European Union
European Social Fund
Operational Programme Employment

Ministry of the Environment
of the Czech Republic

Second Report on Quality of Life and Its Sustainability

Evaluation of the Implementation of the Strategic Framework *Czech Republic 2030*

MINISTRY
OF REGIONAL
DEVELOPMENT CZ

CZECH
STATISTICAL
OFFICE

cenia

European Union
European Social Fund
Operational Programme Employment

This Report on Quality of Life and Its Sustainability was prepared as part of the project *Mechanisms for Promoting Sustainable Development Principles in Public Administration*, registration number CZ.03.4.74/0.0/0.0/15_019/00014042.

Contents

Executive summary 5
Purpose and structure of the report.....7
1. People and Society 9
1 The social climate is universally supportive of families, with barriers and societal pressures minimised. Family, parenthood, and marriage enjoy special legal protection and social respect. 9
2 Technological and social development expand access to decent work.....13
3 Structural inequalities in society are low. 18
4 Education develops individual potential and the ability to manage and influence change while fostering a cohesive society focused on sustainable development. 24
5 Health is improving across all population groups. 29
6 Higher public investments support key cultural functions and equal access to culture and creativity. 36
2. Economic Model 38
7 The economy has been growing long term, and the domestic sector is strong. 38
8 The Czech Republic has well-functioning and stable institutions for supporting applied research and development and for identifying opportunities in this area. 44
9 Natural resources are utilised as efficiently and carefully as possible to minimise the external costs caused by their consumption. 48
10 Economic activities are supported by stable and functional infrastructure.....53
11 The fiscal system as a prerequisite for a successful economy is stable. 61
Additional information relevant to the update of the Economic Model 63
3. Resilient Ecosystems 64
12 The Czech landscape is viewed as a complex ecosystem, and ecosystem services provide a suitable framework for the development of human society. 64
13 The Czech landscape is diverse, and biodiversity is being restored. 72
14 The landscape is adapted to climate change, and its structure supports water retention. 76
15 Soils are protected from degradation, and the potential of the landscape is maximally utilised for carbon capture and storage.....80
4. Municipalities and Regions 87
16 Public services in the region are more accessible to all residents. 88
17 Improving the quality of life in individual municipalities reduces regional inequalities. 98
18 The quality urban development of settlement structures is safeguarded. 112
19 Towns and municipalities have reduced greenhouse gas emissions and adapted to the negative impacts of climate change. 120
20 Territorial public administration purposefully uses the local sustainable development tools 137
5. Global Development 142
22 By domestic policies with an external impact more coherent, the Czech Republic is supporting global sustainable development. 149
6. Good Governance.....152
23 Policy-makers have the knowledge and skills to participate fully in public debate. 152

24 Public policies are coherent with the goals of the Strategic Framework Czech Republic 2030. 157
25 Policy-makers have high-quality and readily accessible data and information for decision-making. 163
26 Innovations in policy-making process are progressive solutions that enhance the democratic nature and/or long-term effectiveness of public policies; such innovations are a permanent part of the public administration performance at all levels. 168
27 The quality of governance has improved from the perspective of public policy beneficiaries. 173
Additional information relevant to the update of Good Governance 173
Policy coherence for sustainable development 175
Subjective evaluation of quality of life 177
Youth perspective 178
Overview of work on the current implementation plan for 2023–2025 182
List of abbreviations 183
List of sources 190

Executive summary

The *Strategic Framework Czech Republic 2030 (CR 2030)* serves as an overarching development framework for the Czech Republic up to 2030. At the same time, it acts as a fundamental mechanism for translating the Czech Republic's international commitments in relation to the *2030 Agenda* and the *UN Sustainable Development Goals* (SDGs). The document was adopted in 2017, and an updated version was adopted in 2024.

CR 2030 is divided into six key areas. *People and Society* (KA1) covers social topics, *Economic Model* (KA2) focuses on economic issues and *Resilient Ecosystems* (KA3) addresses environmental matters. The other three focal areas represent a cross-section of specific themes at regional level (*Municipalities and Regions*, KA4), international level (*Global Development*, KA5), and governance at national level (*Good Governance*, KA6). These areas are further divided into 27 strategic and 97 specific goals.

Progress in achieving the goals is assessed every three years in the *Report on Quality of Life and its Sustainability*. The second evaluation report was presented in 2023.

Even after the second evaluation period, the Czech Republic remains far from achieving its goals. Although progress can be observed in two thirds of the CR 2030 goals, it is not substantial. In many cases, there have been advancements compared to the baseline, but the most recent period has been characterised by stagnation or even deterioration. From the remaining third of the goals, more than half show only negligible progress in the long term. The majority of the remaining goals cannot be evaluated at all.

The developments in the focal areas during 2020–2023 were as follows:

People and Society: The pace of achieving goals in FA1 is very slow or stagnant. Despite numerous strategic documents, significant improvements in many areas have not been achieved. The Czech Republic has one of the highest levels of gender inequality in the EU, and there are significant structural disparities in peripheral regions. The COVID-19 pandemic, the war in Ukraine, and the energy crisis posed significant challenges for social policies in the Czech Republic, highlighting long-standing issues (e.g. funding and staffing in health and social care, work-life balance, mental health, culture, and education).

Economic Model: There has been a decline in progress towards most KA2 goals. The effects of the COVID-19 pandemic and the war in Ukraine significantly impacted developments, although not all deteriorations or stagnations can be attributed solely to these two factors. Despite some partial improvements, the Czech economy remains characterised by high material, emission, and energy intensity. Decarbonising the economy remains a major challenge. The Czech Republic's position in the international division of labour has stagnated, and investment in research, development, and innovation has been declining.

Resilient Ecosystems: Most KA3 goals have stagnated. The Czech Republic's ecosystems are under significant pressure from intensive agriculture and forestry, which contribute to the soil's degradation and reduce its water retention capacity. The landscape is fragmented, and biodiversity is declining. A significant portion of surface water is contaminated by agricultural runoff and wastewater. Measures in water management have so far failed to systematically prevent water runoff from the landscape or achieve a long-term balance in the quality of surface and groundwater. Improvements in KA3 have been partial, with some progress noted in reducing soil vulnerability to water and wind erosion and combating invasive non-native species.

Municipalities and Regions: In evaluating the overall progress of KA4 goals, positive development is evident. Some issues are gradually being addressed, such as reducing social exclusion and promoting low-emission and active mobility. However, progress in certain key aspects of KA4 remains limited or stagnant. Regional disparities in socio-economic indicators persist, and access to services in peripheral areas remains problematic. The undesirable trend of suburbanisation continues. The adaptation of municipalities to climate change is slow and uneven. In the area of municipal waste landfilling, the Czech Republic is moving further away from its targets.

Global Development: At the international level, the Czech Republic actively supports the implementation of the 2030 Agenda and related international agreements. The Czech Presidency of The Council of the European Union in 2022 made a significant contribution. As a responsible and solidaristic member of the international community, the Czech Republic has demonstrated its commitment by responding to the war in Ukraine and contributing to the post-COVID-19 recovery in third countries. However, the Czech Republic lags behind in fulfilling certain international commitments, particularly in financing development and climate protection.

Good Governance: Although the Czech Republic has made significant efforts in recent years to improve the development and implementation of public policies, progress in most FA6 goals is minimal or absent. This has been the case since 2017. While outputs exist, there are significantly fewer tangible outcomes. The best results have been achieved in creating and sharing data and information, but policy coherence and innovation remain long-standing weaknesses.

Purpose and structure of the report

The *Strategic Framework Czech Republic 2030 (CR 2030)* is an overarching and cross-cutting development framework for the Czech Republic. It also serves as a fundamental mechanism for translating the Czech Republic's international commitments in relation to the *2030 Agenda* and the *UN Sustainable Development Goals* (SDGs) at national level. The framework was approved in 2017.[1] It is primarily implemented through lower-level strategic documents and the everyday practices derived from them. Policy gaps not sufficiently covered by strategic materials are addressed through *CR 2030* implementation plans.

CR 2030 is divided into six focal areas. *People and Society* (FA1) covers social topics, *Economic Model* (FA2) focuses on economic issues, and *Resilient Ecosystems* (FA3) addresses environmental matters. The remaining three focal areas provide a vertical perspective, covering a cross-section of specific themes at regional level (*Municipalities and Regions*, FA4), international level (*Global Development*, FA5), and governance at national level (*Good Governance*, FA6).

The task of presenting the *Report on Quality of Life and Its Sustainability*, which evaluates progress in achieving *CR 2030* goals, stems directly from *CR 2030*. In 2018, the reporting frequency was set to every three years.[2] The first three years of CR 2030 implementation were evaluated in 2020, and the government approved the assessment in January 2021.[3]

The primary purpose of the evaluation report is to provide the political representation with information about the results achieved, i.e. progress towards the goals.

Each focal area begins with an overall assessment of its development.

For each of the 27 strategic goals, the target state and an overall assessment of its all specific goals are summarised at the beginning.

The core of the material is the evaluation of 97 specific goals. Each evaluation includes a description of the target state, a detailed description of progress, and a concise final assessment. To facilitate navigation, specific goals are also colour-coded:

- green indicates goals that have been achieved or are expected to be achieved shortly. The indicators show the desired values, and the achievement of tangible results is confirmed by various sources. The situation corresponds to the described target state or is already very close to it. In such cases, it is possible to reformulate the goal, remove it entirely, or retain it in its current form, but with the understanding that no increased effort is needed at least until the next evaluation;
- orange indicates two different situations. It may represent progress in tangible results, either overall or in a particularly important area. Indicator values or information from other sources may be mixed. The situation may be approaching the target state in some areas, but not overall. In such cases, the course taken is good, but ongoing or increased effort and careful monitoring of tangible results are required. However, this colour can also indicate a situation where, despite progress compared to the baseline state, there has been deterioration since the last evaluation. In such a case, the course is not good, and the response should align more closely with that indicated by the red colour;
- red indicates only minimal progress in tangible results, whether due to insufficient effort or despite significant effort. Indicator values and information from other sources are not favourable. The situation does not correspond to the target state, or the Czech Republic is even moving away from it. Such cases require not only increased effort, but also greater attention to the issue and deeper analysis of the reasons for the limited progress;

[1] *Government Resolution of 19 April 2017 No 292 on the Strategic Framework Czech Republic 2030.*

[2] *Government Resolution No 669 of 17 October 2018 on the Implementation Plan for the Strategic Framework Czech Republic 2030.*

[3] *Government Resolution No 68 of 25 January 2021 on the Report on Quality of Life and Its Sustainability.*

- grey indicates goals where the lack of relevant information makes it difficult to assess the extent of their achievement. In such cases, increased attention is also necessary, as the real state is unknown, and precautionary measures should assume a worse rather than a better development. The first step in such cases should be an effort to find ways to evaluate the achievement of the objective.

The report text also includes information on activities undertaken to achieve the goals, making it possible to roughly assess the level of effort exerted by public administration in the given matter.

The indicators used in the evaluation report are published in the database at www.sdg-data.cz. This platform also provides current national data for the indicators of the 2030 Agenda and quality of life. Revisions to the indicator set, associated with the ongoing update of the *Strategic Framework CR 2030*, will be reflected in the database during 2024.

The report also evaluates two important aspects of implementation. One is the coherence of public administration's approach in fulfilling it, covered in the chapter *Coherence of policies for sustainable development*. The other is the progress in implementing the *Second Implementation Plan of the Strategic Framework Czech Republic 2030 (for 2023–2025)*,[4] or a brief overview of progress in the first year of this plan's validity. This information is included in the chapter *Overview of work on the current implementation plan for 2023–2025* and in Annex 1.

CR 2030 combines the perspectives of sustainable development and quality of life. Therefore, the evaluation must reflect not only change and progress in achieving goals at the macro level using conventional statistical or administrative data, but also subjectively perceived changes in the situation, or more broadly, the perspective of people whose quality of life is meant to be improved. This purpose is served by the chapter *Subjective evaluation of quality of life*.

Since the last evaluation report, a new chapter, *Youth perspective*, has been added. It contains the results of focus groups organised to verify the relevance of CR 2030 topics for a social group that typically has limited space in public debate but for whom achieving some long-term goals is especially crucial.

Although the achievement of SDGs is subject to separate reporting, this evaluation report can also be viewed through the lens of the monitoring of national priorities under the 2030 Agenda. The six focal areas evaluated in this report reflect the main dimensions of the *2030 Agenda*: *People, Prosperity, Planet* (the 3 Ps), while also addressing regional and global dimensions and governance, which overlap with the remaining 2 Ps – *Peace and Partnership*.[5]

The *Strategic Framework CR 2030*, adopted in 2017, is roughly halfway through its current validity. Accordingly, the government has decided to update it by the end of 2023.[6] The presented evaluation report thus also serves as an analytical basis for this update. Data, information, and inputs essential for the update but not directly derived from evaluations of progress in achieving goals are included as shorter chapters on the focal areas *Economic Model* (FA2) and *Good Governance* (FA6).

[4] https://www.cr2030.cz/wp-content/uploads/2022/10/Implementac%CC%8Cni%CC%81-pla%CC%81n-2022-2025.pdf

[5] For an overview of the overlap between the specific goals of CR 2030 and the SDGs, see the Government Resolution (2018) on the *Implementation of the UN 2030 Agenda for Sustainable Development in the Czech Republic* (pp. 31–32). For an overview of the overlap between focal areas under CR 2030 and the SDGs, refer to the updated *Strategic Framework CR 2030*.

[6] *Government Resolution 766 of 14 September 2022 on the Second Implementation Plan for the Strategic Framework Czech Republic 2030 for the years 2023-2025.*

1. People and Society

Income inequality in the Czech Republic is one of the lowest in the EU, and incomes show a long-term upward trend. The minimum and guaranteed wages have increased, and the Czech Republic performs well in general and long-term unemployment rates.

However, the Czech Republic has yet to find adequate solutions for many challenges identified in 2017 or has achieved only partial results. Labour market polarisation is decreasing, but the Czech Republic continues to face regional inequalities in almost all aspects. There are gaps in raising the qualification levels of individuals, especially those who have not completed lower secondary education. The problem of dependence of educational outcomes on socio-economic background remains unresolved. A social housing system has not been created, and some public services remain inaccessible to vulnerable groups, particularly in socially excluded localities.

The development of education based on a good general foundation, creativity, and learning ability is supported by the newly approved The Strategy for the Education Policy of the Czech Republic up to 2030+. However, the progress in lifelong learning, especially after the COVID years, has not been favourable, and there is also a lack of connection between formal and informal education.

Gender inequality is reducing only very slowly, wage disparities persist, and the topic of equality does not have sufficient support even in state decision-making positions. Although the legislative establishment of job-sharing has been introduced – which may improve the situation for working people caring for children or seniors – the availability of part-time jobs is insufficient. The parental allowance has been at the same level since 2020; however, an increase by CZK 50,000 has been approved from 2024, alongside a reduction in its maximum duration, in line with efforts to encourage a quicker return to the labour market.

Health inequalities have widened. The prevalence of frequent alcohol consumption and binge drinking is increasing. A positive, though not entirely reassuring, development is the reduction in the proportion of daily smokers.

Public expenditure on culture in the Czech Republic has mostly stagnated, although the wages of cultural sector workers have slightly increased. A bill on public cultural institutions has been prepared.

1 The social climate is universally supportive of families, with barriers and societal pressures minimised. Family, parenthood, and marriage enjoy special legal protection and social respect.

The family plays a key role in society – it is the fundamental social unit and the first point of socialisation necessary for individual and societal development. For this reason alone, it should be adequately valued and supported by the state from an economic, societal, and social perspective to benefit all generations. Balancing work and family life must enable families to support not only their children, but also their seniors. Special attention must also be given to families in specific situations.

The COVID-19 pandemic significantly impacted the area of work-life balance, emphasising previously overlooked issues in this field. Social activation services for families with children are particularly engaged in ensuring special attention is paid to families with specific needs.

1.1 Suitable socio-economic conditions support the proper functioning of families. They focus on the financial security of families, the compatibility of work and family life, and services for the care of children and the elderly. This allows for sufficient free time to improve

Effective family-supporting policy, which underpins all the basic functions of a family, is based on recognising the autonomy of the family. For a family to function well, it is essential to create conditions where people do not feel financially threatened and are not forced to choose between family and work. Therefore, we view the following tools as crucial for supporting the proper functioning of families.

The option to utilise flexible forms of work is one of the fundamental prerequisites for effectively balancing family and work life for parents with young children, particularly for women, whose employment is strongly affected by motherhood.[7] The employment rate of women with preschool-aged children has long remained around 50%,[8] which is one of the lowest rates among EU countries. In contrast, women with older children (aged 12 and above) have the highest employment rate in the EU, reaching 93% in 2019.[9] Increasing the employment rate of parents with preschool-aged children is one of the priorities of the *Family Policy Strategy 2024–2030* and the *Gender Equality Strategy 2021–2030*. Both strategies aim to address problems related to the insufficient availability of flexible work arrangements, such as part-time work or flexible working hours. Success in this area includes the introduction of job-sharing in 2021[10] and a reduction in insurance contributions for part-time jobs implemented in February 2023.[11] In addition to promoting flexible work arrangements, increasing fathers' participation in caring for children and other dependants is also a key prerequisite for effectively balancing family and work life for women. Only about 2% of men annually claim parental leave. This rate has remained almost unchanged over the last decade.[12]

The European Work-life Balance Directive is in the process of being implemented into Czech legislation. It has already introduced or will introduce the possibility to take 10 working days of paternity leave, at least 5 working days of caregiver's leave per year for looking after a relative or a household member, and at least 4 months of parental leave with 2 non-transferable months for each parent.[13] Another essential form of support for families is the availability of childcare services (see Objective 4.1 for more information). However, financially accessible childcare services remain insufficient for children under three years old and, regionally, for three- and four-year-olds across the Czech Republic.[14] In 2021, an amendment to the Act on Childcare Services in Children's Groups was approved.[15]

Families in need are supported through non-contributory social benefits, state social support, assistance for those in material distress, and benefits for people with disabilities and care needs. The government has approved an increase in the parental allowance, effective from January 2024, by CZK 50,000, a reduction in the allowance period to three years, and the extension of substitute maintenance by two years.[16] Regarding family services, the MoLSA provides grants for family support to non-governmental organisations under the *Family* (Rodina) grant scheme. This scheme programme primarily aims to support primary prevention, contributing to higher quality

[7] MoLSA (2023) *Family Policy Strategy 2024–2030*.

[8] Indicator 1.1.1.

[9] Eurostat (2023) *Employment rate of adults by sex, age groups, educational attainment level, number of children and age of youngest child (%)*. Available here.

[10] MoLSA (2021) *The priority of the MoLSA is supporting families and protecting children's rights.* Available here.

[11] MoLSA (2023) press release: Insurance contribution discount for reduced working hours to apply from the beginning of February. Available here.

[12] Research Institute for Labour and Social Affairs (2022) *Postnatal paternity leave benefits as a relatively new tool in sickness insurance – frequency of use and assessment of the measurability of the effects of its introduction*. Available here.

[13] *EU Work-Life Balance Directive*.

[14] MoLSA (2023) *Family Policy Strategy 2024–2030.*

[15] *Act No 247/2014 on the provision of childcare services in children's groups and amending related acts.*

[16] MoLSA (2023) *Parental benefits for newly born children to increase, substitute maintenance allowance to be extended. The government has also approved simplified benefit administration.* Available here.

and stability in family and partner relationships while fostering the development of parenting and partnership skills.

In 2023, the *General Principles for Regulatory Impact Assessment*s (RIAs) were updated to include an expanded category of impacts on families. At the same time, according to an amendment to the Government Rules of Procedure, the impact on families is now also part of the explanatory reports accompanying materials submitted to the government.

A stable and well-functioning family environment supports social cohesion and is vital for the future development of society. However, the costs associated with raising and caring for children significantly affect family budgets, with the average household income decreasing as the number of children increases. The average disposable annual income per person in Czech households was CZK 216,000 in 2021, approximately CZK 18,000 per month, showing a steady increase since 2005. This upward trend in disposable income is evident across all household types in the Czech Republic. Households without children reliably have the highest annual income (nearly CZK 257,000 in 2021). The number of children noticeably and consistently impacts family budgets. While a household with one child had a disposable income about 20% lower (CZK 201,000) than a childless household, the income was over 30% lower for households with two children (CZK 168,000) and up to 44% lower for households with three or more children (CZK 144,000) in 2021.[17]

For nearly the first two decades of the 21st century, up to 2021, fertility rates in the Czech Republic showed a rising trend, placing the country among those with the highest fertility rates in Europe. However, in 2022, the average number of children per woman dropped year on year from 1.83 in 2021 to 1.62.[18] Together with changes in the number of women of reproductive age, this decline meant that the cohort of 2022 had the lowest number of births in the past 18 years. Compared to 2021, fertility rates were lower across all age groups of women under 40.[19] The average age of mothers at childbirth remained at 30.4 years. Given the recent average success of total fertility rates in the Czech Republic, the decline in 2022 does not yet indicate a fundamental change. Preliminary data for 2023, however, suggest a further decline in fertility and birth rates. Regionally, the lowest fertility rates in 2022 were in Prague (1.44) and the Karlovy Vary Region (1.47). On the contrary, the highest rates were in the Vysočina Region (1.74) and the Olomouc Region (1.70).[20] Therefore, the state's interest lies not only in economically compensating the costs and efforts associated with child-rearing but also in pursuing family-supporting policies that set conditions where people can fulfil their desired family size without the threat of poverty accompanying childbirth.

However, families do not only care for children but also for the older generation, their parents. Regarding the social security of seniors, the law addresses pension increases reflecting rising consumer price indices and wage growth. Currently, pensions increase according to 100% of the consumer price index and 50% of real wage growth. Regular indexation leads to pension increases in line with economic capacity. The indexation mechanism also includes a process enabling the government to offset the effects of nominally low pension increases. The average old-age pension in January 2024 reached CZK 20,700, the highest in history.[21]

The Czech Republic is on the right track in family policy, but it still lacks more accessible childcare services (see 2.2) and adequate compensation for the increasing costs and efforts of parents associated with raising children to meet its goals.

[17] Indicator 1.1.4.

[18] Indicator 1.1.5.

[19] Czech Statistical Office (2023) *2022 Cohort is the Weakest in the Last 18 Years*. Available here.

[20] Indicator 1.1.5.

[21] MoLSA (2023) *Pensions will rise again in January and increase by nearly 400 crowns, bringing the average old-age pension to 20,700 crowns*. Available here.

1.2 Families with specific needs are given special attention. Targeted measures are taken to contribute to equal access to education and the participation of members of these families in the labour market and society.

Families with specific needs are systemically subject to the same conditions as other families, but they do not always receive sufficient attention from the state. Since November 2023, the Labour Office of the Czech Republic has been paying substitute maintenance[22] for dependent children for up to 4 years, with a maximum amount of CZK 3,000 per month. This financial assistance applies to approximately 24,000 dependent children. Through an proposed amendment to the Civil Code, efforts are being made to promote the consensual resolution of matters concerning minor children and, in particular, to ensure their proper maintenance.

Objective 1.2 shows significantly worse results compared to the previous objective. Nonetheless, social activation services for families with children are primarily involved in ensuring special attention to families with specific needs, and, since 2021, the approved law on substitute maintenance for dependent children has helped.

[22] *Act No 588/2020 on substitute maintenance for a dependent child and amending certain related acts.*

2 Technological and social development expand access to decent work.

Decent work is fundamental to quality of life. For many years, it has been not only a source of livelihood, but also a key element of identity and socialisation. Opportunities to access work are expanding, and it is necessary to respond flexibly to them. With ongoing digitalisation and robotisation, options for flexible contracts, remote work, or reduced working hours are increasing. However, new opportunities can also bring complications, such as the disappearance of jobs, increased monitoring of workers, or alienation in virtual environments. Beyond technological advancements, the labour market is also influenced by social circumstances, which, due to an ageing population, may not be particularly favourable in the coming years.

Significant progress has been made in raising the minimum and guaranteed wages. Efforts to improve retraining reflect not only the impacts of population ageing but also trends in digitalisation, robotisation, and current labour market needs. Precarisation and low work flexibility remain relatively common in the Czech Republic. The availability of part-time jobs is insufficient, and the sharing economy is not well integrated into the Czech system. Career counselling for people with disabilities is relatively successfully provided in the labour market. However, support for the development of social entrepreneurship and new social enterprises is significantly lacking. While the Czech Republic performs well in terms of general and long-term unemployment compared to EU countries, gaps remain in raising qualification levels, particularly for individuals who have not completed lower secondary education. Although labour market polarisation is easing, the Czech Republic still faces regional inequalities in almost all aspects – whether in unemployment or income. The country also lacks more active efforts to attract skilled foreign workers.

2.1 The labour market shows lower structural imbalances at both national and regional levels, reducing labour market polarisation and its social impacts

The average number of job seekers in the Czech Republic has for a long time significantly exceeded the number of job vacancies. However, this trend began to change slowly after 2013, when the highest number of job seekers (approximately 600,000) and a very low number of vacancies (35,000) were recorded. Subsequently, the number of job seekers began to decline, while the number of job vacancies increased. A turning point occurred in 2018, when the number of vacancies exceeded the number of job seekers by approximately 100,000, a trend that continued in 2019. In the following year, due to the pandemic, the number of job seekers rose, nearly matching the number of vacancies. However, by 2021, the situation had returned to pre-pandemic levels. This fluctuation affected virtually all professions.[23]

Although it may seem that there is an excess of job vacancies in the Czech Republic, structural imbalances persist in some regions. In the Moravian-Silesian, Ústí nad Labem, Karlovy Vary, Olomouc, and Liberec regions, the number of job seekers significantly exceeds the number of vacancies. Conversely, in 2021, there was a labour shortage in Prague, and in the Central Bohemian, Pardubice, and Plzeň regions.[24]

From January 2023, the basic rate of the minimum wage increased by CZK 1,100 per month to CZK 17,300.[25]

Work plays a crucial role throughout most of a person's life. Therefore, it is necessary to reflect different life phases and changing needs and expectations in the labour market. The Czech Republic is making gradual progress in modernising active employment policy tools, focusing primarily on supporting further professional education aimed at integrating individuals into the labour market and increasing the targeting of active employment policy tools. Career counselling provided by Labour Office of the Czech Republic, regional centres (e.g. *InfoKariéra* in Plzeň and

[23] Indicator 2.1.1.

[24] Indicator2. 1.1.

[25] MoLSA (2023) *Minimum Wage*. Available here.

Centrum vzdělávání všem in Brno), and non-profit organisations aims to assist with appropriate labour market placement.

In 2022, the MoLSA completed the *KVASAR* project in the area of improving the quality of the further education system (with a budget of CZK 156 million). The project outputs propose a new retraining system, which could save up to 50% of time and significantly streamline the entire process. However, under current legislation, the proposed new retraining system cannot be implemented in practice; first, legal regulations in the area of retraining must be amended.

Changing or upgrading qualifications is also related to the availability of combined study programmes at universities. This option is used by a quarter of all students, and up to 30% of students in follow-up master's programmes. Nearly all public universities offer lifelong learning courses focused on professional practice. Since 2007, the *Act on the Recognition of Further Education Outcomes* has been in effect.[26] The basic tool for implementing this law in practice is the *National Register of Qualifications*.[27] By 2023, 1,451 professional qualifications had been included in this system, and 330,000 exams had been conducted. In 2018, 8.5% of adults in the Czech Republic participated in educational activities within the framework of lifelong learning, which is lower than the European average (11.1%).[28] The COVID-19 pandemic further worsened the situation.

The issue of robotisation, its taxation, and impacts on the labour market, such as reducing the tax burden on human labour or shortening working hours, is not currently being addressed or analysed in professional or political discussions. Some progress can be seen in digitalisation, where, however, only a proposal for a digital services tax has been submitted.[29]

Significant progress has been made in raising the minimum and guaranteed wages. Efforts to improve retraining reflect not only the impacts of population ageing but also trends in digitalisation, robotisation, and current labour market trends. Although labour market polarisation is easing, the Czech Republic still faces regional inequalities in almost all aspects – whether in unemployment or income.

2.2 Access to decent work is expanding for groups that are still disadvantaged on the labour market – parents on parental leave, persons

Access to decent work must also focus on groups disadvantaged in the labour market – parents with young children, persons with disabilities, and people over 50. The highest employment rate among these groups is shown by people over 50 (41%). Among persons with disabilities, approximately a quarter are employed, and only 15% of employed persons work part-time due to childcare or caregiving responsibilities for another adult. These proportions have not changed significantly since 2019.[30]

Career counselling provided by the Labour Office of the Czech Republic is generally tailored to meet the needs of all clients, including persons with disabilities. For example, the project "Development of the Support System for Employing Persons with Disabilities in the Open Labour Market" aims to create a network of specialists offering labour market counselling for persons with disabilities, including advising employers about hiring persons with disabilities. Social entrepreneurship in the Czech Republic is funded solely through the *Operational Programme Employment* (OPEmp) via the *European Social Fund* (ESF), and otherwise receives little attention. The development of social entrepreneurship in the country suffers from a significant lack of support for the establishment of new enterprises and the development of existing ones. Legislative support is expected to come

[26] *Act No 179/2006 on the verification and recognition of the outcomes of further education and amending certain Acts (Act on the Recognition of Further Education Outcomes).*

[27] *National Register of Qualifications*. Available here.

[28] EUROSKOP (2019) *IN THE CZECH REPUBLIC, ONLY 8.5% OF ADULTS ENGAGE IN LIFELONG LEARNING.* Available here.

[29] This tax, however, was not approved in connection with the implementation of Council Directive (EU) 2022/2523 of 14 December 2022 on ensuring a global minimum level of taxation, as the Directive does not allow the coexistence of these taxes. The global minimum tax can therefore be considered a replacement for the digital services tax.

[30] Indicator 2.2.1.

from the Social Enterprise Act, which was in the approval process at the end of 2023. Existing financial instruments favour the development of larger, stabilised social enterprises, but do not stimulate the creation of new ones. Social entrepreneurship[31] in the Czech Republic also faces insufficient support through socially responsible public procurement.

While the availability of career counselling for persons with disabilities in the labour market is relatively well ensured, there is a significant lack of support for the development of social entrepreneurship and new social enterprises. This sector is practically dependent on EU grants.

2.3 As the overall unemployment rate decreases, so does the proportion of long-term unemployed within the total

In 2022, the general unemployment rate for individuals over 15 years of age was 2.2%,[32] and the long-term unemployment rate in 2021 was 0.9%.[33] The impacts of the COVID-19 crisis on registered unemployment have almost entirely dissipated. When seasonal fluctuations are excluded, the general unemployment rate decreased in 2022. The Czech Republic remains the EU country with the lowest unemployment rate. Disparities in gender, occupational, educational, and age group impacts persist, but are minor.[34] From a regional perspective, higher unemployment rates, including long-term unemployment, are observed in the so-called coal regions. Socially excluded individuals and those at risk of social exclusion are among the groups with higher unemployment rates.[35]

The Labour Office of the Czech Republic provides further education for those at risk of long-term unemployment. The aim is to offer clients comprehensive support and counselling in both social matters and employment opportunities, such as debt resolution as a prerequisite for finding work. Those at risk of long-term unemployment are engaged in retraining courses. Individuals with no more than a lower secondary education form a key target group for Active Employment Policy (AEP) measures, as they most frequently face unemployment (12.8% in Q4 2021).[36] Where possible, retraining and job creation are arranged for them, particularly through public-benefit jobs and the establishment of socially purposeful job positions.

The *KOMPAS* project, co-financed by Operational Programme Employment, focuses on predicting labour market trends. A newly adopted regulation on non-seizable benefits is intended to encourage indebted individuals to seek legal employment.[37] The aim of the government regulation is to increase the non-seizable amount, thus addressing the unfavourable situation where, after legal deductions from wages, debtors were left with insufficient funds to cover basic family needs for food and housing, often pushing them to the brink of poverty.

While the Czech Republic performs well in terms of general and long-term unemployment compared to EU countries, gaps remain in raising qualification levels, particularly for individuals who have not completed lower secondary education.

[31] If the employer is not recognised on the protected labour market.

[32] Czech Statistical Office (2023) *Employment and Unemployment According to Labour Force Survey Results – 4th Quarter 2022* (Indicator 2.3.1.) Available here.

[33] Indicator 2.3.1.

[34] IDEA CERGE (2022) *The impact of the pandemic on unemployment has nearly subsided.* Available here.

[35] Indicator 2.3.1.; MoLSA (2022) *2021 Report on the Implementation of the Social Inclusion Strategy 2021–2030.* Available here.

[36] Indicator 2.3.1.

[37] *Government Regulation No 62/2020 amending Government Regulation No 595/2006 on the method for calculating the basic amount that cannot be deducted from the monthly wage during enforcement of a decision, and on determining the amount above which wages are subject to deduction without limitation (Non-deductible Amounts Regulation), as amended by Government Regulation No 91/2019.*

2.4 The level of precariousness and involuntary flexibilisation of work is minimised, including in activities carried out through the platform economy and other new atypical forms of work.

Across ministries, efforts are being made to minimise precarious work and involuntary labour flexibility through the implementation of measures under the *Society 4.0 Action Plan* and the *Labour 4.0 Action Plan*, though progress has been slow.

The proportion of indefinite-term employment contracts is declining in both Europe and the Czech Republic.[38] Similarly, the proportion of people with fixed-term contracts has also decreased slightly on average since 2015. The actual hours worked by employees decreased in 2020 and 2021 due to the pandemic.[39] Women are significantly more likely to hold fixed-term contracts.[40] New forms of work organisation raise issues such as the spread of precarious work, threats to insurance systems, and the alignment of such work with Czech labour law, taxation, and social and health insurance systems.[41] Discussions on limiting the extension of fixed-term employment contracts in the case of agency employment have not been carried out.

Precarious work and limited flexibility remain relatively common in the Czech Republic. Progress in implementing the *Society 4.0 Action Plan* has been slow, the availability of part-time work remains insufficient, and the sharing economy is not well integrated into the Czech system. Risks associated with false self-employment have not been successfully mitigated over the long term.

2.5 Immigration and integration policies focus on attracting qualified foreigners and strengthen workforce diversity, which is essential for innovation. Public policies also support the return of Czech citizens from abroad.

The number of foreigners with registered or permitted residence in the Czech Republic has been steadily increasing. At the end of 2021, approximately 661,000 individuals were registered, rising to 1,116,000 by the end of 2022.[42] Nearly 350,000 people moved to the Czech Republic in 2022 through permanent or temporary residence permits, temporary protection, or after being granted asylum,[43] marking the highest figure in the country's post-war history. Since 2017, even before the outbreak of the war in Ukraine, Ukrainian nationals have been the most frequent migrants to the Czech Republic. During the war, the number of Ukrainians, especially women, with registered residence in the Czech Republic has risen significantly. By the end of 2022, a record 636,000 Ukrainian nationals were registered in the country. Slovaks (117,000), Vietnamese (66,000), and Russians (43,000) followed in terms of numbers.[44]

Support for migration policy is weakened by insufficient staffing at relevant administrative authorities, including diplomatic missions.

Higher education plays a crucial role in attracting qualified workers from abroad. This increases the likelihood of foreign graduates finding employment in the Czech labour market. Over the past decade, the share of foreign students has steadily increased, rising by one third (33.6%) in absolute terms. In 2020, foreign students accounted for 17% of all students at Czech universities. Slovaks have traditionally shown the highest interest in studying in the Czech Republic, followed by students from Russia, Ukraine, and Kazakhstan. In total, 50,441 foreign students from 165 nationalities were enrolled in Czech universities in 2020,[45] with information and communication technology being the most sought-after field.[46]

[38] NATIONAL TRAINING FUND (2016) *Labour Initiative*. Available here.
[39] Indicator 2.4.1.
[40] Indicator 2.4.2.
[41] MoLSA (2017) *Work 4.0 Action Plan*. Available here.
[42] Indicator 2.5.1.
[43] Indicator 2.5.2.
[44] Indicator 2.5.1.
[45] Czech Statistical Office (2021) *300,000 students attend universities in the Czech Republic, with a significantly growing proportion of foreign students among them*. Available here.
[46] Indicator 2.5.4.

Given the increasing intensity (scale) of international migration over the past four years,[47] information for foreign nationals on entry and residence conditions in the Czech Republic is becoming available not only in English, but also in other languages. A network of 18 *Integration Support Centres for Foreign Nationals* has been legislatively established and operates in all regions of the Czech Republic. Efforts are ongoing to improve the accessibility and availability of practical information, such as through multilingual helplines (in Mongolian, Vietnamese, and Ukrainian), informational brochures down to the municipal level,[48] and the Local Integration Manual for Migrants in the Czech Republic.[49]

The development of Czech language teaching abroad, as well as in the Czech Republic, is closely related to this. Since September 2021, a revised system of language support for foreign nationals in preschool and primary education has been in operation. Foreign nationals attending compulsory schooling in the Czech Republic for no more than 12 months are entitled to language support in primary schools, consisting of up to 200 hours of Czech language instruction. Additionally, the *Programme for the Support of Czech Cultural Heritage Abroad* in 2016–2020 (Ministry of Education, Youth and Sports and Ministry of Foreign Affairs), which is continuing in the 2021–2025 period, also contributes to this effort.[50]

The protection and regulation of wages was achieved in 2019 through the introduction of the *wage criterion*. All foreign nationals newly arriving under government migration schemes must be guaranteed a certain wage level. For example, participants in the most widely used *Skilled Worker Programme* must have a minimum of 1.2 times the guaranteed wage ensured by their employers.[51] This has a positive effect on preventing wage dumping and partially increasing wages in lower-paid sectors. At the end of 2020, a project aimed at introducing a multi-criteria points system for economic migration was launched, focusing on addressing the long-term needs of the domestic labour market.[52]

In migration and integration policy, the issue of incoming Ukrainians has been most prominent due to Russian aggression. Ukrainian nationals represent a significant portion of foreign workers in the Czech Republic (32% of all registered applicants at the Labour Office). It is expected that their numbers will grow significantly due to the war. In March 2022, approximately 240,000 Ukrainian nationals were registered at the Labour Office, 57% of whom were men and 43% women. Since the beginning of the war, an increase in the number of women has been evident. Nearly half of Ukrainians working in the Czech Republic do not require a work permit, while the remaining individuals apply for an employee card (a permit for long-term residence and work) or a work permit (valid for up to two years). Blue Cards, issued to foreign nationals who demonstrate high skills (at least three years of higher education), are almost non-existent among permits issued to Ukrainians.[53] Ukrainians are at risk of labour exploitation and abuse. They are often employed illegally and face discrimination in access to work and during employment due to their nationality and language barriers.

Currently, migration projects are being successfully implemented. However, the Czech Republic still lacks a more active approach to attracting skilled workers and specific data for more reliable evaluations of these measures. The integration of incoming Ukrainian nationals into the labour market is and will remain a major challenge.

[47] Indicator 2.5.3.

[48] *Report of the Ministry of the Interior of the Czech Republic relating to the evaluation of CR 2030* (2020).

[49] SIMI (2020) *Local Integration Manual for Migrants in the Czech Republic*. Available here.

[50] *Programme for the Support of Czech Cultural Heritage Abroad in 2021–2025*, approved by Government Resolution No 926 of 14 September 2020.

[51] *Report of the Ministry of Labour and Social Affairs of the Czech Republic relating to the evaluation of CR 2030* (2020).

[52] MoLSA (2020) *Planned Projects*. Available here.

[53] Czech National Bank (2022) *Ukrainian citizens in the Czech labour market*. Available here.

3 Structural inequalities in society are low.

Inequality and discrimination reduce economic growth and the quality of life of the population. Systematic and targeted support for developing the local economy, health care, and transport services in peripheral regions of the Czech Republic can reverse negative trends, particularly the extent of social exclusion and the risk of poverty. Combating discrimination based on gender, age, caregiving responsibilities, or disability is also a current topic in this area.

Although combating discrimination is a topical issue in the Czech Republic, the degree of success varies. Regarding pay differences, gender inequality is slightly and very slowly decreasing. However, challenges remain in reconciling personal and work life and in societal understanding of this issue, which is changing very slowly. The issue of gender equality lacks significant support in decision-making positions, which are predominantly held by men. Compared to the EU, the Czech Republic is at the beginning of its journey towards gender equality. In terms of discrimination against persons with disabilities, slight improvements have been observed, as their participation in the labour market has been growing slightly in recent years. On the other hand, no social housing system has been established yet, and some public services are not accessible to vulnerable groups, particularly in socially excluded localities. While income inequality in the Czech Republic is one of the lowest in the EU, Czech households continue to be affected by the COVID-19 pandemic, high energy prices, housing, food costs, and inflation, despite a statistically long-term trend of increasing incomes.

3.1 The proportion of people at risk of poverty and social exclusion is steadily decreasing

The Czech Republic's long-term goal is to minimise the number of people at risk of income poverty, material deprivation, or social exclusion, with consideration of regional imbalances. This issue is addressed in more detail in several strategic documents (primarily the *Social Inclusion Strategy 2021–2030*, as well as the *Czech Housing Strategy 2021+* and the *Social Housing Concept of the Czech Republic 2015–2025*).

Compared to 2019, the proportion of people at risk of material deprivation (2.4% in 2021) and income poverty (8.6% in 2021) has decreased statistically. However, the proportion of people living in households with low work intensity increased in 2020 and 2021. Regional disparities persist in all the indicators mentioned, with the Moravian-Silesian Region and Northwest being the worst-off, just as in 2019.[54]

The COVID-19 pandemic significantly impacted household income poverty. While the data may indicate more positive values, at least a quarter of households face a decline in their standard of living due to job loss, inflation, or increased expenses (energy, housing, food).[55], [56]Households most at risk over the long term include those consisting of individuals over 65 and women living alone. Seniors, women on parental leave, and individuals living in single-person households are the most likely to struggle to make ends meet.

Regarding governance efficiency, it is worth noting that the effectiveness of social transfers in reducing poverty was on a downward slope until 2019. In 2021, their effectiveness increased. Generally, social transfers are less effective in reducing poverty when the initial poverty rate is low than when it is high. At higher poverty rates, transfers reduced poverty by roughly half, whereas at lower rates, they reduced it by about a quarter.[57]

Part of the Roma minority is among those at risk of social exclusion and income poverty. The Office of the Government of the Czech Republic, which coordinates Roma integration, actively collaborates with regional coordinators for Roma issues, field workers, and non-governmental

[54] Indicator 3.1.1.

[55] iROZHLAS (2023) *A Priceless Life*. Available here.

[56] FIALOVÁ K., MYSÍKOVÁ M. (2020) *HOW CAN THE CORONAVIRUS PANDEMIC AFFECT POVERTY IN THE CZECH REPUBLIC? SIMULATION OF IMPACTS ON INCOME POVERTY LEVELS*. In: *Institute of Sociology of the Academy of Sciences of the Czech Republic.* Available here.

[57] Indicator 27.1.4.

organisations. In socially excluded localities, the situation is addressed in cooperation with the *Agency for Social Inclusion*, which focuses on supporting adequate housing, employment, community work, debt resolution, and community support. The Office of the Government also supports the prevention of social exclusion and equal access to services partly through the national grant schemes for *Social Exclusion Prevention and Community Work* and *Support for Field Work*.[58]

In the area of debt relief, significant progress has been achieved. The standard period for debt relief is five years; however, under certain conditions, an "accelerated debt relief regime" of three years is permitted.[59] Nevertheless, the debt relief amendment to the Insolvency Act[60] has modified the conditions for discharge from remaining debts. The requirements for completing debt relief have been adjusted primarily to push for the debtor's all possible effort to fully settle the creditors' claims. It is no longer required for the debtor to repay 30% of their liabilities within five years. Currently, the Chamber of Deputies is debating a draft amendment to the Insolvency Act[61] which, if adopted, would reduce the debt relief period to three years from 2024, regardless of the individual's income source. Free legal counselling is available to those whose income does not exceed three times the subsistence minimum over the six months preceding the submission of the application.[62] In the matter of non-bank loans, the *Consumer Credit Act*[63] has made the most significant contributions in recent years. It tightens conditions for granting loans and mandates non-bank lenders to obtain a licence from the Czech National Bank. On the other hand, the regulation of non-bank loans remains a marginal issue in the Czech Republic.

In the resocialisation of individuals who are conditionally released from prison and placed under supervision, probation officers play a crucial role. They provide assistance in resolving difficult life situations (such as addressing financial literacy and indebtedness with the client) and offer contact details for other organisations (e.g. the Czech Labour Office, debt advisory centres, and other entities).[64]

The issue of usury is linked to prevention in excluded localities and preventive measures among ethnic minorities.[65] The *Local Crime Prevention Scheme* has long supported the *Crime Prevention Assistant* (CPA) project. Although the CPA project is not primarily aimed at tackling usury, it is a specific initiative that enhances safety in socially excluded localities, acts preventively against extremism, and supports local governments and citizens in seeking better solutions to problems.[66]

Effective measures against human trafficking are supported by education and cooperation among the Czech Police, the Ministry of the Interior, and non-profit organisations. The Czech Republic also adopts and fulfils its international obligations in this area.[67] As part of the *Programme for the Support and Protection of Victims of Human Trafficking*, extensive preventive and informational activities about human trafficking are carried out annually.

---

[58] *Report of the Ministry of Labour and Social Affairs of the Czech Republic relating to the evaluation of CR 2030* (2020)

[59] MoLSA (2022) *2021 Report on the Implementation of the Social Inclusion Strategy 2021–2030.* Available here.

[60] *Act No 31/2019 amending Act No 182/2006 on bankruptcy and the management thereof (Insolvency Act), Act No 120/2001 on bailiffs and enforcement activities (Enforcement Code) and amending other acts, Act No 6/2002 on courts, judges, lay judges and the State administration of courts and amending certain other acts (Courts and Judges Act), as amended, Act No 312/2006 on insolvency practitioners, as amended, and Act No 296/2017 amending Act No 99/1963, the Code of Civil Procedure, as amended, Act No 292/2013 on special judicial proceedings, as amended, and certain other laws*

[61] Act No 182/2006 on bankruptcy and the management thereof

[62] *Report of the Ministry of Justice of the Czech Republic relating to the evaluation of CR 2030* (2020)

[63] *Act No 257/2016 on consumer credit*

[64] *Report of the Ministry of Justice of the Czech Republic relating to the evaluation of CR 2030* (2020)

[65] *Report of the Ministry of Justice of the Czech Republic relating to the evaluation of CR 2030* (2020)

[66] *Report of the Ministry of the Interior of the Czech Republic relating to the evaluation of CR 2030* (2020)

[67] In 2017, the Convention on Action against Trafficking in Human Beings entered into force to strengthen the protection of human rights for trafficking victims and support international cooperation in combating human trafficking. A year later, the Council of Europe Convention Against Trafficking in Human Organs entered into force.

The Czech Republic has several strategic documents on poverty and social exclusion. Although data indicate improving trends in this area, the situation remains complex due to the impacts of the COVID-19 pandemic, inflation, and higher prices. A social housing system has not been established, and some public services are inaccessible to vulnerable groups, particularly in socially excluded localities.

3.2 Income inequality is falling, with a focus on maintaining a strong middle class.

Income distribution in the Czech Republic has long been relatively egalitarian and, compared to EU countries, appears fairer. However, since 2017, the *Gini index* for the Czech Republic has shown a slight increase.[68] The minimum monthly wage has been increasing annually since 2014, reaching CZK 16,200 in 2022. Similarly, the median monthly wage is rising, with men earning CZK 37,000 and women CZK 32,800.[69]

Property inequality, which is higher than income inequality, is becoming a much more pressing issue. In 2022, the Czech Republic's property Gini coefficient was 78.5, slightly higher than the previous year. Compared to other EU countries, it is similar to the Netherlands and slightly higher than Germany, but significantly exceeds that of France, Belgium, and other Visegrád Four countries.[70] To address high property inequality, the property tax is an appropriate tool; however, it remains one of the lowest in the OECD in relation to GDP and total state tax revenues. From 2024, this tax will increase by up to 1.8 times under the Fiscal Consolidation Act,[71] introducing an inflation coefficient that will automatically raise the tax from 2025 based on the previous period's inflation. Adjusting the property tax system could enhance the relatively low social mobility in the Czech Republic and serve as an essential resource for slowing down state indebtedness.[72]

Strategic documents generally aimed at reducing inequalities are being implemented continuously; however, certain measures, specifically concerning reducing the tax burden on working pensioners and families with children, have not been thoroughly executed. Achieving this goal is also hampered by the low availability of housing, which state support has done little to alleviate. In 2021 and 2022, the Ministry of Regional Development announced calls under the *Housing Support* scheme. In 2023, as part of the *Housing for Life* project, it launched a *Rental Housing* scheme exclusively targeting municipalities.[73]

Income inequality in the Czech Republic is among the lowest in the EU, with incomes following a long-term upward trend. Conversely, statistics do not reflect the outcomes of any new measures. The most significant shortcoming is the lack of available housing in all forms, alongside neglected property inequality, which, if tackled, could serve as one of the tools to slow state indebtedness.

3.3 Gender inequality is being reduced.

In reducing gender inequality, the Czech Republic should focus on increasing the participation of women with young children in the labour market, eliminating the gender pay gap[74] (GPG), and improving the representation of women in politics and decision-making positions. It is also crucial to consider the negative role of gender stereotypes, which sustain and replicate gender inequalities.[75]

In 2021, the government approved the *Gender Equality Strategy 2021–2030*. This document formulates measures at European level, aligns entirely with *CR 2030* and *Agenda 2030*, and responds to the COVID-19 pandemic, which further exacerbated many gender inequalities. The

[68] WORLD BANK (2020) *Gini index – Czechia*. Available here.

[69] Indicator 3.2.1

[70] CREDIT SUISSE (2023) *Global Wealth Databook,* p. 123

[71] *Bill amending certain acts in connection with the consolidation of public budgets* (Parliamentary Document 488).

[72] PAQ RESEARCH (2021) *Property inequality*. Available here.

[73] MoRD (2023) *Bartoš: We aim to invest over CZK 20 billion in affordable housing in the coming years. The MoRD introduces its Housing for Life project.* Available here.

[74] Unequal pay for men and women

[75] 22% TO EQUALITY, MoLSA project (2019) *Equal Pay for Women and Men: Experiences and Opinions of the Czech Public.* Available here.

strategy builds on the *Government Strategy of Gender Equality in the Czech Republic 2014–2020*, many of whose goals had not been achieved by the end of 2020. Although the GPG across the economy decreased compared to 2008 (14.9% in 2021),[76] the Czech Republic continues to rank low in global gender equality rankings.[77]

In the area of equal pay oversight, the State Labour Inspection Office has increased its activities, with more inspections carried out as part of the *22% TO EQUALITY*[78] project co-financed by the Operational Programme Employment. The project, successfully completed in 2022, introduced numerous changes and new tools, such as *Logib*, which identifies pay inequalities and is increasingly used by companies, a wage and salary calculator, training courses for the Czech Labour Office and the State Labour Inspection Office, and numerous analyses and new data to support evidence-based policy. The *22% TO EQUALITY* project is being followed by the *Equal Pay* project.[79]

In June 2023, the government approved a proposal to ratify the *Istanbul Convention*;[80] however, the proposal is still awaiting Parliament's approval. As a result, the Czech Republic is currently one of the few EU countries whose Parliament has not yet ratified the Convention, despite the government having signed it in 2016.

The COVID-19 pandemic and the economic crisis have led to an increase in gender-based and domestic violence.[81] A gap in the existing system of services for victims of domestic and gender-based violence was the absence of a specialised centre for victims of sexual violence. The low availability of specialised services also affects child victims of domestic violence.

In support of the representation of women in politics, primarily soft measures have been implemented. Consequently, women's participation still remains well below 50%; in the government in 2023, there are two women (out of 18 members), less than 19% of the Senate of the Parliament of the Czech Republic consists of women, and 25% of the Chamber of Deputies are women. A key milestone for achieving the balanced representation of women and men was the adoption of the European Parliament and Council directive on improving the gender balance among directors of listed companies.

Support for the reconciliation of personal and professional life for women and men is in the interest of the state; however, compared to the EU, the Czech Republic does not particularly excel in this area. Women overwhelmingly take on caregiving roles[82] and face challenges at the intersection of family and work life far more often than men. Although they tend to enter fixed-term employment contracts more frequently than men at certain ages,[83] the employment rate for women with older children has long been one of the highest in the EU.[84] At the same time, women's participation in the formal economy has changed very little over the past 25 years compared to men.[85] Support for women's engagement in gender-atypical professions has relied heavily on projects funded by the Operational Programme Employment and continues to rely on Operational Programme Employment+, though their impact remains significantly limited.[86] Specific Objective 1.1 addresses this topic in more detail.

---

[76] Indicator 3.3.1

[77] EIGE (2022) *Gender Equality Index of the European Institute for Gender Equality.* Available here.

[78] More on the project website here

[79] MoLSA (2023) Equal Pay – *Final Gender Pay Gap conference is behind us as the project moves into the next phase.* Available here.

[80] *Council of Europe Convention on preventing and combating violence against women and domestic violence* (2011). Available here.

[81] POLICE OF THE CZECH REPUBLIC (2022). *Statistical Overview of Crime in 2022*. Available here.

[82] Indicator 1.1.1.

[83] Indicator 2.4.2

[84] EUROSTAT (2022) *Employment rate of adults by sex, age groups, educational attainment level, number of children and age of youngest child* (%). Available here.

[85] Indicator 3.3.3

[86] *Report of the Ministry of Labour and Social Affairs of the Czech Republic relating to the evaluation of CR 2030* (2020)

Regarding pay differences, gender inequality is slightly and very slowly decreasing. However, challenges remain in reconciling personal and work life and in societal understanding of this issue, which is changing very slowly. The issue of gender equality lacks significant support in decision-making positions, which are predominantly held by men. Compared to the EU, the Czech Republic is at the beginning of its journey towards gender equality. Therefore, more energy is needed to achieve this goal.

3.4 Equal access is ensured for those at risk of discrimination based on gender, age, caregiving responsibilities, disability, ethnicity, nationality, sexual orientation, religion, or belief. A special emphasis is placed on preventing discrimination on multiple fronts.

Discrimination hinders the optimal utilisation of human potential, making it not only a values-based issue, but also an economic and societal problem. In 2021, lower employment rates compared to the general population were particularly evident among those aged 60–64 (51%), women (50%), and people with disabilities (26%).[87]

Discriminated individuals have access to free legal protection (see Objective 3.1). Moreover, for example, holders of ZTP or ZTP/P (disability) cards, individuals under 15 years of age, and those receiving care allowances at levels III and IV are exempt from the fee (CZK 100) for processing applications.[88]

The principle of equal treatment and non-discrimination for persons with disabilities is enshrined in the *National Plan for the Promotion of Equal Opportunities for Persons with Disabilities 2021–2025*, in line with the UN Convention. Similarly, the principle of equal treatment for LGBTI+ individuals is upheld by the new *Government Strategy for Equality and the Elimination of Barriers to a Dignified Life for LGBTI+ Persons in the Czech Republic 2021–2026*. One of the visions of this document is the recognition of LGBTI+ individuals as full members of society, covering all life opportunities and situations, including private and family life (access to marriage, the development of family ties, parenting, the raising of children and the fostering of relationships with them, etc.).

The *Psychiatric Care Reform Strategy* is implemented through various projects. Among the most significant are *Deinstitutionalisation of Services for People with Mental Illness*, *Support for the Establishment of Mental Health Centres I–III*, and *Support for New Services in Mental Health Care*. These projects share the common aim of increasing the proportion of community care and achieving a qualitative shift in mental health care. To this end, activities are continuously carried out to support the transformation of existing psychiatric facilities.[89] A total of 21 mental health centres have commenced operations, of which five have already secured sustainable financing from national sources.[90]

It is not possible to evaluate the long-term trend in ensuring equal access for discriminated groups. However, in recent years, there has been a slightly positive trend in the growing share of disadvantaged groups in employment. The implementation and development of new strategies targeting discrimination currently play a major role in achieving this objective. Nevertheless, full realisation of the goal has not yet been achieved.

[87] Indicator 3.4.1

[88] *Report of the Ministry of Justice of the Czech Republic relating to the evaluation of CR 2030* (2020)

[89] *Report of the Ministry of Labour and Social Affairs of the Czech Republic relating to the evaluation of CR 2030* (2020)

[90] *Report of the Ministry of Health of the Czech Republic relating to the evaluation of CR 2030* (2020)

4 Education develops individual potential and the ability to manage and influence change while fostering a cohesive society focused on sustainable development.

The modern world is undergoing significant transformation. Innovations and new job opportunities are changing the demands for skills (competencies) and, consequently, the volume and content of knowledge required for modern individuals. Education should take a broader approach, promoting critical thinking (information retrieval and verification) and the ability to adapt to change. It will be essential to master foreign languages and computer skills, which are prerequisites for navigating the globalised world. Equally important is the application of knowledge within an appropriate value framework based on the traditions of humanism and enlightenment.

The Czech education system lacks stronger integration of formal and non-formal education, particularly in addressing the dependence of educational outcomes on socio-economic background, which also has a marked regional dimension. The development of education towards a solid general foundation, creativity, and learning in context is supported by the newly approved Education Policy Strategy of the Czech Republic 2030+ and the update of the Framework Educational Programme. Given the speed and intensity of changes in today's society, it is desirable to anchor a system of support for the professional development of educators within the formal education system. The current trend in lifelong learning is not favourable. Comprehensive conditions for lifelong learning at all levels and in all forms have not yet been established.

4.1 The education system is inclusive and mutually permeable, does not segregate young pupils into talented and non-talented groups, and limits the dependence of educational paths and outcomes on their socio-economic background

It is likely that the greatest influence on the education system during the assessed period was the COVID-19 pandemic and the measures associated with it. One positive impact has been the recognition of the importance of the school's socialisation function and the value of contact with classmates and teachers. However, the impact of distance learning during the pandemic has generally been more negative. Up to a quarter of pupils experienced mental discomfort, closely linked to struggling with the curriculum taught during distance learning.[91] At the same time, distance learning exacerbated educational inequalities and highlighted often overlooked issues resulting from the socio-economic background of families, such as access to the internet, computer ownership, or a quiet space for learning at home during the day.

From a long-term perspective, the goal has been met thanks to the maintenance of free public education (except for a fee for extending the standard study period by one year in a bachelor's or master's programme).

In general, differences in the distribution of secondary school pupils at regional level can be observed; this characterises the Czech education system. Overall, in 2021, 27% of secondary school pupils in the Czech Republic attended grammar schools (lyceums), 50% attended vocational schools with a school-leaving examination (*maturita*), and 23% attended vocational schools without a school-leaving examination. Prague differs slightly, with more pupils attending grammar schools and fewer attending vocational schools without a school-leaving examination. The opposite is true in the Karlovy Vary and Ústí nad Labem Regions, where almost 30% of pupils study vocational courses that do not end in a school-leaving examination.[92] These two regions highlight the extremely strong dependence between a child's socio-economic background and educational outcomes, which are influenced by family background and place of residence. At the

[91] PAQ RESEARCH (2021) *Impact of the COVID-19 Pandemic on Schoolchildren – Report 2*. Available here.

[92] Indicator 4.1.1

same time, these regions accumulate additional problems such as poor housing conditions, debt enforcement, and a higher risk of poverty.[93]

Local Crime Prevention, a grant scheme, helps to ensure that vulnerable children and at-risk youth do not drop out of the education system. Applicants must guarantee social work with the target group when submitting applications. Since 2020, projects involving residential stays, weekend events, and trips for children and young people have included work with their parents and emphasised the importance of school attendance and education.[94] Discussions are ongoing regarding a proposed amendment to the regulation on inclusive education in the Czech Republic.[95]

Horizontal gender segregation in education is a barrier to achieving the goal of an inclusive education system that does not select pupils based on gender. Gender stereotypes about "traditional" male and female professions shape the upbringing of boys and girls, as well as the attitudes of educators, significantly influencing pupils' educational and professional decisions.[96]

This specific objective of ensuring a non-selective education system in the Czech Republic is partially fulfilled, but COVID-19 measures have dealt a blow to the system. There is a lack of consistent integration between formal and non-formal education, particularly in addressing the issue of the dependence of educational outcomes on socio-economic background, which also has a significant regional dimension.

4.2 The education system supports teachers and other educators to bring necessary changes to education and take on the role of guiding learners in a changing world. It is open to intensive contact with the real world and involves all education stakeholders.

Further development of the education system includes supporting teachers and fostering their collaboration with the wider community. This objective is supported by initiatives such as involving additional stakeholders, including municipalities and entrepreneurs, in education. Schools have been recommended, through methodological guidelines, to use the workshops of partner secondary schools or polytechnic centres for technically oriented subjects. Pupils can also visit technology-focused popularisation centres (public workshops) such as *PrůšaLab*, *TechnoLab*, and *Techmania*, where they are introduced to the latest technologies. Within the Operational Programme Development, Research and Education (OPDRE), open digital professional teaching resources have been developed, and civic education has been supported. Regarding collaboration between schools and businesses, since September 2019, the Schools Act[97] has required vocational school headteachers to establish partnerships with employers in developing school curricula. They are also required to ensure practical training for pupils in workplace settings and to involve industry professionals in schools.[98]

In the Czech Republic, there is no career development system for teaching staff within the formal education system that rewards the quality of educators' work, their participation in further education, and professional development.[99] Although efforts exist, such as improving the quality of future teachers through projects at university faculties of education or reducing disparities between novice and experienced teachers, many measures remain unestablished. However, various projects are contributing to positive changes. Under the OPDRE project *System for the Support of the Professional Development of Teachers and Headteachers* (SYPO), pilot support

[93] MoEYS (2020) *Implementation Card for Key Measure of the Strategy for the Education Policy of the Czech Republic up to 2030+ for the 2021–2023 Period. Improving the Quality of Education in Structurally Disadvantaged Regions.* Available here.

[94] *Report of the Ministry of the Interior of the Czech Republic relating to the evaluation of CR 2030* (2020)

[95] Czech Society for Inclusive Education (2020) *Educators and experts on the amendment to the Inclusion Decree: ministry has other options to make the system more efficient than cutting support for the most vulnerable.* Available here.

[96] Government Office (2021) *Gender Equality Strategy 2021–2030*. Available here

[97] *Act No 561/2004 on preschool, primary, secondary, post-secondary vocational, and other education*

[98] *Report of the Ministry of Education, Youth and Sports of the Czech Republic relating to the evaluation of CR 2030* (2020)

[99] Indicator 4.2.1

for novice and newly arrived teachers is under way. The aim is to design and test a comprehensive and continuous support system for novice teachers in collaboration with mentors and school leadership. Additionally, SYPO is piloting methodological meeting points ("cabinets") as spaces where teachers can expand their knowledge and professional skills, exchange experiences with colleagues, and further develop professionally in their field; in 2020, three such cabinets were piloted: *Czech Language and Literature*, *ICT and Informatics*, and *Mathematics and Its Applications*.

The National Pedagogy Institute (NPI) of the Czech Republic provides targeted further education for teaching staff and supports career counselling in lifelong and continuing learning.[100]

Professional development for teachers must also emphasise education connected to practice and the real world. For example, the online application *Profil Učitel21* (Teacher21 Profile) enables teachers to assess and plan the development of their digital competencies. Campaigns such as *Literacy for Life* – Teaching in Context and www.imysleni.cz focus on linking children's learning in school with the real world. To support the development of an ICT methodological support network, the National Cabinet for Informatics and ICT (a SYPO project) was established.[101] Given the growing opportunities in the virtual world, maintaining contact with the real world is an essential aspect of the education system, which should be increasingly taken into account in the future.

In previous years, the *CIVIS* project[102] focused on developing social and civic competencies for sustainable development. Support for sustainable development was divided into two areas: methodological support and further education for teaching staff in global development education (GDE), and study visits for teaching staff to foreign schools and educational institutions engaged in GDE and sustainable development.[103]

Public expenditure on educational institutions (at all levels) has been rising since 2017, reaching 5% of GDP in 2019.[104] Since 2017, teacher, teaching assistant, and non-teaching staff salaries have increased to 150% of their previous levels. The goal is to continue this positive trend and ensure that, by 2030, average teacher salaries reach at least 130% of the average wage. However, predicting further salary developments is challenging due to the current economic crisis and its broader impact. In recent years, teacher salaries have remained 20–25% lower than the average salary of university graduates. In 2021, the average teacher salary was CZK 46,770, more than CZK 7,000 higher than in 2019.[105]

Although progress has been made on Objective 4.2, numerous measures remain to be implemented. Given the speed and intensity of changes in today's society, it is desirable to anchor a system of support for the professional development of educators within the formal education system. Ensuring adequate pay for teachers remains a priority.

[100] *Report of the Ministry of Education, Youth and Sports of the Czech Republic relating to the evaluation of CR 2030* (2020)
[101] Ibid.
[102] Lipka – školské zařízení pro environmentální vzdělávání Brno, příspěvková organizace
[103] *Report of the Ministry of Education, Youth and Sports of the Czech Republic relating to the evaluation of CR 2030* (2020)
[104] Indicator 4.4.4
[105] Indicator 4.2.2

4.3 Education ensures that everyone has access to the development of transferable competencies needed for active citizenship, professional, and personal life. The system includes an adequate general foundation necessary for further education, social integration, and understanding the interconnections of the modern world.

The *Education Policy Strategy of the Czech Republic up to 2030+* (*Strategy 2030+*)[106] focuses on acquiring competencies needed for active civic, professional, and personal life, as well as transforming the content, methods, and evaluation of education. Concurrently, revisions to the framework educational programmes (FEP) are under way. Within the framework of *Strategy 2030+*, an emphasis is placed on integrating principles of sustainable development into education. This principle is also underscored by a Health Education working group in the preparation of updated content concerning human health and personal safety. As part of the planned FEP revision, experts in personal development education, healthy lifestyles, and safety topics are being involved. Similarly, the inclusion of environmental topics is ensured. One of the key competencies requiring greater integration across the curriculum is digital competence. In 2020, the final version of the framework educational programmes for informatics and information and communication technologies for lower secondary education, grammar schools, and secondary vocational education was completed.

Education for Sustainable Development (ESD) will be included in the FEP for primary and lower secondary education, which is currently being revised. Digital literacy will be described comprehensively in the FEP as a set of competencies, where practically every educational field contributes to the building of its foundation and it is developed through application in various contexts of schoolwork. In secondary vocational education, environmental topics and ESD are mainly included in Science Education area, with Ecology and Environmental Protection as a standalone subject, and further in the cross-cutting theme Humans and the Environment. Schools are obliged to incorporate the cross-cutting theme Humans and the Environment into their school educational programmes and may fulfil this requirement in various ways.[107]

Career counselling is an integral part of school counselling services and educational counselling institutions. As part of the VIP II Career project, the E-Career e-learning education modules were updated and made available to counselling staff via the ISA+ portal. Generally, a greater emphasis on career and other forms of counselling at universities is needed. Career counselling is further mentioned in Specific goals 4.1 and 4.2.

Teacher training on how to work with heterogeneous groups is one of the measures under the Long-term Plan for Education and Development of the Education System of the Czech Republic 2019–2023, which is being implemented on an ongoing basis. To support the sharing of experiences between teachers, and with subject didactics at faculties training teachers, the OPDRE Core Skills Development call was introduced.

Between 2003 and 2022, the results of Czech pupils were on a declining trajectory. The number of pupils achieving at least a basic skill level is decreasing, as is the number of pupils achieving the highest levels.[108] In 2018, approximately 20% of pupils were at a low level in reading literacy, numerical literacy, and science literacy.[109] Conversely, the share of pupils at a high level was lower – reading (8.3%), science (7.6%), and numerical literacy (12.6%). Generally, girls have higher reading literacy levels than boys, while levels in mathematics and science are comparable.

In recent years, the proportion of children aged 3 to 6 in formal childcare facilities has declined (63% in 2021), as has the proportion of children under 3 years old (5% in 2021).[110]

The Strategy for the Education Policy of the Czech Republic up to 2030+ supports the development of education towards a good general foundation, creativity, and learning in context. The realisation of this goal will also be influenced by FEP updates. Considering

[106] MoEYS (2020) *Strategy for the Education Polity of the Czech Republic up to 2030+*. Available here.

[107] MoEYS (2020) *Strategy for the Education Policy of the Czech Republic up to 2030+* . Available here.

[108] Czech School Inspectorate (2023) *International PISA Survey 2022*. Available here.

[109] Indicator 4.3.1

[110] Indicator 4.3.2

the available data, assessing the objective is challenging due to the difficulty of implementing measures in practice.

4.4 The lifelong learning system is publicly guaranteed and widely accessible. It focuses on both professional education and the development of transferable skills.

The *National Register of Qualifications* (NRQ) is being continuously developed and expanded. Professional qualifications are defined through standards to outline the competencies of individuals applicable in specific work activities on the labour market, reflecting current needs and trends. For this fundamental principle of the NRQ to be fulfilled, professional qualifications must be acceptable to employers, who therefore contribute to defining their content.

Sector Councils, established through EU-funded projects, have become a platform for involving employers in the development of the NRQ system. Since 2020, the system has been financed from the state budget, with the Ministry of Education, Youth and Sports (MoEYS) responsible for its development and maintenance, in cooperation with representative experts from employers, schools, educational institutions, and other ministries. The NRQ is linked to the National Register of Occupations, managed by the Ministry of Labour and Social Affairs (MoLSA).

The Czech Republic ranks among countries with below-average adult participation in further education and learning, a situation exacerbated by the COVID-19 pandemic.[111] Long-term unfavourable factors include the fact that funding is predominantly from private sources and people need to use their free time if they want to participate.[112] Since 2014, the share of adults aged 25–64 participating in any form of further learning (formal or non-formal) within the last four weeks exceeded 10% only in 2017. In 2021, this figure was merely 5.8%.[113] The literacy levels of Czech adults are comparable to those in other European countries. Since 2010, the share of the adult population of working age with higher education has been growing, while the share of people with education below the secondary school-leaving exam has been declining.[114] However, it should be noted that more than 10% of adults in the Czech Republic have low reading literacy.[115]

From an overall perspective, the goal is not being met, as the trend in lifelong learning remains unfavourable, especially given the impacts of the COVID-19 pandemic, which highlighted deficiencies. Comprehensive conditions for lifelong learning at all levels and in all forms have not yet been established.

[111] National Pedagogy Institute (2021) *What the pandemic tells us about the importance of lifelong learning*. Available here.

[112] National Observatory of Employment and Education (2015) *Competitiveness of the Czech Republic – Quality of Human Resources*. Available here.

[113] Indicator 4.4.1

[114] Indicator 4.4.3

[115] Indicator 4.4.2

5 Health is improving across all population groups.

Improved quality of life and better health contribute to cost-effectiveness in health care and have an impact on the economy and labour market. In the health sector, it is essential to focus on reducing inequalities, the influence of environmental and workplace quality on health, and prevention.

The effects of implemented measures in health are often delayed – sometimes by decades. Despite existing measures, data still show increasing health inequalities. Further measures must intensify efforts to increase public spending on primary prevention, promote health literacy, and encourage healthy lifestyles, particularly among children. Additionally, immission levels must be considered as much as possible, and vehicle technical conditions and emissions control in traffic must be strictly enforced and monitored, as these can pose significant health risks to the population. The prevalence of frequent alcohol consumption and binge drinking is increasing. A positive, albeit not reassuring, trend is the decreasing share of daily smokers.

5.1 Life expectancy in good health is increasing for all population groups in the Czech Republic

Until 2019, there was a long-term positive trend in life expectancy at birth. This changed with the COVID-19 pandemic. Compared to 2019, average values decreased by approximately two years. In 2021, the average life expectancy at birth was 80.5 years for women and 74.1 years for men. Life expectancy varies across regions in the Czech Republic. The highest average values for both genders (2020–2021) were recorded in the regions of Prague and Vysočina, while the lowest were observed in the Karlovy Vary, Ústí nad Labem, and Moravian-Silesian Regions. For instance, men in Prague live on average four to five years longer than men in the Ústí nad Labem Region.[116] The average healthy life years (HLY) at birth and at age 65 also reflects the extent to which Objective 5.1 has been achieved. In 2020, HLY at birth was 62.5 years for women and 60.9 years for men. HLY at age 65 was 7.9 years for women and 7.5 years for men.[117] Although the trend in HLY in the Czech Republic was not improving even before the pandemic, COVID-19 has demonstrably worsened these values. It is essential to highlight the long-term unfavourable situation in HLY in the Czech Republic, which has shown little change compared to life expectancy. While people in the Czech Republic live longer, they often do so with illnesses or other health complications. On average, people in the Czech Republic live shorter healthy lives compared to the EU average.[118]

Health matters are governed by the *Strategic Framework for Health Care Development in the Czech Republic up to 2030* and its implementation plans, which focus on: (1) reforming primary care; (2) preventing diseases, promoting and protecting health, and increasing health literacy; (3) implementing integrated care models, integrating health and social care, and reforming mental health care; (4) stabilising human resources in health care; (5) digitalising health care; (6) optimising the healthcare payment system. Specific projects currently support, for example, healthy lifestyles and responsible attitudes to health in schools, as well as improving access to health care for people at risk of poverty and social exclusion. [119]

The COVID-19 pandemic had (and continues to have) a significant impact not only on physical health, but also on mental health. While the situation gradually improved during the pandemic, the prevalence of symptoms of at least moderate depression or anxiety in mid-June 2020 remained nearly double compared to pre-pandemic levels. The most affected groups were

[116] Indicator 5.1.1

[117] Indicator 5.1.2

[118] EUROSTAT (2021) *Healthy life years at age 65 by sex*. Available here.

[119] MOH (2020) *STRATEGIC FRAMEWORK FOR HEALTH CARE DEVELOPMENT IN THE CZECH REPUBLIC UP TO 2030.* Available here.

women, especially mothers, young people aged 18 to 24, and individuals with significant income losses.[120] The suicide rate has been approximately 11% since 2019.[121]

Due to COVID-19, healthy life expectancy in the Czech Republic has not increased, but has instead declined, remaining consistently below the EU average. Despite numerous measures, the objective is challenging to evaluate, particularly as health-related outcomes often take years, sometimes decades, to emerge. Changing attitudes towards lifestyle and personal health is a complex process requiring the involvement of multiple stakeholders and societal coordination. For this reason alone, the objective must remain in place, with continued efforts to meet it.

5.2 Factors causing health inequalities are being reduced.

Alongside regional disparities (see Specific Objective 5.1), an individual's health is also influenced (apart from age) by their socio-economic status, i.e. education level and income. The proportion of people aged over 16 with lower secondary education who are chronically limited in activities for health reasons was, in 2021, twice as high as those with higher education. Similarly, a significant difference (threefold in 2019) in health limitations exists between individuals with the lowest and highest incomes. Overall, the situation in the Czech Republic is not improving. Instead, there is an increase in the proportion of people who are chronically limited in common activities for health reasons, with the most notable deterioration observed in the lowest-income groups. Among those with the lowest incomes, up to 47% were chronically health-limited in their common activities in 2019.[122]

To achieve the specific objective, it is necessary to raise awareness of the reasons behind health inequalities among both professionals and the general public. During the reporting period, this issue was addressed by the National Institute of Public Health project *Effective Health Support for People at Risk of Poverty and Social Exclusion*. To reduce health inequalities, 14 regional health promotion centres were established, and 68 intervention-based motivational programmes were implemented to encourage health-related decision-making. The project also developed a network of cooperating professional capacities (staff from relevant regional authority departments, regional hygiene authorities, general practitioners, regional Roma coordinators, etc.).[123]

Plans for the motivational programme *Increasing Shared Responsibility in Health and Addressing Lifestyle Risk Factors* (arising from the *National Strategy for Health Protection and Promotion*) did not come to fruition. Other projects are being implemented, reinforcing people's responsibility for their health (e.g. *World Hand Hygiene Day* and *Healthy Balls*) and highlighting lifestyle risk factors (e.g. diabetes prevention and cardiovascular disease prevention).[124]

According to available information, the factors causing health inequalities are not diminishing. Although it is difficult to assess progress towards the objective since many projects are still ongoing, data so far indicates, if anything, deepening inequalities in health.

[120] IDEA CERGE EI (2020) *Mental health impacts of the coronavirus pandemic.* Available here.

[121] Indicator 5.1.4

[122] Indicator 5.2.1

[123] National Institute of Public Health (2023) *Effective Health Promotion Project.* Available here.

[124] *Report of the Ministry of Health of the Czech Republic relating to the evaluation of CR 2030* (2020)

5.3 The public healthcare system is stable, universally accessible in terms of quality and capacity, and simultaneously develops the corresponding professional structure. The average age of medical and non-medical staff is decreasing, and the remuneration of all healthcare workers is

In January 2023, a systematic adjustment to remuneration for medical and non-medical healthcare workers was introduced. The changes aim to improve, among other things, the remuneration of health laboratory technicians and unify conditions that recognise years of practice.[125] The average remuneration for healthcare workers is increasing annually; in 2020, their average salary was CZK 50,900, and their average wage was CZK 42,400. The highest increases were seen among doctors, dentists, general nurses, and midwives. In 2020, the median salary of doctors and dentists in the public sector was approximately CZK 79,000, while the median salary of general nurses and midwives in the public sector was CZK 46,000.[126]

The age structure of doctors in the Czech Republic has been growing older in recent years. The number of doctors over 65 years old has been increasing,[127] exceeding the average of other EU countries.[128] Although the number of doctors in the Czech Republic has risen over the past decade, many doctors are currently nearing retirement age, posing a significant issue for the Czech healthcare system. This will lead to increased healthcare costs and exacerbate existing regional disparities, particularly in access to health care.[129, 130] In terms of regions, the highest number of healthcare workers per capita is found in the City of Prague, which also provides care for residents of the Central Bohemia Region. Generally, healthcare services are more concentrated in major regional cities due to catchment area dynamics. In some regions, the density of doctors per capita is as much as double that of regions with the lowest density.[131] Overall, the number of doctors (full-time equivalents) per capita has seen only a very slight increase in recent years (4 doctors and 0.7 dentists per 1,000 inhabitants in 2020). On the other hand, the number of general nurses has remained relatively stagnant in recent years.[132] Since 2021, the *Concept of Subsidies for Resident Posts for Young Doctors* has been in effect. This aims to improve staffing in regions with a shortage of doctors, financially support young doctors during their specialist training, and motivate healthcare providers to train young doctors.[133] At the same time, an amendment to the Act on the Medical Professions of Doctor, Dentist, and Pharmacist was passed.[134]

In terms of unmet medical care needs, the Czech Republic achieves very low levels and ranks among the lowest in Europe. According to data from 2018, only 0.3% of individuals over the age of 16 reported that they needed to visit a doctor in the past year but did not do so due to financial reasons, transport accessibility, or waiting times.[135]

The Czech Republic is among the countries with relatively low survival rates for monitored cancers, but the situation is improving, with values increasingly approaching the European

[125] MoH (2023) *Changes in the remuneration of non-medical health professional from 1 January 2023.* Available here.

[126] Indicator 5.3.2

[127] Indicator 5.3.1

[128] Eurostat (2021) *Healthcare personnel statistics – physicians.* Available here.

[129] OECD (2021) *Czech Republic: Country Health Profile 2021.* Available here.

[130] Czech Radio (2020) *More and more doctors are at retirement age. We need to get graduates into the field, says minister.* Available here.

[131] IHIS (2017) *Healthcare in the Czech Republic: staff capacity and remuneration*. Available here.

[132] Indicator 5.3.3

[133] MoH (2020) *Education in residential locations to be more financially attractive for young doctors, especially in areas with a shortage.* Available here.

[134] *Act No 95/2004 on conditions for the acquisition and recognition of professional competence and specialised competence to pursue the medical profession of doctor, dentist, or pharmacist*

[135] Indicator 5.3.4

average.[136] One major success has been the declining mortality rate for colorectal cancer, which is very common in the Czech Republic.[137]

In July 2023, the government approved an amendment to the Act on Health Services and Conditions for the Provision Thereof.[138] Its goal is to legally regulate and simplify the management of medical records in connection with the digitalisation of health care, refine the legal framework of the National Health Information System, and introduce a definition and basic legal framework for telemedicine healthcare services.[139]

Progress towards Objective 5.3 has been partial. Some areas show a positive trend (e.g. average remuneration of healthcare workers), while others are undesirable (e.g. average age of doctors). The Czech public healthcare system generally aligns with the EU average in most respects. However, its future development, such as increased support for prevention, will be crucial.

5.4 A healthy lifestyle is supported through higher public spending, focusing on primary disease prevention and health promotion throughout life.

The overlap between health care and social care is addressed in the *Strategic Framework for Healthcare Development in the Czech Republic up to 2030.*

In 2020 and 2021, healthcare spending as a percentage of GDP increased significantly due to the COVID-19 pandemic, from 7.6% in 2019 to 9.2% in 2020 and 9.5% in 2021.[140] In absolute terms, total public healthcare expenditures in 2021 amounted to nearly CZK 501 billion. Of this, 3.46% (CZK 17.3 billion) was allocated to primary prevention (information programmes, immunisation), and 5.33% (CZK 26.7 billion) to secondary prevention (screening, health monitoring).[141] Attention should clearly focus on primary prevention, which is linked to an emphasis on health literacy. Although the proportion of individuals with limited health literacy decreased by 12%[142] between 2015 and 2020, in 2020, inadequate or problematic health literacy still affected nearly half of the population over the age of 18.[143]

Preventive programmes by health insurers focus on the early detection of oncological and cardiovascular diseases and risks leading to metabolic disorders. Contributions for vaccinations not covered by public health insurance (e.g. against tick-borne encephalitis or influenza) are also an integral part of these programmes. Smoking cessation support programmes are also available to a significant portion of insured individuals.[144]

Promoting health throughout life is desirable, but it is most effective among children. The cornerstone should be regular physical activity and healthy eating. Since 2017, compulsory swimming lessons have been introduced for pupils in the first tier of primary school. The experimental roll-out of the three-year project *Extra Hour of Physical Activity*, aimed at fostering a positive and lasting relationship with physical activity, was popular among pupils and schools. Interest in European schemes such as *School Fruit and Vegetables* and *School Milk* is also growing annually.[145] However, obesity and overweight among children have not improved

[136] Indicator 5.3.5

[137] IHIS (2020) *C18 – colon cancer*. Available here.

[138] *Act No 372/2011 on health services and conditions for the provision thereof (Health Services Act)*

[139] MoH (2023) *Government approves amendment to the Health Services Act.* Available here.

[140] Indicator 5.4.2

[141] Indicator 5.4.1

[142] Kučera, Z. *et al.* (2023) Changes in Health Literacy in the Czech Republic Between 2015 and 2020. *Časopis Lékařů českých.* 162: 84–92.

[143] Indicator 5.4.3

[144] *Report of the Ministry of Health of the Czech Republic relating to the evaluation of CR 2030* (2020)

[145] *Report of the Ministry of Education, Youth and Sports of the Czech Republic relating to the evaluation of CR 2030* (2020)

significantly. In fact, the number of overweight children is slowly rising, and over one fifth of children aged 11 to 15 are overweight or obese.[146]

Progress towards the objective has been channelled through efforts to address the overlap between social and healthcare services under the *Health 2030 Strategic Framework*, although changes have not yet been implemented. Further measures must intensify efforts to increase public spending on primary prevention, promote health literacy, and encourage healthy lifestyles, particularly among children.

[146] Zdravá generace (2019) *Czech children are gaining weight. A fifth of them have a weight problem*. Available here.

5.5 The consumption of addictive substances and the exposure of the population to health-risk substances and noise are decreasing through better environmental quality. Relevant limits for harmful substances and noise are not exceeded.

Health quality and well-being are closely linked to limiting and avoiding harmful factors, not only alcohol and tobacco, but also poor air quality, high noise exposure, and light pollution.

Some immission limits continue to be exceeded, but the situation is gradually improving despite minor year-on-year fluctuations. In 2022, areas exceeding immission limits (excluding ground-level ozone) accounted for 1.7% of the Czech Republic's territory, where approximately 12% of the population lives. The ground-level ozone immission limit was exceeded in only a minimal area in 2022, marking a significant year-on-year change.[147]

A persistent issue is the high proportion of emissions caused mainly by local heating with solid fuels, which accounts for more than one third of household heating. One of the main subsidy schemes for households in the fight for cleaner air is the Ministry of the Environment's "boiler subsidies", encouraging the replacement of old and obsolete boilers. By the end of 2021, 107,000 boiler replacements had been approved, totalling CZK 11.9 billion.[148] Currently, an estimated 150,000 non-ecological boilers still need to be replaced.

Cars and their technical condition affect not only air quality, but also noise exposure levels. Legislative amendments have tightened the conditions of the regular vehicle technical inspection system and allowed for mobile technical inspections, including real-world emission measurements. Vehicles contributing the most to air pollution are gradually being removed from circulation.[149]

Since January 2021, the new End-of-Life Products Act,[150] which includes vehicles, has been in effect. This law sets emission charges based on compliance with EU-prescribed emission limits for exhaust gases.

The proportion of people exposed to all-day noise levels (Lden) above 55 dB in Czech agglomerations slightly decreased between 2017 and 2022. The most severe noise pollution situation in 2022 was in the Prague and Olomouc agglomerations.[151] Critical areas are defined in strategic noise mapping as populated regions where the given noise limit values are exceeded. Specific noise control measures under the *Noise Control Programme* (NCP) are developed within the scope of *action plans for each critical area* (territory) identified for individual noise sources, primarily based on the results of a more detailed analysis of the area (e.g. detailed acoustic studies). The solution is more stringent urban acoustic planning (bypasses, restrictions on the passage of freight vehicles, etc.). The level of noise in urban settings is also influenced by the speed of passing vehicles, which is within the competence of each municipality.[152] Similarly, the quality of road surfaces, which is the responsibility of road owners or managers, affects noise levels. Preparations for railway projects involving high-speed tracks and the completion of road bypasses are matters for the years ahead.[153]

Light pollution poses ecological, health, and safety risks, deprives us of views of the night sky, and costs a significant amount of money and energy – often entirely unnecessarily. In 2023, a technical standard came into force that sets parameters for energy-efficient lighting to minimise the adverse effects of artificial light.[154]

[147] Czech Hydrometeorological Institute (2023) Air Pollution in the Czech Republic in 2022. Available here.

[148] CENIA (2022) *Report on the Environment of the Czech Republic 2021.* Available here.

[149] *Report of the Ministry of Transport of the Czech Republic relating to the evaluation of CR 2030* (2020)

[150] *Act No 542/2020 on end-of-life products.*

[151] Indicator 5.5.4

[152] *Report of the Ministry of Transport of the Czech Republic relating to the evaluation of CR 2030* (2020)

[153] *Report of the Ministry of Transport of the Czech Republic relating to the evaluation of CR 2030* (2020)

[154] MoEnv (2023) *New Standard to Protect People and Nature from Light Pollution.* Available here.

The second group of health risks concerns hazardous activities. This primarily includes excessive alcohol consumption[155] and the use of tobacco products. In 2020, likely due to the COVID-19 pandemic,[156] per capita alcohol consumption was the lowest in 15 years (since 2005).[157] In 2022, 6.7% of individuals met the criteria for risky drinking, and 8% met the criteria for harmful drinking. Men statistically consume excessive amounts of alcohol on a single occasion more often than women, and the occurrence of harmful drinking is also significantly more common among men.[158] Men also smoke more than women. In 2020, the prevalence of tobacco use among those over 15 years old was nearly 31%, with men accounting for a larger share of tobacco use than women.[159] In addition, there are other risk activities. In the Czech Republic, there are 900,000 people abusing sedatives and hypnotics, 125,000 at risk of cannabis use, 80–120,000 pathological gamblers, and 45,000 injection drug users of methamphetamine and opioids. This area is conceptually covered by the *National Strategy to Prevent and Reduce the Harm Associated with Addictive Behaviour 2019–2027*.

Although some immission limits are exceeded, the situation is generally improving. Since 2021, a new law on end-of-life products has been in force, and, since 2023, a new technical standard has been in place setting parameters for energy-efficient lighting. As part of further progress towards the objective, it is necessary to strictly monitor and control the technical condition of vehicles and conduct emissions measurements in active traffic, which can be extremely harmful to public health. The prevalence of frequent and binge drinking of excessive amounts of alcohol and general access to alcohol consumption remains a significant issue in the Czech Republic, which is often downplayed. A positive, albeit not reassuring, trend is the decreasing share of daily smokers.

[155] Three categories of drinking are used (WHO): moderate drinking (up to 20 grams of alcohol for women and up to 40 grams of alcohol for men per day); hazardous drinking (20 to 40 grams of alcohol for women and 40 to 60 grams of alcohol for men per day); harmful drinking (more than 40 grams of alcohol for women and more than 60 grams of alcohol for men per day).

[156] National Monitoring Centre for Drugs and Addictions (2023) *Report on Illicit Drugs in the Czech Republic 2022.* Available here.

[157] Indicator 5.5.1

[158] National Institute of Public Health (2023) *National survey on tobacco and alcohol use in the Czech Republic 2022*. Available here.

[159] Indicator 5.5.2

6 Higher public investments support key cultural functions and equal access to culture and creativity.

Culture is reflected in the value system of society, co-creates national identity, and fosters creativity. Its significance is growing especially in modern secular democratic states. Knowledge of one's own culture and its values, along with respect for the diversity of cultural expression, can also better protect society from undesirable influences, such as the loss of cultural identity or xenophobia. For these and many other reasons, it is in the state's interest to support the development of cultural knowledge, reduce inequalities in access to culture, and thus contribute to improvements in the quality of life.

Although it is in the state's interest to support the development of cultural knowledge, public spending on culture in the Czech Republic is stagnating, investment in contemporary art is low, and the law on public cultural institutions has not been passed, nor has the status of artists been approved. On the other hand, there has been success in stabilising film incentive funding, thanks to increasing subsidies from the state budget, and slightly rising wages in the cultural sector – although these increases are not keeping pace with the overall rise in income.

6.1 Higher public spending is directed towards culture, and the possibilities to engage in long-term financial planning for cultural organisations are strengthening

For more than ten years, there has been government discussion about the share of culture in total state budget expenditures, but it has not yet been possible to reach a value of 1% of the state budget.[160] The total revenue of the Ministry of Culture for 2023 is budgeted at CZK 2.8 billion, which is CZK 1.3 billion higher than the budget approved for 2022. This increase includes significantly higher year-on-year revenue from the NRP (an increase of CZK 1.888 billion). Conversely, the revenue from the EU budget for the 2014–2020 programming period has decreased by CZK 543 million, and there is also a decrease in revenue from financial mechanisms (a decrease of CZK 40.1 million).[161] In the approved budget for 2022, extraordinary non-tax incidental revenues were also included (amounting to CZK 47.2 million). The proportion of total expenditure on culture in 2020 was 20.5%.[162] In contrast to the overall culture budget, the share of culture support in total culture spending has been increasing since 2018.

The objective is partly achieved through existing measures in the State Cultural Policy and NRP, but it has not been fully met because culture still does not reach at least 1% of the state budget.

6.2 The development and establishment of new cultural organisations is systemically supported in response to the needs of changing society

The development and establishment of new cultural organisations currently lacks support. The consultation document for the bill on public cultural institutions had not been approved by the end of 2023. The planned long-term investment programme for 2020–2028, which would be based on multi-source financing (usually state, city, region), is currently under discussion. The development of creativity in society is supported, for example, through the National Information and Consulting Centre for Culture within the scope of the fostering and promotion of non-professional artistic activities, but efforts are not primarily focused on the youngest generations.[163] Investment in growing collections of contemporary art in 2021 was significantly lower than in the previous two years. The most funds were channelled into the Moravian Gallery in Brno (CZK 1.5 million out of a total of CZK 2.5 million in investments).[164]

The achievement of the objective remains quite far off, as the law on public cultural institutions has yet to be passed and investments in contemporary art are low.

---

[160] MoF (2022) *State Budget 2023 in Brief.* Available here.

[161] MoC (2023) *Approved budget for 2023 and medium-term outlook for 2024 and 2025*. Available here.

[162] Indicator 6.1.1

[163] *Report of the Ministry of Culture of the Czech Republic relating to the evaluation of CR 2030* (2020)

[164] Indicator 6.2.1

6.3 Cultural and creative industries are supported as an opportunity for economic development

Cultural and creative industries (CCIs) remain a relatively underdeveloped area in the Czech Republic. However, a cornerstone here is the newly introduced *CCI Development and Support Strategy*, which overarches the sector strategically at national level. The intentions outlined in the *State Cultural Policy 2015–2020* (and Outlook up to 2025) were not incorporated into the *CCI Strategy*.[165] The volume of public expenditure allocated to support CCI in the last three years was around 1.5% of total industry expenditure, amounting to approximately CZK 2.7 billion in 2020.[166] In 2021, the Czech Republic adopted the *Czech Tourism Development Strategy 2021–2030*.

Action under Specific Objective 6.3 made significant progress thanks to the newly established *CCI Development and Support Strategy* and the *Czech Tourism Development Strategy 2021–2030*. Progress was also made in stabilising the financing of film incentives. In 2022, film incentives were supported with a total of CZK 1.3 billion.[167]

6.4 Cultural workers are supported both methodologically and financially, with the aim of increasing their prestige and improving the conditions necessary for their creative and motivational role towards other groups in society

Since 2014, there has been a gradual increase in wages in the cultural sector. The average salary in the cultural sector in 2009 was CZK 23,400, rising to CZK 34,600 in 2020. An exception to this wage increase is libraries, which saw a decrease in the year-on-year comparison (2019–2020).[168] There has also been a long-standing failure in the Czech Republic to reach a consensus on "artist status". Although the Czech Republic committed to adopting this under the NRP, the legislation and definition of this concept – which should anchor artists in the labour market – are still missing. This issue was emphasised by the COVID-19 pandemic, particularly in terms of aid uptake.

Although wages in the cultural sector are increasing, their growth has not kept pace with the overall rise in incomes. While in 2009 these workers had relatively average salaries, by 2020, they were below the average. This not only fails to raise the prestige of their profession, but also does not improve the conditions for their further participation in society.

[165] *Report of the Ministry of Culture of the Czech Republic relating to the evaluation of CR 2030* (2020)

[166] Indicator 6.3.1

[167] MoC (2023) *Czech government decides to supplement funding for film incentives this year*. Available here.

[168] Indicator 6.4.1 (note: the figures are for culture only, not recreation)

2. Economic Model

The world is currently going through a very turbulent period. The coronavirus crisis has left deep scars in global communities, economies, and supply chains. The following period, which was supposed to be reserved for recovery from the damage that had been caused, was quickly marked by the Russian invasion and terrorist attacks on Ukrainian territory, which will have significant global impacts. Climate change and its extreme phenomena are beginning to affect daily life with increasing frequency. Currently, the EU's annual losses caused by climate change exceed EUR 12 billion.[169]

The Czech economy, despite some improvements, is still linked to higher material, emissions, and energy demands. Particularly due to the need for a rapid shift away from fossil fuel supplies from Russia, support for renewable energy sources and decarbonisation of the economy increased last year, while access to transitional energy sources, namely gas, was more complicated.

Economic development always hinges significantly on functional and resilient infrastructure (critical, transport, energy, and water management infrastructure). In the Czech Republic, infrastructure is generally in good condition, but each area shows a number of smaller or larger risks, which should be considered in the coming years with a focus on their resilience to climate change.

Public finances face a significant deficit, mainly caused by the government's decision to cap energy prices after a sharp rise due to the energy crisis caused by the war in Ukraine. ***Investment expenditures in the area of research, development, and innovation (R&D&I) are declining, and government spending is not reaching the targets previously set by the Czech Republic. The efficiency of public expenditure has not yet been systematically monitored or evaluated. Overall, government and household debt is rising, not only due to the substantial impact of the COVID-19 crisis and the current geopolitical situation, but also due to the general trend of increasing indebtedness.***

7 The economy has been growing long term, and the domestic sector is strong.

For the Czech economy to remain competitive in the long term, it is necessary to focus on supporting entrepreneurship. This support must cover all business sectors, particularly small and medium-sized enterprises (SMEs), which are the least developed sector with the highest growth potential. It is also important to focus on improving the quality of foreign direct investments and support the shift from subcontractors to independent producers capable of offering their own products in the final production market. Large businesses form the backbone of the Czech economy, and it is important to support their ability to reach and maintain a leading position in technical, organisational, and business development worldwide. The largest potential for contributing to economic growth lies with SMEs, as they are less developed than large and micro businesses in the Czech Republic. The biggest barriers to SMEs development must be removed, particularly by facilitating access to capital and reducing relatively high administrative barriers.

The national private business sector is developing positively, but is still lagging behind OECD countries. According to data from the pre-pandemic period, the share of domestic companies in creating added value in the economy was reporting slight increases, not only at the expense of the public sector, but also by reducing the share of companies under foreign control. Czech businesses were moving up in international trade. However, they have not reached the highest echelons, as exports of medium high-tech products decreased due to supply chain disruptions during the pandemic. Conversely, the importance of high-tech exports has grown, and revenues from

[169] EUROPEAN COMMISSION (2021), PESETA IV study "*Climate change impacts and adaptation in Europe*", Joint Research Centre, Seville. Available here.

technological services are increasing. An improvement in the quality of foreign direct investment can be expected, due to stricter conditions for investment incentives and changes in evaluating investment incentives. However, this shift cannot yet be directly evaluated due to the short validity period of these conditions and the few investment projects implemented so far. Overall, labour productivity has increased significantly in recent years, but we still lag behind the EU average. Some sectors, particularly automotive within the manufacturing industry, were severely affected by the COVID-19 pandemic, supply chain disruptions, and rising energy prices and other inputs.

7.1 Domestic parts of the economy are developing

Targeted support for domestically owned companies has become a significant topic in discussions about the issue of profit outflow abroad. The outflow of profits through dividends abroad is a long-standing phenomenon, and there has been no change in this situation in recent years.[170] In 2022, the Czech current account balance fell into a deficit of over CZK 415 billion. This reflects the significant outflow of dividends, caused by extraordinary profits in some sectors, efforts to reduce taxes on extraordinary profits through accounting optimisation, and a record decline in the Czech Republic's external trade.[171] Extraordinary dividends increased the share of financial and insurance activities (35.8%, an increase of 11 percentage points compared to 2021), and particularly of banks, in the total outflow of dividends from the Czech Republic, followed by the manufacturing industry and motor vehicle production (28.7%).[172] This reflects the high investment attractiveness of the Czech Republic and its profitability for foreign investors.

The Czech Republic is implementing ongoing measures to reduce bureaucracy for entrepreneurs. Currently, the number of measures has expanded to a total of 196 measures and projects for the digitalisation of public administration. So far, 110 measures have been completed, and work is continuing on the remaining ones.[173] The Ministry of Industry and Trade (MoIT) is the national manager of the agenda to reduce entrepreneurial bureaucracy and has created the STOP Bureaucracy project for this purpose. The goal is to present specific measures to reduce bureaucracy affecting entrepreneurs and to share information about other key digital projects. Proposals and suggestions, which entrepreneurs could submit throughout 2022, are currently being evaluated.[174]

Support for innovation and collaboration between the business sector and research institutions is implemented through programmes (Innovation Vouchers for SMEs, The Country for the Future, and others) and strategies (*Innovation Strategy of the Czech Republic 2019–2030*). Between 2018 and 2020, companies' own innovation activity stagnated, and 14% of businesses collaborated on innovation activities with public research institutions and universities.[175] During the same period, company innovation costs were still mainly driven by the purchase of machinery, equipment, and software (52.9%). Expenditure on in-house or purchased research and development accounted for 25.7% in 2020, a decrease of 10.4 percentage points compared to the previous period (2016–2018).[176]

The structure of gross value added in the economy, from the origin perspective, did not change significantly between 2015 and 2022. However, the national private sector slightly increased its share in the economy to 49%[177] (from 47.3% in 2015). This was at the expense of the public

[170] Government Office (2016) Analýza odlivu zisků: Důsledky pro českou ekonomiku a návrhy opatření. Available here.

[171] Česká národní banka (2023) *Balance of payments statistics*. Available here.

[172] Česká národní banka (2023*) Zpráva o vývoji platební bilance 2022*. Available here.

[173] MoIT (2022) Report on the Development of the Business Environment in the Czech Republic in 2021. Available here.

[174] MoIT (2023) Stop Bureaucracy. Available here.

[175] Czech Statistical Office (2022) Innovation Activites of Enterprises – 2018-2020. TAB 39A Enterprises with innovation activities that collaborated with other entities on innovation activities in 2018–2020, by type of collaborating partner. Available here.

[176] Czech Statistical Office (2022) Innovation Activites of Enterprises – 2018-2020. Analytical Section. Available here.

[177] Indicator 7.1.1.

sector and, in particular, the private sector under foreign control. Gross value added in the national private sector grew the most among the mentioned sectors, by 29.1% between 2015 and 2019. The public sector grew by 24.3%, and businesses under foreign control grew by 21.4%. As a result, the importance of businesses under foreign control has decreased by more than 1 percentage point since 2015, reporting a share of 32.27% by 2019.

Although the objective was being fulfilled, it was unclear whether and how effectively the measures had a real impact on the targeted objective. Currently, the situation is, if anything, stagnating, influenced by fluctuations and stresses caused by the pandemic and ongoing geopolitical developments.

7.2 The SME sector is growing

The domestic business sector is primarily composed of small and medium-sized enterprises (SMEs). SMEs are the backbone of the Czech economy, their flexibility enhances competitiveness, they provide employment in regions, and they reinvest their profits in the domestic economy. In March 2021, the government approved the *Strategy to Support Small and Medium-Sized Enterprises 2021-up to 2027*, which builds on the *Small and Medium Enterprises Support Strategy 2014–2020*. The document's primary aim is to increase the productivity and competitiveness of SMEs, as well as strengthen the international position of the Czech Republic, for example, in research, development, and innovation. SMEs are also the main beneficiaries of European funds under the OPEI, which has long been the primary source of funding for SME support. According to the evaluation report on OPEI financial instruments from February 2022, financial instruments are a tool that generates added value and strengthens employment in supported projects. A positive impact on the financial performance of the supported businesses was also observed. However, this impact has yet to be statistically confirmed.[178] The eligibility of expenditures for the 2014–2020 programming period ends at the end of 2023. For the 2021–2027 period, the key programme for supporting Czech entrepreneurs is the OPTAC, whose funds can be used to co-finance business projects in the areas of digitalisation and digital infrastructure, research and development, business development, circular economy, and sustainable energy. The dependence of business sector financing on EU funds has not decreased, and with the new funds responding to the challenges of the Green Deal for Europe[179] and the coronavirus crisis, this dependence is expected to increase.

The need for greater public awareness of entrepreneurship, particularly among young people, is addressed in framework educational programmes and in the modernisation of vocational education. Many secondary schools also offer courses in simulated companies, using simulations as tools to acquire knowledge and competencies, as well as real student companies and business-related supplementary courses for graduates of vocational training programmes. Some universities have established business incubators to assist students as they start their businesses, providing them with support and examples of good practice.[180]

Between 2015 and 2019, the total number of active SMEs grew by approximately 16,000, with more than 45,000 legal persons contributing to this increase.[181] In contrast, the number of sole traders declined by approximately 25,000. Given that these are pre-pandemic figures, it can be assumed that this decline will be steeper. Employment at SMEs increased, accounting for 66.4% of total employment in the business sector in 2019 (compared to 57.7% in 2018). In 2019, the added value generated by SMEs accounted for 56% of the total, nearly matching the EU average of 56.4%. The data indicates that SMEs capitalised on the economic boom and increased both their output and employment in absolute terms, but they have weakened slightly compared to large enterprises over the reporting period.

The objective is only being achieved in absolute terms due to the peak of the economic cycle in 2019. However, in terms of SMEs' relative contribution to added value creation and employment, this objective is not being fully met, and the trend is the opposite.

The share of high-tech products in the Czech Republic's total exports, in cross-border terms, followed an increasing trend, peaking in 2020 (13.1%). However, since 2021, values have been decreasing.[182] The largest share is made up of exports of ICT equipment, computers, and optical instruments. The main markets for these products are the USA (22.2% of total exports) and Germany (20.2%). Nevertheless, the structure of this indicator includes the import and export of any goods passing through the Czech Republic's borders, including the simple transfer of goods between warehouses of multinational transport and trade companies for the EU region. In national

[178] MoIT (2022) *Evaluations and Other Analyses*. Available here.

[179] European Commission (2023) *European Green Deal*. Available here.

[180] PointOne (2023). Available here.

[181] MoIT (2021) *Strategy for Supporting Small and Medium-sized Enterprises 2021–2027.* Available here.

[182] Indicator 7.3.1.

7.3 The state supports the shift of the economy to higher positions in the international division of labour and in the global value chain

terms (i.e. counting exports and imports only when ownership changes), the share of high-tech products increased by just one percentage point between 2015 and 2019 to 12%, with computers, electronic, and optical instruments and devices making up the largest portion.[183]

The share of medium high-tech products in Czech exports in national terms has been declining since 2020. From its peak of 55.9% in 2019, it fell to 53.6% in 2021. The decline was caused by disruptions in international supply chains during the pandemic and will likely be further impacted by geopolitical events in the years ahead. The largest drop was recorded in the export of motor vehicles, which decreased by 3.3 percentage points from 2019 to 2021. In contrast, the share of medium low-tech products rose to 20% in 2021, mainly in the category of basic metals, while the category of low-tech products also saw a slight increase, making up nearly 14% of Czech exports.

Income from the sale of technological services abroad increased by 74.9% between 2015 and 2021.[184] The most significant categories are computer services – IT consulting and related services, and the creation of original computer software. Income from research and development services grew by 59% since 2015, mainly due to custom research and development. Income from ownership rights to research and development results has been on an upward trend since 2019, with an increase of 85 percentage points in 2021 compared to 2015. Income from licensing fees for the right to use industrial property rose by 72% between 2015 and 2021 for utility models, although there was a 12% decline for patents, and industrial designs saw the most significant drop, nearly 70% (from CZK 1,186,981,000 to CZK 362,646,000).[185]

In addition to grant support for competitiveness, there has been a smaller-scale launch of venture capital support and financial instruments overseen by the National Development Bank (NRB). In 2020, the financial instrument IPO Fund, aimed at SMEs seeking capital through public stock offerings, was launched. The Start market on the Prague Stock Exchange for small stock companies is now in its fifth year, with 13 companies targeting capital of several tens of millions of crowns, up from two companies initially. The comprehensive development of capital markets, which remain small and relatively inactive, is overseen by the Ministry of Finance's 2019 concept.

The number of patent applications from the Czech Republic filed with the European Patent Office has fluctuated over the years. In 2021, there were 204 applications.[186] The most significant patent offices for the Czech Republic are the European Patent Office and the United States Patent and Trademark Office (577 applications in 2018). In the Czech Republic, patent protection is managed by the Czech Industrial Property Office, which in 2022 recorded 987 registered utility models and 507 patent applications, of which 355 were granted patents.

Due to the impact of the pandemic on supply chains, the significance of medium high-tech exports has weakened, particularly in the export of motor vehicles. The share of high-tech exports has also slightly declined. Income from technological services is growing. The Czech Republic is strengthening its position in custom research and creation of custom-made software.

The Czech economy is open, and as such, there is a significant share not only of domestic companies, but also firms under foreign control. After many years of blanket support for foreign direct investments, the Czech Republic is adopting an approach to selecting priority investment sectors (so-called domains) and regions suitable for the preferential localisation of foreign investments. In March 2023, the government approved an amendment to the investment incentives law in response to the shortcomings of the 2019 amendment. This should ensure a more efficient approval system, which is now under the responsibility of the Ministry of Industry and Trade and other ministries, primarily the Ministry of Finance. The support for foreign investments primarily focuses on technological investments and research and development. Incentives are assessed based on regional benefits and are supported by projects with higher

[183] Indicator 7.3.2.

[184] Indicator 7.3.2.

[185] CZECH STATISTICAL OFFICE (2022) *LICENCES ON INDUSTRIAL PROPERTY ITEMS – 2021.* Available here.

[186] Indicator 7.3.3.

7.4 The quality of foreign direct investments in the Czech Republic is increasing

added value – indirectly through indicators such as higher wages or the proportion of research and development workers. These should, in the future, contribute to increased labour productivity in the manufacturing sector. Additionally, the entry limits for small and medium-sized enterprises have been lowered, making incentives more accessible for them. To eliminate potential security risks associated with foreign investments from non-EU countries, the European Parliament's regulation on the screening of foreign investments has been adopted. This introduces a mechanism for monitoring and controlling direct foreign investments in terms of their security, reflecting the development of EU cooperation in this area.[187] In the Czech Republic, this national screening mechanism came into effect in May 2021.[188]

Indirect financial support for companies, aside from the above-mentioned investment incentives, remains unused. To support small businesses, the Start market on the Prague Stock Exchange exists for small joint-stock companies seeking to raise a modest amount of capital, although the comprehensive development of capital markets is overseen by the Ministry of Finance's 2019 concept. In April 2023, the government was presented with a law building on this concept, aimed at introducing measures contributing to the development of the financial market in the Czech Republic.

Overall, labour productivity in the Czech Republic has increased by 85% over the past 30 years, with an average annual growth rate of 2.4%.[189] The annual growth rate of real GDP per employee has been tracked since 2005. In 2020, it fell to its lowest point (96.15); however, in 2021, it registered an increase of 7 percentage points to 103.17.[190]

The objective is generally being met, and labour productivity increased by the end of 2022 due to a rise in added value alongside a modest increase in employment.[191] However, the Czech Republic still lags behind the EU average, and the real development of labour productivity in 2020 was significantly impacted by the COVID-19 pandemic. In the area of investment incentives, the 2019 amendment has been updated by another one in 2023, which transfers the approval of investment incentives to the relevant ministries and changes their system in response to geopolitical changes, the need to increase the Czech Republic's strategic autonomy, and the shift in energy transformation.

[187] *Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union (2021)*

[188] MoIT (2023) *Foreign Investment Screening*. Available here.

[189] MoIT (2023) *Analysis of Economic Development – December 2022.* Available here.

[190] Indicator 7.4.1.

[191] MoIT (2023) *Analysis of the Economic Development of the Czech Republic – March 2023.* Available here.

8 The Czech Republic has well-functioning and stable institutions for supporting applied research and development and for identifying opportunities in this area.

A higher level of innovation requires a functioning connection between research organisations, quality education, and businesses. It is necessary to renew and support the institutional base of applied research and to improve the dissemination and sharing of knowledge from research organisations with an emphasis on its subsequent practical application. The ability to innovate based on research and development is a necessary condition for improving living standards. Innovation is also crucial for our ability to respond to anticipated societal needs and global challenges. A challenge for the future, in addition to innovation itself, is the ability of businesses to commercialise innovations and create an entire value chain from them. They must not only discover new solutions domestically, but also use and sell them to ensure that as much added value as possible remains in the domestic economy. A key task for the state is to support the linking of research activities with small and medium-sized enterprises and to streamline and accelerate the commercialisation of research results, thereby strengthening the still insufficient institutional base for applied research.

The amount of funds for research, development, and innovation (R&D&I), as well as the number of researchers and specialists, is growing, thanks in particular to businesses under foreign control. However, investment expenditure in the field of R&D&I is declining, and government spending is not reaching the set targets. The decline in students in technical fields is proving difficult to reverse, although there is still significant potential to increase the number of female students and graduates.

Innovation activity at businesses is increasing, not only in firms under foreign control. Domestic companies are more extensively conducting in-house research, and collaboration with the higher education sector is gradually increasing in terms of sales. However, research, development, and innovation are primarily domains of foreign and large enterprises. SMEs innovate on a much smaller scale. In international comparisons, the Czech Republic is still considered only a moderate innovator and is not among Europe's leaders.

8.1 The Czech Republic has a stable material and personnel capacity for research and development with an appropriate structure and focus, in which both the state and businesses invest sufficient financial resources

Research and development activities significantly contribute to the creation of new knowledge and, through their transformation into new or innovative products, technologies, or processes, are an essential prerequisite for stable and long-term sustainable economic growth. Without adequate financial support from both the state and the business sector, it cannot be expected that research and development in the Czech Republic will produce internationally competitive knowledge, innovations, and technologies that will contribute to greater productivity and employment in the Czech economy, and thus indirectly to social cohesion and sustainable development.

Gross expenditure on research and development (GERD) rose to CZK 121.9 billion in 2021, an increase of CZK 19.2 billion compared to 2018. The intensity of research and development relative to GDP stood at 2% in 2021.[192] However, the Czech Republic's *Innovation Strategy 2019–2030* foresaw an increase in financing to 2% of GDP by 2020, 2.5% of GDP by 2025, and 3% of GDP by 2030, i.e. an annual increase of 0.1 percentage points; of this, public sources should increase to 1% of GDP and business sources to 1.5% by 2025, and 2% by 2030.

In terms of sectors, the continuing influence of privately-owned businesses under foreign control, particularly in the manufacturing industry, is evident, as they finance two thirds of business-related research and development and are the largest source of R&D funding in the Czech Republic.

Investment expenditures between 2015 and 2021 significantly decreased, and this downward trend remains. In 2021, their share of R&D&I expenditure was only 9%. Within their structure, the

[192] Indicator 8.1.1.

importance of long-term intangible assets – software, know-how, and industrial rights – has increased. These expenditures accounted for 25% of R&D&I investments in 2021.[193] These investments are again primarily made by privately owned manufacturing companies under foreign control. In terms of investment intensity in research and development (the share of R&D&I investments relative to gross fixed capital formation in the region), the best result is achieved by the South Moravian Region, with 3.32%. After a decline following the peak in 2014, this share has been rising again since 2019.

Government budget allocations for research and development (GBARD) have been steadily increasing, reaching CZK 38.3 billion in 2021.[194] However, when expressed as a percentage of total state budget expenditures, the share of GBARD has been steadily decreasing since 2017. In 2021, this share fell to 2.01%.[195] Overall public expenditures increased by 0.54 percentage points between 2020 and 2021. These expenditures were evenly distributed between institutional and purpose-specific support from 2015 to 2018, and, except for a few exceptions, were of a non-investment nature. In 2021, institutional support increased at the expense of purpose-specific support, which decreased by 2 percentage points. The largest provider of funds was the Ministry of Education, Youth and Sports (nearly CZK 15 billion in 2021). Beneficiaries were primarily public and state universities and the Czech Academy of Sciences. Private companies are beneficiaries only to a small extent, with support directed mainly at domestic medium-sized enterprises . These companies are particularly active directly in research and development or in the electrical, metalworking, and automotive industries, as well as in information and communication activities.

The share of GBARD in total GDP has long been stagnating around 0.62%. After an increase in 2020 (0.67%), it fell to 0.63% of GDP in 2021.[196]

The most important source of financing for research and development activities carried out in the Czech Republic is businesses. In 2021, these sources accounted for 60% of funding for R&D in the Czech Republic. In absolute terms, domestic or foreign businesses invested 72.8 billion CZK in R&D conducted in the Czech Republic.[197] Particularly between 2012 and 2015, EU sources were an important source of funding.

A comparison with EU member states shows that the Czech Republic, after Slovenia, has the second highest share of investment in R&D as a percentage of GDP among new member states and currently has a higher R&D intensity than several southern European member countries, such as Spain, Italy, Portugal, or Greece. The growth in R&D intensity in the Czech Republic has been among the largest within the EU27 member states in the last decade.[198]

In 2021, the highest R&D intensity among EU member states was recorded in Sweden (3.35%), Austria (3.22%), Belgium (3.19%), Germany (3.13%), Finland (2.98%), and Denmark (2.81%). Six member states recorded R&D expenditure of less than 1% of their GDP in 2021: Romania (0.48%), Malta (0.65%), Latvia (0.71%), Bulgaria (0.81%), Cyprus (0.89%), and Slovakia (0.95%).[199]

Among non-EU countries, Israel and South Korea have had the highest R&D intensity for a long time. More than 3% of GDP is also spent on R&D in Japan, the United States, Switzerland, and Taiwan. In Russia, it is only around 1% of their GDP.[200]

Skilled human resources working directly in research and development play a key role in the process of creating and transferring knowledge and are thus an essential prerequisite for ensuring the long-term sustainable economic and technological development of society through its own

[193] Indicator 8.1.1.

[194] Indicator 8.1.2.

[195] Indicator 8.1.2.

[196] Indicator 8.1.2.

[197] Indicator 8.1.1.

[198] EUROSTAT (2022) *New Eurostat R&D expenditure*. Available here.

[199] EUROSTAT (2022) *EU investment in R&D increased to €328 billion in 2021*. Available here.

[200] OECD (2023) *Gross domestic spending on R&D* (indicator). Available here.

efforts. The total number of people working in research and development has been steadily increasing and in 2021 it was nearly 85,000 full-time equivalent [201] (FTE[202]) persons. Compared to 2018, this number increased by 10,000 people. As for gender representation, 71% of these individuals identify as male, and the number of men and women is only significantly similar in auxiliary positions. The proportion of women has been steadily decreasing. Of the total number of people, 56.8% are researchers, 30.6% are technical and specialist workers, and 12.6% are miscellaneous auxiliary workers. While the proportion of researchers is increasing, we observe a declining trend among technical and auxiliary workers. The largest number of workers are employed in foreign-controlled private enterprises (32.4%), public and state universities (24.7%), and domestic companies (24%). The majority of workers are engaged in technical sciences (43.2%) and natural sciences (36.3%). Since 2018, the number of workers in social, humanities, and technical sciences has been decreasing, while natural and agricultural sciences have shown a long-term increase.

The proportion of scientific publications co-authored by domestic and foreign researchers has been steadily increasing, and in 2021 this value reached 58.8%.[203] Targeted support for excellent research projects is still sporadic and therefore insufficient. This can be illustrated by the very low success rate of Czech applicants for ERC (European Research Council) projects. Participation in these projects is considered an indicator of the quality of scientific institutions or even the entire national research system.[204]

The number of students and graduates in technical fields, including education, mathematics, statistics, natural sciences, ICT, engineering, manufacturing, and construction, decreased across the board between 2015 and 2019, but since then their numbers have increased again, with the exception of technical and social science fields, which continue to decrease.[205] Among the first category, the only growing field in terms of student numbers was the environment. In the ICT category, only software development and application analysis grew. The share of students in all these fields compared to young people aged 20–29 remained the same or decreased. In the last five years, the number of female students in ICT fields has increased by 32.6%.[206] However, the Czech Republic has the lowest representation of women in ICT in the EU, with 92.6% of ICT employees being male.[207]

The fields of education in mathematics, statistics, and natural sciences are the only ones where women predominate. Among other fields, the largest decrease was observed in engineering, manufacturing, and construction, mainly due to interdisciplinary programmes.

The amount of funds for R&D as well as the number of research workers and specialists are growing, especially thanks to foreign-controlled businesses. However, investment spending on R&D is declining, and government spending falls short of established targets. The decline in students in technical fields is proving difficult to reverse, although there is still significant potential to increase the number of female students and graduates.

[201] Indicator 8.1.3.

[202] Number of persons converted to full-time equivalent. The head count as of 2018 was 113,447 individuals.

[203] Indicator 8.1.4.

[204] MoEYS (2020) *National Research, Development, and Innovation Policy of the Czech Republic 2021+.* Available here.

[205] Czech Statistical Office (2022) *Students and Graduates of Universities in the Czech Republic 2001–2021.* Available here.

[206] Czech Statistical Office (2022) *Students and Graduates of Universities in the Czech Republic 2001–2021.* Available here.

[207] Eurostat (2022) *More men with an ICT education employed than women.* Available here.

8.2 Innovation activity in businesses is growing, based mainly on the results of domestic research and development, and the extent of collaboration between the academic and business sectors is increasing

Research and development are considered a key factor for innovation activity. In total, businesses invested more than CZK 266 billion in innovation activities in 2020, which is an increase of more than CZK 100 billion compared to 2018.[208] Businesses under foreign control invest almost twice as much in innovation as domestic businesses. The share of innovative businesses that also conduct research and development activities reached 40.7%,[209] with in-house R&D costs amounting to CZK 72.8 billion.[210] Innovative domestic businesses conduct this R&D activity more often. The share of innovation costs relative to the revenues of these innovative businesses has not changed much over time, although after a decline in 2018, it increased to 3.1% in 2021.[211]

Between 2018 and 2020, 56.9% of businesses successfully introduced process and product innovations.[212] These were mainly process innovations, indicating a focus on improving internal processes, marketing methods, and organisational changes. Businesses under foreign control introduced these innovations more frequently, and their implementation also increased with the size of the company.[213]

In 2020, tax support for research and development in businesses amounted to CZK 2.1 billion. This support was mostly utilised by private businesses under foreign control (CZK 1.3 billion) and domestic private businesses (CZK 847 million).[214]

Since 2016, company spending on R&D has been increasing, and in 2021 it reached CZK 76.6 billion.[215] Investment costs for R&D amount to approximately 8.3%, and the most common R&D expenditures exceed CZK 100 million.

The share of innovative businesses that collaborated on innovations with universities was 11% in 2018, but this share has been decreasing, and in 2020 it was only 9.8%.[216] The largest decline occurred in businesses under foreign control, where there was a drop of 4.3% compared to the previous period, possibly due to measures related to the COVID-19 pandemic. As for domestic businesses, their share has remained around 10%.

Venture capital investment in start-ups in the Czech Republic is very low, around 0.005% of GDP. It peaked in 2017 (0.007% of GDP).

Innovation activity in businesses continues to grow, not only at businesses under foreign control. Domestic companies are more extensively conducting in-house research, and collaboration with the higher education sector is gradually increasing in terms of sales. However, innovation is still primarily the domain of foreign-controlled companies and large businesses. From an international comparison perspective, the Czech Republic is still a modest innovator and does not belong among European leaders.

[208] Indicator 8.2.4.

[209] Indicator 8.2.3

[210] Indicator 8.1.1.

[211] Indicator 8.2.4.

[212] Indicator 8.2.2.

[213] Czech Statistical Office (2022) *Innovation Activities of Enterprises 2016–2018.* Available here.

[214] Indicator 8.2.6.

[215] Indicator 8.2.1.

[216] Indicator 8.2.7.

9 Natural resources are utilised as efficiently and carefully as possible to minimise the external costs caused by their consumption.

Sustainability, productivity, and ultimately the economic maturity are reflected in the ability to manage resources, especially in terms of the efficiency of their use and recycling. An important part of such a solution is the better use of domestic resources – replacing natural materials with recycled waste and secondary raw materials. In the transition towards a circular economy, it is crucial to focus on designing products with a view to reusing the maximum amount of input materials and components, even after their life cycle ends.

The use of resources is associated with externalities, i.e. external costs and benefits. Externalities are only partially included in the price of resources, meaning society often uses resources more, or less, than their social value would justify.

Among the most important resources for the Czech economy are energy and other mineral resources, land, water, and clean air. Another significant parameter in resource consumption is greenhouse gas emissions, particularly CO2, pollutants, and waste production.

Greenhouse gas emissions have stagnated in recent years. The emission intensity of gross domestic product (GDP) has been successfully decreasing over the long term, but it remains several times higher than for the EU as a whole.

The circular economy has not been successfully developed so far, which reflects the long-term and transformative nature of this objective. Several activities have already taken place in public administration, strategic documents such as Circular Czech Republic 2040 and its action plan have been adopted, but the transformation of industry, the economy, and increased cyclic use of resources and higher use of secondary resources have not yet been initiated. Gradually, material and energy efficiency is increasing, and the development trend is heading in the right direction, but despite this positive trend, material efficiency falls short of the European standard, and deficiencies remain in energy savings, particularly in meeting the obligations of Directive 2012/27/EU on energy efficiency.

Food self-sufficiency should be viewed, essentially, from the perspective of the EU and internal market, to which we belong. Therefore, food security and the protection of high-quality agricultural land are becoming important issues.

9.1 Greenhouse gas emissions and the carbon intensity of products are decreasing

The 2020 data should be interpreted in the context of the COVID-19 pandemic, which significantly reduced economic activity and contributed to a drop in total greenhouse gas emissions.

National targets and expected trajectories for reducing greenhouse gas emissions are set out in the strategic document *Climate Protection Policy of the Czech Republic*.[217] An update of the document was being prepared in 2023 in response to the adoption of the *Fit for 55* package and the dynamics of climate change in recent years. For 2020, the objective was to reduce emissions by 32 Mt CO2 equivalent compared to 2005 (excluding the LULUCF[218] sector), thus reaching a total of approximately 114 Mt CO2 equivalent. This target was met, and CO2 equivalent emissions in 2020 reached 113.34 Mt,[219] fulfilling 71% of measures and tasks under the Climate Protection Policy. Meeting the target for 2030 (a reduction of 44 Mt CO2 equivalent compared to 2005) is possible, but additional measures will be required, which should be included in the updated Climate Protection Policy, alongside the ongoing updates to the *National Energy and Climate Plan* (see below) and the *State Energy Policy of the Czech Republic*.

Since 2017, a gradual negative impact from the LULUCF sector has been apparent, particularly due to large-scale logging during the bark beetle calamity. As a result of this calamity and

[217] MoEnv (2017) *Climate Protection Policy.* Available here.

[218] LULUCF stands for Land Use, Land Use Change and Forestry.

[219] Indicator 9.1.1.; Indicator 13.2.2.

significant logging, this sector stopped absorbing carbon and instead began to significantly contribute to total CO2 emissions from 2018 onwards. The sector, which mostly reports negative values, contributed 12.77 Mt CO2 equivalent in 2020 according to estimates[220].

In terms of emission intensity (emissions per GDP), the Czech economy still relies heavily on carbon-based technologies and fuels. In 2020, the emission intensity in the Czech Republic was 0.530 kg CO2 equivalent per EUR, while the EU27 average was 0.258.[221]

Due to the Russian invasion of Ukraine, EU sanctions, and the RePower EU package aimed at cutting dependence on Russian gas, significant fluctuations from the declining emission trend post-COVID-19 pandemic can be expected in the data after 2022.

The Czech Republic is implementing several measures to reduce greenhouse gas emissions. These measures generally stem from the Climate Protection Policy of the Czech Republic. The structure and types of support for renewable energy sources and increasing energy efficiency have been broadly defined in the Czech National Energy and Climate Plan since 2020. This document was updated during 2023 and was acknowledged by the government in October. Negotiations with the European Commission will follow, and the final version should be completed by 30 June 2024.

A significant impact on emission levels in the Czech Republic will also be caused by the change in the energy mix and the shift from fossil to sustainable energy sources, which is receiving more attention due to geopolitical events.

Emission reduction targets have not been met. While the emission intensity of GDP is decreasing, it is still very high compared to the EU.

9.2 The share of the circular economy in total material flows is increasing

In 2021, the rate of cyclic material use in the Czech Republic was 11.4%, an increase of 2.3 percentage points compared to 2017, bringing it closer to the European average of 11.7%,[222] which has stagnated after a decrease from 12% in 2019 to 11.7% in 2020 and 2021. However, due to the structure of this indicator, secondary raw materials are not included in this share.

The construction industry, as one of the important parts of the economy, has one of the highest innovative potentials for a more sustainable and circular transformation. Currently, construction waste is used for recycling and backfilling. In 2021, 71.12% of construction material was recycled, and although this is an increase compared to a drop in 2020 by 2 percentage points, the trend is still largely downwards.[223] 20.32% of construction waste was used for backfilling, but the 7.27 percentage point decrease compared to 2019 was largely due to a change in methodology in the following year, when the category “disposal of waste as a process material for securing landfills” was moved to the landfilling category. Improving the values in the circular material use indicator could be supported by the *New European Bauhaus* initiative, which is part of the European Green Deal. Its main objective is to focus on and guide the construction sector towards greener and more sustainable alternatives.

The *Circular Economy Strategic Framework of the Czech Republic 2040*[224] was approved by the Czech government on 13 December 2021. The objective of the Circular Czech Republic is to formulate the prerequisites, strategic goals, and measures needed to create a resilient circular economy. Ten priority areas were identified, ranging from products and design to industry, energy, bioeconomy, waste management, and others. The document was created in collaboration with the OECD and funded by the EU Structural Reform Support Programme. In June 2023, the Czech government approved the follow-on implementing *Action Plan for 2022–2027*, which sets specific activities and tasks for the six-year period ahead in order to contribute to the goals set out in the Strategic Framework.

[220] CENIA, MoEnv (2021) *Evaluation of Climate Policy in the Czech Republic*. Available here.

[221] Eurostat (2022) *Air emissions intensities by NACE Rev. 2 activity*. Available here.

[222] Indicator 9.2.1.

[223] Indicator 9.2.3.

[224] MoEnv (2021) *Circular Economy Strategic Framework of the Czech Republic 2040.* Available here.

In March 2020, the EU introduced a new Circular Economy Action Plan, which is part of the *European Green Deal* and the proposed industrial strategy. It includes proposals for eco-design[225] (more sustainable product design), reducing waste production, and strengthening consumer rights, all of which should lead to greater inclination towards a circular economy. Special attention is paid to resource-intensive sectors such as the textile industry, electronics, IT and communication technologies, plastics, and construction.

The update of the *Czech Waste Management Plan*, with an outlook up to 2035, was approved by the government in May 2022 and was available for public consultation up to the end of August 2023. This is the main strategy for waste management. The Czech Waste Management Plan incorporates all the targets of the amended European directives, the new Waste Act, the End-of-Life Products Act, and the amendment to the Packaging Act. The main objective is the transition towards a circular economy, waste prevention, and an increase in the share of recycling and material recovery of waste.

In 2022, the transposition of the European Directive on single-use plastic packaging was completed, and it became Act No 244/2022, effective as of 1 October 2022.[226] In the Czech Republic, no legislation on returnable plastic waste is in force, but this is expected to change in 2023. Since February 2023, plastic bottles have been returnable in several stores in the Czech Republic through private sellers' initiatives.

The objective has not yet been achieved, and the cyclical use of resources has only increased slightly. Although a number of preparatory activities are under way in public administration, it is necessary to complete the preparation of legislative changes and begin implementing, in particular, the purchase of products made from recycled materials and secondary raw materials according to green public procurement criteria. It is also necessary to motivate the private sector and business activities according to circular economy principles in order to achieve European goals.

9.3 The energy and material efficiency of the economy is increasing

Material productivity, i.e. economic performance per unit of consumed raw materials,[227] increased until 2019. In 2020, there was a short-term relative decoupling. Due to the COVID-19 pandemic, economic performance fell by 5.6% year on year, with domestic material consumption dropping even more significantly, by 7.5%, to 157.7 million.[228] The decline in material intensity suggests growing efficiency in transforming input material flows into economic output, as well as a decrease in the environmental burden per unit of GDP; however, as mentioned above, the data may be influenced by the decline in economic activities during the pandemic years.

In the short term, the share of secondary raw materials in direct material input reports a growing trend. In 2018, it reached 8.3%, and since 2011, when this share was 8.0%, fluctuating developments with no major deviations have been observed over the medium term.[229]

The energy intensity of the economy has been steadily decreasing in the long term (by half since 1990), reaching 0.375 MJ/GDP in 2019.[230]

The overall energy import dependency of the Czech Republic has been increasing over the last decade. It grew from 28.8% in 2011 to 40.2% in 2021. Compared to EU 27 countries, the Czech Republic is among those countries with low energy import dependence. The import dependency was primarily related to fossil fuels from Russia, and in 2021 it reached 25.4%. Since the start of the Russian invasion of Ukraine, gas imports from Russia to the EU have fallen significantly. This

[225] EUROPEAN COMMISSION (2023) *ESPR – ECODESIGN FOR SUSTAINABLE PRODUCTS REGULATION.* Available here.

[226] *Act No 244/2022 amending certain acts in connection with the adoption of the Act on the Reduction of the Impact of Certain Plastic Products on the Environment.*

[227] Material productivity is measured as the value of gross domestic product produced at constant 2010 prices relative to domestic material consumption (DMC).

[228] Indicator 9.3.1.

[229] CZECH STATISTICAL OFFICE (2023) *ENVIROMETR: SHARE OF SECONDARY RAW MATERIAL PRODUCTION VOLUME IN DIRECT MATERIAL INPUT.* Available here.

[230] Constant GDP 2015 in purchasing power parity

outage was offset mainly by an increase in liquefied natural gas (LNG) imports, primarily from the USA. In the first quarter of 2023, the Czech Republic managed to eliminate its dependence on gas imports from Russia. All LNG supplies from the Netherlands and gas from Norway reached the Czech Republic via Germany.[231]

In the area of mandatory consumption reduction under Directive 2012/27/EU, the Czech Republic follows the so-called alternative scheme, where the obligations lie with the state, and savings are mainly achieved through a subsidisation policy. The obligation to increase energy efficiency and achieve a cumulative energy saving of 204.4 PJ for 2014–2020, as set out in Article 7 of the directive, has long been distant, and the Czech Republic will not meet this commitment by 2020. The second commitment, i.e. the exemplary role of public buildings according to Article 5 of the directive, will be met by the Czech Republic, provided that all reported investments are made. The objective under Article 3 of the directive, i.e. the national indicative energy efficiency target, is being met by the Czech Republic.[232]

In the next programming period, as before, the Czech Republic will rely on meeting energy efficiency goals and commitments through the alternative scheme, which is supplemented by a scheme of voluntary agreements. Voluntary agreements serve as a tool for involving third-party entities without the need for the state to apply the mandatory scheme. The basic pillar of fulfilment remains subsidisation schemes, supplemented by financial instruments. Discussions are currently underway to expand the range of financial instruments.

To improve the situation by 2030, the National Energy and Climate Plan has allocated approximately CZK 140 billion to support the increase in energy efficiency.[233]

Material and energy efficiency are gradually increasing, and the development trend is moving in the right direction; however, despite this positive trend, material efficiency does not reach the European standard, and there are deficiencies in the area of energy savings, particularly in fulfilling commitments under Directive 2012/27/EU on energy efficiency.

9.4 The use of domestic agricultural production is increasing, reducing imports of agricultural products and strengthening food self-sufficiency

The implementation of the *Strategy of the Ministry of Agriculture with an Outlook up to 2030* is ongoing, and the first evaluation of these measures took place in 2020. The strategy also includes ensuring adequate food self-sufficiency. However, measures are being implemented, and ongoing results are available in the annual Agriculture Status Report. Food self-sufficiency depends on the availability of input production materials. Sensitive commodities are supported in terms of their production, while for materials where we are self-sufficient, the objective is to maintain or expand processing capacity. The aim is to limit the export of primary raw materials and the re-import of final products with higher added value made from these domestic raw materials. The degree of self-sufficiency in the production of certain basic crops, i.e. covering domestic consumption with domestic production, shows a rather negative trend in the Czech Republic.[234] Indicative target values for 2020, 2025, and 2030 are set by the *Strategy of the Ministry of Agriculture with an Outlook up to 2030*.[235]

Of the monitored crops included in this indicator,[236] the self-sufficiency rate for the production of certain basic foods has ceased to be monitored compared to previous years. These include the production of fruit, wine, hops, and pulses. Of the foods still monitored, self-sufficiency increased in 2021 for vegetables (40%), potatoes (75%), and poultry meat (68%). It should be noted that all values not reaching 100% must be imported to meet the demand of the Czech population. The

[231] MoIT (2023) *No gas imported from Russia to the Czech Republic in the first quarter of 2023.* Available here.

[232] MoIT (2022) *10th Report on Progress in Meeting National Energy Efficiency Targets.* Available here.

[233] *Report of the Ministry of Industry and Trade of the Czech Republic on the implementation of CR 2030 (2020)*

[234] Indicator 9.4.1.

[235] MoA (2016) *Ministry of Agriculture Strategy and Outlook up to 2030*. Available here.

[236] Due to limited data availability, industrial crops and feed are not covered.

only foods exceeding the 100% threshold are milk and dairy products (133%) and beef (121%), although stagnation or decline is noticeable in these as well.

To achieve higher food self-sufficiency, subsidisation schemes are being implemented. Investments in agricultural enterprises, with a preference for processing their own production or products, are supported to enhance competitiveness. Additionally, investments for processing agricultural products in food enterprises are supported, where the main recipients of the Rural Development Programme are small and medium-sized businesses. Large businesses are supported by national subsidisation scheme 13. Financial resources for the development of innovations in food processing, aimed at improving products, processes, or technologies, have been allocated for modernisation in the food industry.[237] There is also a National Programme for the Conservation and Use of Genetic Resources for the long-term preservation and protection of the world's natural resources.

Public awareness and improvements in the health of the population have been promoted through the activities of the Food Safety Information Centre, which provides information "from farm to fork".[238] This centre operates public internet portals on food safety, conducts educational activities for schools, and ensures the dissemination of information on the prevention of disease from food and on healthy nutrition. The Ministry of Agriculture strengthens consumers' connection to food from their region and to Czech food, for example, by using the "Regional Food" label[239] for the highest-quality regional products and the voluntary "Czech Food" label.[240]

Another important role is played by food banks, whose aim is to reduce food waste and distribute rescued food to people in material need, and in doing so restoring solidarity among people. Since 2016, the Ministry of Agriculture has been administering national subsidisation scheme 18, which supports the operation and development of food banks. The MoA supports co-financing of the collection and distribution of food from producers, and particularly from retail chains. Since 2016, support for food banks has amounted to CZK 480.5 million, saving more than 38,000 tonnes of food.[241]

Food self-sufficiency goals have only been achieved for certain commodities, and the trend is, if anything, declining. Given the lack of success in several commodities, it is appropriate to reconsider the current setting of food self-sufficiency in the future, even in the context of the internal market of the EU. Both food self-sufficiency and food security are negatively affected by the amount of high-quality agricultural land which has been increasingly built upon and degraded by warehouses throughout the Czech Republic in recent years.

[237] MoA (2023) *Ministry of Agriculture Report relating to the Evaluation of CR 2030*

[238] Food Safety Information Centre (2023) *Food safety*. Available here.

[239] The "Regional Food" label is awarded by the Ministry of Agriculture in 13 regions of the Czech Republic to the highest quality agricultural or food products. These must be made from local ingredients and have a link to their region – whether by traditional production methods or original regional recipes.

[240] Food producers may voluntarily label their products with a logo containing the Czech flag and the inscription "Česká potravina" (or just the words "Česká potravina") if they meet the requirements of Section 9b of *Act No 110/1997 on food and tobacco products, as amended*. This label ("Czech Food") alludes to the place of origin of a food.

[241] MoA (2023) *Ministry of Agriculture Report relating to the Evaluation of CR 2030*

10 Economic activities are supported by stable and functional infrastructure.

A key prerequisite for the functioning of a resilient economy, business, and quality of life is smartly designed, high-quality, and reliable infrastructure, which is consistently maintained at a good level and which is dimensioned with sufficient reserves, taking into account the challenges posed by climate change. Infrastructure functioning in this way contributes to the smooth operation of other sectors and helps to build resilience to crises caused by humans or nature. The sustainability of strategic infrastructure is determined by its ability to provide services of general economic interest to a sufficient extent at an acceptable cost in economically efficient systems. It depends on the structure and mutual interaction of network sectors operating infrastructure, public and induced private costs for its renewal, changes in demand, and technological innovations in the field of network services. The measure of success in building and managing infrastructure is the quality of the services it provides.

The critical infrastructure system for the functioning of the state is developing, but the current geopolitical situation highlights the need to ensure maximum protection for this infrastructure. Now, more than ever, the importance of cyber and information security for the protection of critical infrastructure has significantly increased. Unfortunately, the construction and upgrading of internationally significant transport infrastructure is very slow, and, given the current trend, it is not possible to talk about ensuring quality transport connections or the competitiveness of railways compared to road transport. The electricity transmission network remains stable and ensures uninterrupted and safe electricity supply. However, the expected developments in the coming years suggest a number of risks that need to be considered. Heat supply and the Czech thermal energy supply system have undergone major changes after EU countries discontinued gas supplies from Russia, and the situation is evolving turbulently. The war in Ukraine, rather than the increasing presence of climate change impacts, has brought about a boom in renewable and secondary energy sources. Infrastructure and access to high-speed internet is improving, with the vast majority of the population having internet access, but there is an issue with the stability of this connection in rural areas. In the future, more focus will need to be placed on increasing transmission speed and using new technologies. Water management infrastructure is developing positively, with the development speed appearing sufficient for sewers and wastewater treatment plants, but the trend in the construction and modernisation of water supply systems is slower than it should be.

10.1 Permanent state control over the critical infrastructure system is maintained, and the critical infrastructure protection system is being developed

The list of critical infrastructure (CI) elements operated by state organisational units is usually processed and updated usually once a year. This list also includes infrastructure not operated by the state but falling within the jurisdiction of a state organisational unit. Elements of critical infrastructure not operated by state organisational units are continuously determined by general measures from relevant ministries, other central administrative authorities, and the Czech National Bank. For strategic reasons, the state's significant influence is ensured in the energy sector (ČEPS and OTE).

Supervision is carried out by the relevant ministries and other central administrative authorities, which oversee the crisis preparedness plans of CI entities and the protection of CI elements. In case of security events and incidents involving critical information and communication systems, the National Cyber and Information Security Agency (NÚKIB) is also involved. The resilience of critical infrastructure can be administratively assessed based on ongoing inspections and findings. These inspections follow on from the preparation of crisis preparedness plans by critical infrastructure entities.[242] Inspections have been carried out since 2013, with their number varying significantly over the years, likely in connection with the gradual determination of critical infrastructure elements. The highest number of inspections took place in 2019 (25), with no

[242] Sections 17 and 18 of *Government Regulation No 462/2000* to implement Sections 27(8) and 28(5) of *Act No 240/2000 on crisis management and amending certain acts (Crisis Act)* define the requirements and method for the preparation of a crisis preparedness plan.

inspections in 2020; 14 inspections were recorded in 2022. Since 2013, no significant findings have been made in the course of inspections.[243] For many CI elements, it was recommended to implement further measures for physical protection, but in terms of preparedness and legal obligations, it can be said that the critical infrastructure they operate is protected against known risks.

Technical standards and binding documents for the protection of critical infrastructure are continuously developed, with several hundred already in existence. Certified methodologies are also supplemented by corporate standards. For example, the Ministry of the Interior created a set of binding documents for the Information Security Management System[244] that set criteria for the cybersecurity of critical information infrastructure. However, some ministries report limited progress in the area of technical standards.[245]

For effective management of critical infrastructure, the relevant legislation should be sufficiently flexible and regularly amended to respond to new findings and threats. Government Regulation No 432/2010 on the criteria for determining critical infrastructure elements, was updated in 2022, with some sectoral criteria adjusted in the emergency services sector, concerning the criteria for the National Operational and Information Centre and the Ministry of the Interior – General Directorate of the Fire Rescue Service of the Czech Republic, as well as criteria for determining units of the Czech Police.

In January 2023, the Critical Entities Resilience Directive (CER Directive) entered into force, introducing minimum rules for risk assessment and national resilience strategies. This directive was adopted together with the NIS2 Directive on cybersecurity. Member states were given a 21-month period from the effective date of both directives to implement them into their national legislation. The CER Directive replaces the currently valid Directive on the identification and designation of European critical infrastructures from 2008. In the context of the Czech Republic, the new directive, besides introducing new legislation, will result in a significant change in fundamental elements of the current critical infrastructure system. First and foremost, this means a broader approach to protection, or rather resilience, of critical infrastructure, strengthening the resilience of CI entities to ensure the continuous provision of essential services. Another significant change is the shift away from addressing critical infrastructure at the level of individual elements. The new approach focuses on the CI entities themselves that provide essential services.

A new law on the resilience of critical infrastructure entities, including new implementing regulations, is being prepared. The objective of the new law is to transpose the CER Directive into national legislation, while taking into account lessons learnt from recent crisis situations, including the COVID-19 pandemic and the migration wave caused by the Russian invasion of Ukraine. Cybersecurity has become one of the EU's key issues due to the increasing number of DDoS[246] attacks and rising risks of phishing[247] and ransomware[248] attacks (referred to as incidents).[249] In the pre-war year 2020, incidents in supply chains accounted for 1% of breaches, but by the following year, this had risen to 17%.[250]

---

[243] Indicator 10.1.1.

[244] *Act No 181/2014 on cybersecurity and amending related acts.*

[245] *Ministerial reports on the implementation of CR 2030.*

[246] A DDoS attack is a form of cyberattack in which attackers attempt to disrupt or damage a website, network or other online service by overloading it with large numbers of bogus or unsolicited requests until performance degradation, limitation or service failure occurs.

[247] Phishing is a type of cyberattack using social engineering techniques where the attacker tries to obtain the victim's confidential data or execute malicious code on the victim's device. It most often takes place in the form of fraudulent emails or text messages.

[248] Ransomware is a type of malicious software designed to encrypt, disable or severely restrict access to a victim's data, devices or entire systems. The attacker usually demands a ransom from the victim in exchange for access to the data.

[249] EUROPEAN COUNCIL (2022) *TOP CYBER THREATS IN THE EU.* Available here.

[250] EUROPEAN COUNCIL (2022) *TOP CYBER THREATS IN THE EU.* Available here.

Since the summer of 2023, the updated Czech Security Strategy, maintaining alignment with Czech Republic 2030, has been the top strategic document in the field of security. The protection and resilience of critical infrastructure are reflected in this strategy in various contexts.

The objective is being met, state control is ensured, and critical infrastructure should be protected from known risks according to the inspections that are being carried out. In the coming years, a quick response and adaptation of critical infrastructure to new challenges brought by the current geopolitical developments and accelerating climate change will be crucial.

10.2 High-quality transport connections are ensured with the economic, population, and transport hubs of Germany, Austria, and Poland

Long-term development is based on the *Transport Policy of the Czech Republic 2021–2027 with an Outlook up to 2050*. In the case of road infrastructure, the aim is to ensure a road network at least in the category of an alternating three-lane road, while in the case of railway infrastructure, an electrified railway track is necessary, where driving times can be achieved comparable to parallel road infrastructure. Infrastructure projects are carried out in accordance with *Transport Sector Strategies* (2018) and financing has been secured for them. Progress is being made, but the proportion of upgraded tracks in the Trans-European Network (TEN-T) in the Czech Republic increased by only three percentage points between 2018 and 2022. As of 2021, only 47% of railway infrastructure has been modernised, in the case of road infrastructure it has been 63%.[251]

The pilot use of the public-private partnership (PPP) format is focused on completing the D4 motorway between Příbram and Písek. The concession contract was signed on 15 February 2021, with the planned opening date for the motorway in its entirety set for the end of 2024.[252] In August 2023, the government approved further steps in the preparation of new PPP projects.[253]

The objective for 2030 is unrealistic, given the current trend. The slow pace of modernisation and the forecast of improvements in the position of railways versus road transport over the course of multiple decades do not make its achievement feasible.

In connection with the current developments, codes for network operation at European level have been adopted in recent years. The rules for the operation of distribution systems and the rules for the operation of the transmission system fully reflect these developments. The transmission system is being developed in accordance with the Ten-Year Transmission Network Development Plan, which is subject to approval by the Energy Regulatory Office. To ensure stability, legislative adjustments are being made for network operation in emergency situations. Measures for the digitalisation of the electricity grid and the development of smart grids are implemented through the National Action Plan for Smart Grids (NAP SG), under which infrastructure projects have been realised since 2019. The implementation of the NAP SG is proceeding according to schedule. A draft update of the NAP SG will be submitted to the government by the end of 2024.[254] The European Commission's Clean Energy for All Europeans package from 2018[255] is gradually being implemented, including via the new Energy Act. The NAP SG also includes support for the development of decentralised electricity generation. In response to the need to address energy supply security and reduce the Czech Republic's dependence on imports from Russia, the latest amendment to the Energy Act allows for the operation of small photovoltaic sources with an installed capacity of up to 50 kW for the self-consumption of electricity without the need for a licence to produce electricity. It also addresses further support for emission-free sources, nuclear energy, and the construction of renewable energy power plants. However, the introduction of the terms "accumulation" and "aggregation" into legislation is still lacking. The structure and types of support for renewable energy sources are generally set out in the National Energy and Climate Plan of the Czech Republic, with the aim of achieving a set share of renewable sources by 2030. In 2023, the National Plan was updated, and the target was adjusted to the new EU-wide target of 42.5%[256] (expressed as the share of renewable sources in gross final energy consumption).The operational support is made more specific in a draft amendment to Act 165/2012 on supported

[251] Indicator 10.2.1. (data available only for 2018 and 2020).

[252] MoT (2022) *Motorway D4 PPP Project.* Available here.

[253] MoT (2023) *Government supports preparation of further new highway and railway projects in the form of PPPs*. Available here.

[254] MoIT (2021) *Interim Evaluation Report on the Implementation of the National Action Plan for Smart Grids (NAP SG 2019–2030).* Available here.

[255] European Commission (2023) *Air*. Available here.

[256] European Commission (2023) *European Green Deal: EU agrees stronger legislation to accelerate the rollout of renewable energy.* Available here.

10.3 The electricity grid ensures the distribution of electricity to the required technical standard, regardless of the structure of the energy sources

energy sources. Investment grants have been provided through operational programmes and are also being prepared for the next period.

Capacity adequacy shows the ability of the electricity grid to fulfil its main function, namely to transmit and distribute electricity between sources and consumers, particularly considering the changing structure of the energy balance. The data for 2015–2021[257] show the very positive factor that there was no insufficient capacity in the system in terms of either energy not supplied (ENS) or loss of load duration (LLD). It should be noted that the rapid development of photovoltaic systems, even within half a year of the amendment to the Energy Act, resulted in the need for ČEPS to disconnect some users from the grid to prevent a collapse.[258]

These indicators are also significant as transmission system development indicators that are part of the regular medium-term adequacy forecast.[259] According to these forecasts, a significant increase in dependence on energy imports from abroad is expected, along with a higher likelihood of insufficient capacity in the system and a deterioration in these indicators, especially after 2025, due to the increase in renewable energy sources and the gradual phasing out of conventional coal-fired sources. The LOLE[260] (loss of load expectation) and EENS (expected energy not supplied) indicators in the baseline scenario, due to the phase-out of coal after 2040, report the lowest resulting values of all scenarios. The maximum LOLE of 3 hours and EENS of 0.9 GWh are not projected to occur until 2040. In the conservative scenario, these values are significantly higher. The safe limit according to ČEPS is 15 hours per year. Capacity adequacy in the evaluated development scenarios is highly dependent on the extension of the lifespan and the construction of new blocks of the Dukovany nuclear power plant and the availability of sufficient reserve transmission capacity in the grid in case certain sources were to fail.

The ČEPS electricity transmission continuity indicators, as reported by the Energy Regulatory Office,[261] show fluctuations in the number of transmission interruptions and their total duration from 2015 to 2019, with a peak in 2019 (11 interruptions, 143 minutes). Similarly, there were fluctuations in total energy not supplied, with a maximum in 2015 (140 MWh) and a minimum in 2016 (45 MWh).

Another challenge is how the Czech Republic will approach the development of electromobility, other alternative drives, and their energy intensity. One logical step seems to be the sharing economy and carsharing. The average car in the Czech Republic is used for only 24 minutes a day, which is only 1.7% of the time; the remaining 23 hours and 36 minutes it is idle. In contrast, the efficiency of public transport vehicles is much higher. Therefore, sustainable multimodal mobility ensuring access to transport connections across the entire country using an appropriate combination of different transport modes and local terrain, such as recuperation systems in hilly terrain, will be crucial.[262]

The objective of transmission network safety and stability is being met. However, the source adequacy forecasts, regardless of the scenario for using different types of sources, are risky and even alarming.

The Czech Republic has a significant number of households connected to district heating systems. A supply of heat is a basic condition for a healthy and quality life for households. The interest is in particular to have a high share of efficient supply systems that include a significant share of heat from renewable and secondary sources or a high share of combined heat and power

[257] Indicator 10.3.1.

[258] iROZHLAS (2023) *ČEPS TO PAY MILLIONS OF CROWNS IN COMPENSATION FOR MONDAY'S SOLAR SHUTDOWN. THE ELECTRICITY HAD NOWHERE TO GO.* Available here.

[259] ČEPS (2022) *ASSESSMENT OF THE RESOURCE ADEQUACY OF THE CZECH ELECTRICITY GRID UNTIL 2040.* Available here.

[260] Number of hours during which electricity is not supplied over one year

[261] ENERGY REGULATORY OFFICE (2022) *REPORT ON THE OPERATION OF THE CZECH ELECTRICITY SYSTEM 2019.* Available here.

[262] MOT (2021) *TRANSPORT POLICY OF THE CZECH REPUBLIC FOR 2021–2027 AND OUTLOOK UP TO 2050.* Available here.

10.4 Thermal energy supply systems create conditions for efficient use of heat from renewable and secondary energy sources available at regional and local level

generation. Efficient systems are monitored by the Energy Regulatory Office under Act 165/2012 on supported energy sources. The number of efficient thermal energy supply systems[263] increased between 2016 and 2020, reaching a peak in 2021 (221 systems).[264]

For new plants commissioned from 2021 onwards, operational support is envisaged. Combined high-efficiency electricity generation plants whose current support expires will be able to apply under new operational support schemes to keep these plants in operation if they no longer receive other operational support. Funds for the reconstruction and development of efficient heat supply systems after 2020 are prepared and allocated within the Modernisation Fund as part of the HEAT calls.[265] Also, as of 1 January 2020, the VAT rate for heat energy was reduced from 15% to 10%. However, the playing field has not been levelled by the introduction of a carbon tax for individual heat generation plants not included in the EU ETS, aimed at reducing the share of solid fossil fuels in these sources. These smaller heat generation plants compete with large heating plants supplying district heating systems, although they may not meet the same conditions for CO2 emissions and pollutants.

The objective is being achieved, the trend of growth in efficient heat supply systems corresponds to its fulfillment.

10.5 Access to high-speed internet is increasing

High-speed internet refers to coverage by NGA networks (networks enabling connections with speeds greater than 30 Mbit/s). The Ministry of Industry and Trade (MoIT) regularly announces calls for support to build NGA networks[266] in white areas. After several years of issues, the MoIT has managed to set rules for NGA network support that are non-discriminatory and sufficiently attractive to potential applicants. This issue has also been addressed by the Supreme Audit Office.[267] The findings of the audit report show that the Czech Republic has not been very successful in public support for the construction of these networks and the expansion of coverage into white areas, and the situation has improved mainly due to investments from the business sector.

In 2021, internet access service was provided to 3.9 million active connections, of which 3.2 million were non-business (residential) connections. The share of active connections with speeds over 30 Mbit/s in all active connections is 71%.[268] The most common technology is wireless access in free or licensed bands, including WiFi, which predominates in municipalities with up to 2,000 inhabitants. This technology currently uses frequency bands that allow higher internet transmission speeds, i.e. 100 Mbit/s and higher.

Access to the internet for Czech citizens has been improving long-term; by 2022, 85.4% of households had the internet.[269] Only 49.4% of households with pensioners had the internet, with only 29.9% of people aged 75+ using it.[270] However, the situation is improving, and since 2020, we have seen an increase of 10 percentage points in this group. As of 2021, the worst coverage was in the Ústí (78% of households) and Olomouc (79% of households) Regions. The share of households with access to and using the internet significantly increases with higher income and education levels. The bottom fifth of households by income (1st quintile) have access to and use

[263] An efficient thermal energy supply system is a system meeting the conditions set out in Section 2(v) of *Act No 165/2012, as amended* (50% of heat from renewable sources, 50% of heat from secondary sources, 75% of heat from combined heat and power production, or 50% of heat from a combination of these options); the definition is based on *Directive 2012/27/EU*.

[264] Indicator 10.1.4.

[265] STATE ENVIRONMENTAL FUND (2023) *HEAT CALL 1/2023*. Available here.

[266] New Generation Access Network.

[267] SUPREME AUDIT OFFICE (2020). *AUDIT FINDINGS FROM SUPREME AUDIT OFFICE AUDIT 19/15.* Available here.

[268] CZECH STATISTICAL OFFICE (2023) *THE INFORMATION SOCIETY IN NUMBERS 2023.* Available here.

[269] Indicator 8.3.1.

[270] CZECH STATISTICAL OFFICE (2023) *THE INFORMATION SOCIETY IN NUMBERS 2023.* Available here.

the internet in only 59.1% of cases. In terms of the size of municipalities, the differences in internet access in households are not very high.

Specific groups that make extensive use of the internet and mobile connections are traditionally students and women on parental leave. In terms of internet usage share, there is a difference between men (87%) and women (82%), and this is also reflected in the use of mobile data (men 79.1%; women 74.4%). Internet usage declines particularly among women in the age groups 55–74 and 74+.[271]

The main activities of Czech households on the internet in 2022 include using email (79.6%), reading news and newspapers (78%), and shopping online (61%). A notable feature, compared to the EU, is the significant share of people using internet banking (70.8%). Social media is used by 58% of individuals, particularly in the younger age group of 16–34 years, notably students.[272]

The key document in the development of very high capacity networks (VHCNs)[273] is the *National Plan for the Development of VHCN*, which defines specific goals that need to be focused on between 2021 and 2027.

The objective is being met, and the majority of the population is already covered by high-speed internet. However, in the future, it will be necessary to continue increasing its speed and utilise the most suitable technologies to enable the transition to the so-called gigabit society. One challenge will be to ensure access to services for everyone, regardless of their access to the internet or smartphones, while developing digital technologies within the public administration.

10.6 Despite the negative impacts of climate change, the state maintains a high standard of water management services while increasing their availability

Ensuring the supply of quality drinking water and functioning sewage systems are fundamental prerequisites for sustainable development in local areas and the quality of life enjoyed by their residents. Water management infrastructure is being developed in accordance with regions' Water Supply and Wastewater System Development Plans, which are regularly updated. These are financed from the regional budgets. Updates of Water Supply and Wastewater System Development Plans of the Czech Republic are funded by the Ministry of Agriculture. The aim of the updates is to determine the most suitable technical and economic solutions in terms of drinking water supply and wastewater treatment. The Ministry of Agriculture (MoA) performs inspections of owners of water supply and wastewater systems for public use in the Czech Republic and collects data in the sector. Monitoring of the sustainability of water supply and wastewater system infrastructure is one of the key goals of sector regulation. The results are published annually in a Benchmarking Report.[274] It is anticipated that benchmarking will continue to deepen and develop, primarily for the needs of oversight and regulation in the water supply and wastewater sector. Risk analysis is also used to a limited extent for purposes of good operational practice. This is addressed by current legislation, e.g. approval of operating regulations for public water supply systems and wells. One of the main problems in the water supply and wastewater sector is the heavy market fragmentation, which fosters inefficiency in the provision and quality of service. These problems will be exacerbated by the effects of climate change, especially in less populated areas. The sector is undercapitalised and, between 2016 and 2020, the debt for infrastructure renewal grew compared to the revenue of water supply owners from water and wastewater fees to CZK 7.95 billion.[275]

The number of residents permanently living in houses connected to the public water supply has been steadily increasing. In 2022, residents of the Czech Republic consumed, on average, about four litres less than in 2021, yet daily water consumption still stands at 90 litres. Compared to 1990, there has been a decrease of 84.1 litres from the previous maximum of 173.5 litres per

[271] Czech Statistical Office (2023) *The Information Society in Numbers 2023.* Available here.

[272] Czech Statistical Office (2023) *The Information Society in Numbers 2023.* Available here.

[273] MoIT (2021) *National VHCN Development Plan*. Available here.

[274] MoA (2021) *Benchmarking Report for 2020.* Available here.

[275] MoA (2021) *Benchmarking Report for 2020.* Available here.

person per day. In the past year, 4% of the population was not supplied by public water systems, and nearly 13% were not connected to a sewage system.[276]

The total number of people connected to the sewage system in 2022 rose to 9.191 million. Of these, 97.3% were connected to wastewater treatment plants (WWTPs). Until 2020, this indicator reported a growing trend, but in 2021 we saw a drop of nearly 30,000 due to the year-on-year decrease in the population of the Czech Republic. In that year, the average prices (excluding VAT) were CZK 46.10 per m³ for water supply and CZK 41.00 per m³ for sewage.[277]

The National Programme Environment supports projects aimed at protecting and improving the environment in the Czech Republic out of national resources. In 2021, the State Environmental Fund (SEF) administered 22 calls and 2 non-call projects. Grants amounting to CZK 2,815 million were paid out in the calls and distributed across 3,879 applications. In terms of water infrastructure, funds from the State Transport Infrastructure Fund amounting to CZK 697 million were disbursed in the same year, of which CZK 34 million comprised non-capital expenses.[278] According to the 2021 Report on the State of Water Management in the Czech Republic, data was collected for 2,222 measures, and data on implementation, costs, and the impacts they aim to mitigate were evaluated. Of the measures, 497 were completed, 1,081 are ongoing, and 470 have yet to be initiated.

Oversight of the sector's development is improving, and benchmarking has introduced functional qualitative criteria. Coverage of the population with water and sewage infrastructure is very high. Attention needs to be given to this sector as critical infrastructure and adapted it to the potential impacts of climate change.

[276] MoA (2022) *Report on the State of Water Management in the Czech Republic in 2021.* Available here.

[277] MoA (2022) *Report on the State of Water Management in the Czech Republic in 2021.* Available here.

[278] MoA (2022) *Report on the State of Water Management in the Czech Republic in 2021.* Available here.

11 The fiscal system as a prerequisite for a successful economy is stable.

Fiscal policy plays a significant role in macroeconomic stabilisation; however, a necessary condition for this role is the long-term sustainability of public finances. The sustainability of public finances is based on the quality of public spending and its effective allocation, a sustainable tax revenue structure, and a flexible balance between revenues and expenditures that responds to the current economic situation and phase of the economic cycle. In the long term, this balance should be balanced and have a countercyclical nature.

The state of public finances, according to past developments and forecasts for the coming years, appears somewhat strained. The consolidation of public finances in connection with the economic crisis caused by COVID-19 and the war in Ukraine will be a multi-year process, and balanced budgets in the medium-term outlook cannot realistically be expected.

The effectiveness of public spending is still not systematically evaluated across the board. However, international comparisons suggest areas may be identified where public resources are perhaps not being fully utilised efficiently.

11.1 The medium-term outlook maintains structurally balanced budgets, ensuring both the stabilising function of public finances and their long-term sustainability

Fiscal policy is one of the tools of economic policy and plays a very significant role in macroeconomic stabilisation. It requires long-term sustainability, with effective control and management of public finances being a necessary precondition for this sustainability. The Ministry of Finance (MoF) implements interim measures to combat tax evasion. One of the tools introduced in 2016 to address tax evasion was electronic sales records (EET). The current government does not share the perspective of previous governments on EET, and with effect as of 2023, EET has been completely abolished; voluntary registration is not allowed either. The My Taxes project serves the function of an online tax office. For the efficient management of state debt, the MoF also issues an annual strategy for the financing and management of this debt. The MoF can then update this strategy quarterly to take advantage of more favourable market conditions, depending on how the market is developing.

The government sector's debt is one of the key indicators of the long-term sustainability of public finances. As such, this indicator developed positively from 2013 to 2019, with a significant reduction by 14.4 percentage points to 30% of GDP. However, this trend was halted by the global COVID-19 pandemic, and during 2020–2022 it increased to 44.2% of GDP, i.e. this was a rise by 14.1 percentage points.[279]

The structural balance of the government sector shows the true fiscal policy of the government, as it is adjusted for the influence of the economic cycle and one-off operations. This balance was positive in 2016 and 2017, but by 2019 it had reached -1.0% of GDP. This development was heavily influenced in the following years by government assistance to households and businesses in response to the COVID-19 pandemic and high energy prices. The structural balance projected for 2023 is -2.5% of GDP, in line with a fiscal rule set by the Budgetary Responsibility Act. In subsequent years, thanks in part to the consolidation of public finances, its gradual reduction is expected, and is forecast to stand at -1.7% of GDP by 2026.

The fight against tax base erosion or the shifting of profits to other countries should be supported by the transposition of Council Directive (EU) 2022/2523 of 15 December 2022 on ensuring a global minimum level of effective taxation for multinational enterprise groups and large-scale domestic groups in the Union. The initiative on global taxation of multinational corporations (BEPS), from which the European directive is derived, involved 143 countries in 2023.

The objective has not yet been met. In connection with government measures to combat the coronavirus crisis and the consequences of the war in Ukraine, the objective is unlikely to be achieved in the coming years.

[279] Indicator 11.1.1.

11.2 The efficiency of public expenditure in selected public policies (healthcare, education, science and research, and others) is increasing

Public procurement – in terms of meeting the conditions of the Public Procurement Act – is handled by the Ministry of Regional Development, which is preparing a public procurement strategy for the period up to 2030. The Ministry of Finance conducts training on how to comply with the obligations of the Financial Control Act, where it highlights both good and poor practices in implementing the 3E principles in public procurement processes and in asset management. Central procurement has evolved and is now a relatively standard procedure. Based on experience, procedures and rules have been simplified and further standardised.[280] Unfortunately, the requirement to conduct evaluations has not yet been fully integrated into public administration practices. However, as part of the *Client-Oriented Public Administration* concept, the task of creating analyses and a consultation document for the Public Finance Management and Control Act has been approved. Monitoring of spending efficiency, i.e. performance-based budgeting, has not yet been integrated and would require a complete change in the approach to the creation of the state budget.

Public spending could be made more efficient through regular, thematic spending reviews. In October 2022, the Ministry of Finance published the results of a pilot project on spending reviews for postgraduate grants. This project was funded through the EU Technical Support Instrument (TSI) and implemented by the OECD.

To heal economies after the pandemic, EU member states prepared national recovery and resilience plans, which enable the use of funds from the Recovery and Resilience Facility (RRF). In the Czech Republic, this is the National Recovery Plan (NRP), which sets goals and timetables for reforms and investments. All components and measures are tied to the "Do No Significant Harm" (DNSH) principle, which mandates that none of the measures harm the environment.

As part of the Czech Ministry of Finance project "Strengthening the Management and Control of Public Finances",[281] Masaryk University's Faculty of Economics and Administration conducted an "Analysis of Internal Control Systems", supplemented with an analysis titled "*Economy, Efficiency, Effectiveness (as a tool for improving and controlling public finances)*", which focuses on examining the 3E criteria[282] and how they can help to reduce waste and improve the management and control of public finances within a properly set control process.[283]

Increases in the efficiency of public resource expenditure cannot be objectively assessed, as public finances are not systematically evaluated. Adopting and automating processes that contribute to a more economical approach to the management of public financial resources remains a significant challenge for the Czech Republic.

[280] *Government Resolution No 487 of 8 July 2019, on the Report on the Evaluation of the State's Central Procurement and Ministerial Centralised Procurement Systems for 2018 and on the rules governing joint procurement.*

[281] The Ministry of Finance is not responsible for the Public Procurement Act, mentioned here because of the factual connection to the Financial Control Act.

[282] 3E stands for economy, efficiency, and effectiveness.

[283] PŮČEK J.M., PÁLENÍKOVÁ. M. (2022) *Economy, Efficiency, Effectiveness (as a Tool for Improving and Controlling Public Finances).* Available here.

Additional information relevant to the update of the Economic Model

Foresight activities

For the purposes of the update, a foresight exercise[284] was conducted in cooperation with České priority to identify and assess gaps in the strategic framework. In relation to the update of FA2, a number of topics were articulated that should be taken into account. The rise in state debt and the associated loss of autonomy and policy decisions determined by global financial markets, as well as mounting pressure to cover the damage caused by climate change, were identified as clear threats. One opportunity for the coming years is clearly pension system reform, including its financing sources, both in relation to vulnerable citizens and a healthy state budget and the sustainability of the entire system. Another important topic was Green Transformation, which was identified as an opportunity and a way to increase Czech competitiveness if we respond to this trend in a timely manner. In relation to climate goals, the foresight exercise also highlights the importance of eliminating environmentally harmful subsidies and the need to build compensation mechanisms for the impacts of climate change. Increasing global engagement and wider public involvement in the green transition could be useful means of achieving this.

Supplementary analyses

For the needs of the Economic Model focal area, two supplementary analyses have been developed. The Decarbonisation and Sustainable Economy analysis became the foundation for a whole new chapter on Decarbonisation in the CR 2030 update. It focuses on three thematic areas: the competitiveness of the private sector, sustainable finance, and the interconnection of the economy and sustainable energy.

The second supplementary analysis focuses on digitalisation and the digital economy. It centres on various approaches to decentralisation and their strengths and weaknesses. It addresses terms in the Czech Republic that are still very abstract, such as decentralised digital identity, collaborative economy and finance, crypto-economics, DAOs[285], etc.

Digitalisation and artificial intelligence

In terms of the development and economic use of AI and other digital solutions, EU countries are lagging behind the USA and Asia. Digitalisation also brings new societal challenges and concerns, with the potential for new inequalities. A critical role may be played by the inequality of automation's impacts on different labour market and economic sectors, deepening economic inequality between states, and growing technological unemployment. Digitalisation also significantly affects mental health, privacy, and social life. The implementation of digital solutions is globally slowest in construction, education, health care, and the public sector, so accelerated interest and growth are expected in these areas.[286]

[284] MoEnv, MoRD, České priority (2023) *Climate and Societal Scenarios for the Development of the Czech Republic: Foresight Study for the Update of CR 2030*, *FA2*, pp. 25–28

[285] Decentralised autonomous organisations

[286] České priority (2021) *Cards of Megatrend Areas and Major Societal Challenges*, pp. 205–206.

3. Resilient Ecosystems

The quality of human life is directly correlated with the quality of the environment. Therefore, the Resilient Ecosystems element of the strategic framework Czech Republic 2030 focuses on the protection of the landscape as a whole, the state of biodiversity, the interaction of all living organisms, including humans, and a sustainable and viable ecosystem. Similarly, commitments to preserve environmental quality are reflected in the protection of forests and soils. Climate change, along with the issue of water retention in the landscape, are challenges that permeate all parts of focal area 3 – Resilient Ecosystems, and intersect with other key areas, particularly Municipalities and Regions.
So far, it has not been possible to sufficiently protect systemically valuable natural and cultural elements of the landscape to create a sustainable environment for all organic communities. The Czech landscape has been long shaped primarily by intensive agriculture, the impacts of which are reflected in all strategic goals of the focal area, notably in water management in the landscape and in soil care, where there remains a lot to do to introduce carbon farming. Progress has been made in the fight against non-native invasive species that pose a serious risk to biodiversity. Human efforts to shape the landscape and adapt it to our needs often do not lead to the expected results and may cause unexpected damage, the restoration of which then becomes a long-term process.

12 The Czech landscape is viewed as a complex ecosystem, and ecosystem services provide a suitable framework for the development of human society.

The landscape is made up of individual ecosystems, and as a whole, it is also an ecosystem of a higher order – a landscape ecosystem. As such, it provides many diverse benefits in the form of ecosystem services. There is no complete agreement on what ecosystem services include, but, in general, they are services provided to humans by nature, through which people can achieve the desired level of well-being.[287] *The current Czech landscape contains valuable natural and cultural elements that must be protected, as well as degraded parts for which decisions must be made regarding changes in their use. The form of the Czech landscape is mainly shaped by agriculture.*

The aim for the future is to reduce the negative impacts of intensive agriculture on the landscape. This can be achieved through land reform (re-parcelling). However, its preparation and implementation has been progressing slowly. It is desirable to focus on the creation of landscape elements with eco-stabilising functions and on securing the land needed for their implementation. A key role in landscape decision-making has land-use planning, so it is essential to create conditions for the development and use of specific spatial-planning documents focused on sustainable land use, management, and planning, and the protection of its natural and cultural values. This also applies to forests, whose sustainable management is part of the protection of the landscape's values and use. This type of management also involves striving for a diverse natural species composition of forests[288] *and their protection from adverse influences, including the recent bark beetle outbreaks.*

*The conditions for subsidy support on both European and national level give the Czech state, within the boundaries set by the relevant EU legislation, the opportunity to reduce the negative impacts of agriculture on the landscape. The state will therefore use the system of European and national support to permanently strengthen ecosystem services and achieve appropriate food security (*Economic Model*). Subsidisation will be tied to improvements in soil fertility, an increase in the landscape's ability to retain water, and the restoration of biological diversity. In the future, the conceptual interdisciplinary approach to landscape planning needs to be*

[287] The UN divides ecosystem services into provisioning, regulating, cultural, and supporting services. *Millennium Ecosystem Assessment*, available here.
[288] MoA (2021) *Application Document for the Concept of State Forestry Policy up to 2035*, Measure A.1.

strengthened. This should be done in in the interest of protecting and developing the landscape's natural functions. Moreover, public administration bodies require methodological support in applying the requirements for the production of territorial landscape studies and the use of their outcomes.[289]

Efforts to improve the quality of the landscape as a complex ecosystem are, for the most part, currently being implemented in the Czech Republic through various measures across strategic documents. The objective is very complex and involves multiple layers for implementation. Some of these layers (e.g. landscape policy or soil quality improvements) still have significant potential for development, and, similarly, the proportion of organically farmed arable land is not particularly high. The Czech Republic has a high share of forest land compared to the total area of the country and this share is gradually increasing. The assessment of ecosystem services is not yet considered a natural part of decision-making processes. This is partly due to the underdevelopment of research and public administration, a lack of understanding at political level, and barriers such as low levels of interdisciplinary communication. The National Action Plan for Adaptation to Climate Change also addresses ecosystem services, with goals that aim, among other things, to create conditions that allow the integration of ecosystem service assessments into decision-making and approval processes and the inclusion of their concept in spatial planning. One Nature, a project on ecosystem services at Natura 2000 sites, is currently underway at Charles University, and its outcomes should be applicable in both spatial planning and in assessing various ecological damage and losses, as well as supporting conservation authorities in their recommendations and guidelines. This is indicative of a positive trend in the defining of ecosystem services and the establishment of their importance for society, at least in Natura 2000 areas.

12.1 A landscape policy and rules for its implementation have been developed for use in decision-making by various levels of public administration

The objective responds to the current state of nature and the landscape and the need for their protection. The first step towards achieving the objective should be the formulation of a landscape policy, approached as an opportunity for deeper and more detailed analysis of the performance of public administration, an evaluation of the compatibility of existing tools, and, subsequently, broader discussions on coherent measures. It can be expected that a significant contribution to the work on landscape policy will come from new EU legislation, which in the long term will strengthen the legal framework for nature restoration. The Czech Republic, through the *National Nature Recovery Plan* (NNRP), will introduce measures not only to protect biodiversity, but also to restore urban ecosystems, as well as agricultural and forest ecosystems, including landscape elements, as part of its support for all terrestrial systems. In areas where good conditions have been achieved, the state of ecosystems will not deteriorate and active efforts (or abstention from certain activities) to improve ecological functions will become a standard practice supported by legislation. The landscape in the Czech Republic will undergo significant changes. In less fertile areas, the aim will be to reduce intensive farming and strengthen organic farming, as well as to curb the negative effects of suburbanisation, such as the encroachment of open land or the degradation of landscape permeability. All of this is related to increasing public interest in the non-productive functions of the landscape. In this regard, it can be stated that the update of the State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025 (SPPNL) has mapped existing economic instruments to ensure funding for nature and landscape protection. Further work on the update of SPPNL is currently underway.

Agreement has yet to be reached on how to sustainably use the landscape, which is also required for the potential preparation of a strategic document. Landscape policy plans are spread across various strategies, rather than being included in one overarching document. Some progress has been made under the SPPNL. A significant contribution to

[289] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025*

the development of landscape policy should come from the NNRP, but at this moment this has been only promised. The EU regulation on nature restoration, once approved, will also contribute to the interpretation of landscape policy, thus shifting the objective towards a broader European perspective. It is therefore necessary to reconsider whether the creation of a separate document on landscape policy for a coherent approach is really crucial and whether the tools that already exist or are being directly prepared here are sufficient, or if the approach still requires a specific objective under CR 2030.

12.2. The share of arable land is decreasing, while the share of permanent grasslands in agricultural land is increasing

The objective is based on data about the proportion of arable land, which is unfavourably high in the Czech Republic, even compared to the EU average. It aims to reduce this proportion without increasing the share of paved surfaces and built-up areas at its expense. It is desirable to approach the EU average, as the Czech Republic (along with Slovakia) carries the legacy of large contiguous fields from the collectivisation period. The specific objective is to increase the area of grassland on non-productive arable land to help protect soils threatened by erosion. Comparative data for 2022 for the Czech Republic and individual regions shows a very slight (approximately one per cent) decrease in the proportion of arable land in total agricultural land area and only a modest increase in the share of permanent grasslands.[290, 291] This is tied to a reduction in the size of crop cultivation areas and has a direct link to reducing the loss of agricultural land and soil degradation, including erosion.[292] The development is therefore slow,[293] but not negligible.

One of the goals of the *Rural Development Concept* is to limit inappropriate farmland-take.[294] The trend looks favourable, and a positive shift is expected after the approval of the amendment to the Agricultural Land Stock Protection Act.[295] The previous *Rural Development Programme* (RDP) 2014–2020 covered this objective by supporting various activities aimed at increasing the area of grasslands, especially in erosion-prone areas, in protective zones around water sources, in nitrate-vulnerable areas, and along water bodies. All this was with the aim of slowing surface water runoff from arable land, increasing water retention in soil and the landscape, and reducing the soil erosion risk. As part of its awareness-raising activities, the RDP also funded a series of seminars for applicants in all specially protected areas; one of the topics was the grassing of arable land.[296] However, the impact of this awareness-raising activity cannot be assessed without available data.

Support for the grassing of arable land was proposed for the 2021–2027 period and is also reflected in the Common Agricultural Policy. At national level, the *State Programme for Nature and Landscape Protection 2020–2025* includes measures related to grassing, such as revising conditions to support extensive and nature-friendly farming on agricultural land and securing the necessary financial allocation for these supports. It also includes measures to increase the retention capacity of soil, including a greater share of organic matter.

The *State Agricultural Intervention Fund* contributes financially to the maintenance of permanent grasslands, thereby encouraging farmers, through agro-environmental-climate measures, to protect and improve the environment.[297]

[290] Czech Statistical Office (2023) *Land Balance.* Available here.

[291] Czech Statistical Office (2023) *Land balance - Territorial Comparison.* Available here.

[292] MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050.* Specific Objective 3.1.2.

[293] Indicator 12.2.1 and Indicator 12.2.2.

[294] MoRD (2020) *Rural Development Concept* 2021–2027. Specific Objective 3.3.

[295] *Bill amending Act No 334/1992 on the protection of agricultural land stock, as amended.*

[296] *Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020).*

[297] EnviWeb (2023) *Farmers to receive over CZK 3.15 billion for the treatment of permanent grassland.* Available here.

Progress has been made in the field of sustainable grassland management through monitoring and research activities, such as studies and the Ministry of Agriculture's applied research programme "EARTH" for 2017–2025.[298]

The objective has yet to be assessed due to a lack of data. Even within the scope of subsidies, measures for improving soil conditions are only voluntary tools. The trend evident from indicator measurements does show that it is progressing in the right direction, but this is a very slow process. It is clear that, through programme funding, the objective has been partly achieved, but indicator measurements indicate that the reduction of arable land in favour of grasslands is proceeding slowly.

12.3. The share of arable land managed under organic farming is significantly increasing

The proportion of organically farmed arable land is still insufficient and has not been raised to a significant level.[299] Up to 2016, it oscillated around 2 %. In 2021, nearly 103,000 hectares of arable land were organically farmed, which is an increase to 3.5 % of the total arable land area.[300] The Czech Republic is among those countries with a high proportion of organically farmed land, but this largely includes permanent grasslands, crops such as vineyards, orchards, and pastures. Their area has been steadily increasing since 2020 and exceeded 500,000 hectares in 2021.[301] According to the Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030, organic farming currently covers about 16 % (relative to the area in the Land Parcel Identification System),[302] ranking the Czech Republic fourth in the EU. The Action Plan for the Development of Organic Farming in 2021–2027 has a target of 22%.[303] Under the European Green Deal, at least 25% of agricultural land in the EU should be farmed organically by 2030.[304] However, this increase is not particularly related to organically farmed arable land. Organic farming, which aims to increase the content of natural organic matter in the soil and reduce soil compaction (see 15.2), is addressed in strategic documents, notably in the Rural Development Concept. This should help to strengthen organic farming methods, which are also linked to stricter conditions for the use of fertilisers and pesticides. Organic farming is also appropriately reflected in the existing *State Programme for Nature and Landscape Protection*.[305]

To maintain and increase the share of organically farmed arable land, it is essential to ensure the continuity of funding for organic farmers. Until 2020, this was done under the Rural Development Programme (RDP), which was extended to the years 2021 and 2022 as a transitional period. Support for organic farming is also planned within the framework of the *Common Agricultural Policy Strategic Plan 2023–2027*, which mentions the maintenance of permanent grassland based on its proportion to agricultural land in the context of climate change.[306] Efforts to introduce advisory services focused on environmentally sustainable farming methods also contribute to this objective. This plan is at least partially covered by the Ministry of Agriculture's Advisory System Concept 2017–2025, which includes expert consultations from research organizations in governmental departments and the university sector, including in the field of organic farming. Data on the effectiveness of this advisory service is not yet available. The *Action Plan for the Development of Organic Farming in 2021–2027*[307] also foresees the provision of advisory

[298] Under the EARTH Programme, 151 research projects are currently supported; see the Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020).

[299] Indicator 12.3.1.

[300] MoA (2021) *Report on the State of Agriculture in the Czech Republic for 2022.* The percentage calculation is based on the total area of arable land in the Czech Republic, which is 2,921,945 ha (p. 133)

[301] Envirometr (2022) *Proportion of organically farmed land*. Available here.

[302] *Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020)*

[303] MoA (2021) *Action Plan for the Development of Organic Farming in 2021–2027.* Available here

[304] European Commission (2021) *Organic action plan*. Available here.

[305] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020-2025,* Specific Objective 2.2.3.

[306] European Commission (2022) *Common Agricultural Policy Strategic Plan 2023–2027,* objective 3.10.1.

[307] MoA (2021) *Action Plan for the Development of Organic Farming in 2021–2027.* Priority measure: 1.1.

services for conversion to organic farming, and the Ministry of Agriculture's national grant scheme supports educational activities and the promotion of organic farming and organic food.[308] There is also support for the organic food market, for example, through the campaign "September – Organic Food Month", which pursues the long-term goals of educating consumers on why they should buy organic food and promoting organic farming. According to data from the Ministry of Agriculture, the consumption of organic food in the Czech Republic grew until 2020, with a 14% increase recorded in 2020 compared to 2019.[309] Data for 2021 is not yet available. However, it must be noted that the growth in organic food consumption is not driven by the production of Czech organic agriculture, but mostly by imported organic products.[310]

The objective can only be partially evaluated by reference to the available data. The proportion of organically farmed arable land remains at a marginal percentage, fluctuating between 1.8% and 2.7% over the past 10 years, which is insufficient. Although organic food consumption has increased, consumer demand is being satisfied by imported organic products, which, compared to the prices of products from intensive farming, do not appear to be affordable for consumers during periods of high inflation.

The proportion of forest land in the total area of the country has been slowly increasing in the long term,[311,312] but the actual forested area has decreased in recent years due to bark beetle outbreaks. This is partly due to the fact that non-forested land is being afforested at a higher rate than land is being removed from the forest for various reasons and partly due to the fact that data from the property register is constantly being refined.[313] At the end of 2022, there were 2,680,372 hectares of forest land, a very slight increase compared to the previous year. [314] Minimisation of permanently encroached forest land and restrictions on construction are among the measures of the State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050. The *State Forestry Policy Application Document* also aims to increase the area of forest in the landscape, particularly in areas with low forest cover, as part of the afforestation of agricultural land.[315] Healthy forests mitigate the impacts of climate change by increasing the ability to absorb atmospheric CO_2, enhancing biodiversity, improving the ecological balance of the landscape, stabilising hydrological and climatic conditions, protecting soil and water, reducing the risk of erosion, improving water management and the microclimatic conditions of the air, and of course, also provide significant aesthetic and recreational benefits (see forests in more detail in section 15.3).[316] Forests are thus generally a significant producer of oxygen and play an important role in carbon management. Ironically, however, bark beetle outbreaks have affected the carbon balance in the atmosphere, which, according to the current LULUCF protocol, is calculated as the difference between harvested wood (CO_2 emissions) and average growth (CO_2 sequestration). From this perspective, forests in the Czech Republic contributed to the sequestration of carbon

[308] Examples of activities supported: vocational training and quality improvement; education and promotion in the field of organic farming and organic food; increases in the positive perception of agriculture and forestry; educational activities in the field of fisheries, etc. CZK 56 million is allocated for 2023, and the same amount for 2024.

[309] MoA (2023) Press release: *Organic food market grows by 14 % the year before last. Czech population consumes CZK 5.99 billion worth of organic food in 2020*. Available here.

[310] Indicator 12.3.1.

[311] Indicator 12.4.1. – the indicator of the share of forest land in the total area of the Czech Republic shows a gradually increasing trend, which in absolute terms means an increase in the area of forest land from 2,657,376 ha in 2010 to 2,675,670 ha in 2019, i.e. by almost 20,000 ha.

[312] Forest Management Institute (2020) *Forest Area and Forest Coverage*. More recent data shows: forest cover 37.1 %, 2,923,200 ha, forest area per capita 0.28 ha/capita. Available here.

[313] MoA (2019) *Report on the State of Forests and Forest Management in the Czech Republic in 2019.* 4.1 Evolution of forest area. Available here.

[314] Czech Statistical Office (2023) *Land Balance.* Available here.

[315] MoA (2021) *Application Document for the Concept of State Forestry Policy up to 2035.* Measure A.1.2.

[316] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025*

12.4 The share of forested land in the total area of the

dioxide from the atmosphere until 2017, but since 2018 they have become a producer of CO_2.[317] For further information on this, see section 15.3.[318]

Afforestation of non-forest land has a long tradition in the Czech Republic. In the past, land unsuitable for agricultural production, particularly land highly threatened by erosion, was afforested.[319] Today, it still holds that forest area should be increased mainly on land with high slope gradients or otherwise threatened by erosion. These are ravines, skeletal, shallow, or waterlogged soils, as determined based on expert data from the Research Institute for Soil and Water Conservation. The State Agricultural Intervention Fund provides subsidies for the afforestation of agricultural land based on the suitability of land blocks[320] for afforestation according to conditions set out in the LPIS.[321]

Specific procedures exist for *Natura 2000*. At these sites and in specially protected areas, activities are guided by sets of measures recommended for sites of Community importance and approved management plans for protected landscape areas (CHKO) and small-scale specially protected areas in case that these sites overlap with *Natura 2000* areas.[322] For 2023 and 2024, funds from the National Recovery Plan are allocated for Natura 2000, both for the care of specially protected areas and for the adaptation of aquatic, non-forest, and forest ecosystems to climate change.[323] Additional funds will be drawn from the national Operational Programme Environment[324] for the care of important parts of nature and the landscape, protected areas, and the creation of conceptual documents.[325]

The afforestation of agricultural land is also supported by the *Common Agricultural Policy Strategic Plan 2021–2027*.

Afforestation plans in terms of cultural values (e.g. in protective zones of cultural monuments or areas with valuable archaeological sites) have not yet been addressed.

The objective is gradually making progress; the area of forest land relative to the total area of the country is increasing. Afforestation has several positive impacts – it helps to reduce water erosion and other degradation factors. However, one plan that has not been fulfilled in recent years due to bark beetle outbreaks is for forests to help reduce emissions and increase carbon sequestration in the soil by the more effective absorption of greenhouse gases. Therefore, attention should shift from the simple effort to increase forest land area to afforestation itself, specifically of the types of forests that will enable the provision of the required ecosystem services. Since the trend of increasing forest land area will continue with existing measures, consistent efforts should be focused on the ecological stability of forests.

The permeability of the landscape, which is a matter of survival for many animal species, is primarily a task for spatial planning. Here, the protection of migration corridors should be applied

[317] Forestry and Game Management Research Institute (2019) *Consequences of the Bark Beetle Calamity for the Future of Forestry in Central Europe.* The current calculation of the balance does not take into account carbon retention in the processed wood and only simulates a situation where all bark beetle wood is burned immediately. Available here.

[318] Forestry and Game Management Research Institute (2019) *Consequences of the Bark Beetle Calamity for the Future of Forestry in Central Europe.* The current calculation of the balance does not take into account carbon retention in the processed wood and only simulates a situation where all bark beetle wood is burned immediately. Available here.

[319] VOPRAVIL, JAN; PODRÁZSKÝ, VILÉM; HOLUBÍK, ONDŘEJ; VACEK, STANISLAV; BEITLEROVÁ, HANA *ET AL.* (2017) *Principles of Establishing Forests on Former Agricultural Land in Designated Reforestation Areas: A Practical Methodology.*

[320] The afforestation suitability layer includes land with a slope gradient greater than 10°.

[321] State Agricultural Intervention Fund (2023) *Measure 8.1.1 Afforestation and reforestation.* Available here.

[322] *Report of the Ministry of the Environment of the Czech Republic relating to the evaluation of CR 2030* (2020).

[323] CZK 135 million is allocated for 2023, CZK 139 million for 2024, with CZK 80 million and CZK 115 million, respectively, earmarked for the above-mentioned adaptation measures

[324] CZK 370 million for the care of important parts of nature and landscape and CZK 600 million for the care of protected areas under the Operational Programme Environment

[325] Detail of individual calls under the Operational Programme Environment

down to the level of individual sites addressed in spatial planning documentation. Standard spatial planning processes ensure that the competent nature protection authority can apply its opinion and principles on the contents of spatial planning documents[326] (this principle is also maintained in the proposed new Building Act). Since 2018, a new monitored phenomenon, the *habitat of selected specially protected species of large mammals*, has been included in spatial analysis data (SAD). Since January 2020, the Nature Conservation Agency has provided this data layer, and it was first updated during the fifth full update of the SAD, with ongoing updates thereafter. The extent to which this data layer is used by spatial planning authorities is not known, but it is assumed that it is being utilised, especially considering the emergence of new Nature Conservation Agency methodology, Protection of the Habitat of Selected Specially Protected Species in Spatial Planning, which is intended to serve as a basis for the preparation of spatial planning documentation.[327] There is no data for the previous period. This issue is also addressed by a relevant objective under the *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025*.[328] It includes strengthening methodological support to protect landscape permeability for animal migration.[329]

The issue of migration corridors was addressed by the Nature Conservation Agency from 2018 to 2021 under the *Interreg* programme in cooperation with Austria. It focused on interregional migration corridors for large mammals.[330]

Measurements of the number of critical points on long-distance migration corridors for large mammals have not yet yielded a trend; the measurements have been conducted only twice, with the same values recorded for both 2010 and 2015.

Measures to ensure the migratory passability of watercourses are addressed at strategic level by the *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025*[331] and the *Concept of River Network Accessibility in the Czech Republic*,[332] which was last updated in 2020. Currently, it is too early to evaluate its effectiveness.

The Czech Republic attaches importance to landscape permeability for migration, as evidenced by the allocation of funds under the Operational Programme Environment for projects aimed at removing migration barriers for terrestrial and aquatic animals and implementing measures to reduce their mortality.[333]

Compared to the previous assessment, significant steps have been taken to achieve this objective – the monitoring of layers for SAD and the creation of methodologies for the protection of selected specially protected species. However, there has evidently been no major headway up to 2022. Data on the extent to which the layers relating to large mammal migration corridors are being used by territorial planners (using SAD) is not available.

Launching and putting it into practice the valuation of ecosystems is a key measure in ecosystem service evaluation. This is also mentioned in the *State Environmental Policy of the Czech Republic 2030*[334] and is part of the Biodiversity Protection Strategy (BPS). Specific Objective 12.6

[326] *Opinion according to Act No 183/2006. Section 4(2)(b)*

[327] HLAVÁČ, VÁCLAV; CHOBOT, KAREL; PEŠOUT, PAVEL; HAVLÍČEK, JAN; JEŘÁBKOVÁ, LENKA *ET AL.* (2021) *Protection of the Habitat of Selected Specially Protected Species in Spatial Planning: Methodology of the Nature Conservation Agency of the Czech Republic*.

[328] MoEnv (2020) *State Programme for the Protection of Nature and Landscape 2020–2025.* Measure 1.1.4

[329] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020- 2025.* Objective 1.1.4.

[330] Nature Conservation Agency (2022) *Migration corridors between the Czech Republic and Austria.* Available here.

[331] MoEnv (2020) *State Programme for the Protection of Nature and Landscape 2020- 2025*

[332] Nature Conservation Agency and T.G. Masaryk Water Research Institute (2020) *Concept of River Network Accessibility in the Czech Republic, Update 2020.* Available here.

[333] Up to mid-2023, a total of CZK 290 million from the Operational Programme Environment is planned for these measures

[334] MoEnv (2020) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050*

12.6 The evaluation of ecosystem services is incorporated into decision-making

was further pursued through the National Action Plan for Adaptation to Climate Change (NAP CC, 2017), which addressed the concept of ecosystem services in agricultural, forestry, and water ecosystems, as well as in urbanised areas. According to the 2019 evaluation, this was partially implemented. In the updated NAP CC (2021), this objective is pursued through cross-cutting tools. An evaluation of the updated NAP CC (2021) is planned for 2025.

The objective should be to establish a clear framework for national ecosystem evaluation, which should be carried out by a team of experts from research institutions. A conceptual methodological framework for the effective creation and protection of the territorial system of ecological stability has not yet been established.[335] Progress is promised by a project under the expert leadership of staff from the Charles University Environment Centre that focuses on creating methodologies for ecosystem service evaluation under the integrated LIFE project "One Nature". The project will, among other things, create methodological procedures and tools for the regular monitoring and evaluation of the benefits of ecosystems for decision-making in nature protection at both local and national levels. It is focused on *Natura 2000* sites. The procedures, tools, and their usefulness in decision-making on ecosystem management will be tested through case studies. These tools will enable an overall assessment of ecosystem services in *Natura 2000* sites in the Czech Republic. The project is scheduled to end in 2026, so final outputs are not yet available.[336]

In connection with the aforementioned integrated project "One Nature", the National Ecosystem Services Platform has been built since the end of 2022. This should allow experts to interconnect their experiences and work better with the concept of ecosystem services. It is significant in terms of integrating the evaluation of nature's benefits and ecosystem services into decision-making in nature protection at national level. Given the composition of the platform, which includes representatives from various sectors, academia, and non-governmental organisations, a base has been created for an informational, scientific and political interface on ecosystem services to be built.[337] For the widespread incorporation of the concept of green infrastructure into any planning, decision-making, or other processes, it will also be important for the chosen method to be sufficiently simple and not demanding on staffing capacity.

The Ministry of the Environment, other ministries, and institutions have not yet defined the methods needed to use ecosystem service evaluations. There is currently a lack of personnel capacity to develop this policy. This activity would require political support, as inter-ministerial cooperation is essential and financial costs are involved. Additional systemic barriers are emerging that will need to be overcome in the future, such as low inter-disciplinary communication and insufficient data flow between the various fields dealing with landscapes – both of which are, among other things, a result of understaffing in research and public administration.

The objective has not yet been achieved, but a trend towards its fulfilment is already evident: the LIFE project and measures under the NAP CC are steps towards achieving the objective, including practical verification of their applicability.

Specific objective 3.1.3; MoEnv (2016) *Biodiversity Protection Strategy of the Czech Republic 2016–2025.* Objective 4.2.3.

[335] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025.* Objective 2.1.1.

[336] European Commission (2019) *Integrated LIFE project for the Natura 2000 network in the Czech Republic* (2019–2026). Available here.

[337] VAČKÁŘOVÁ D. (2022) The National Ecosystem Services Platform in the international context of nature conservation and restoration. Available here.

13 The Czech landscape is diverse, and biodiversity is being restored.

Objective 13 is correlated with the previous strategic objective focused on landscapes and their ecosystem services, because a fundamental precondition for the provision of these services is diverse communities of wild animal and plant species tied to their natural habitats, which are able to adapt to changing environmental conditions. The Czech Republic's aim for the next few decades is to achieve the presence of viable, genetically diverse populations of native species in the landscape. Through targeted restoration, individual natural habitats will be represented to a sufficient extent and quality. To conserve and restore biodiversity, it is crucial to protect areas that are scientifically or aesthetically significant or unique, preserve or improve their condition, maintain the natural functions of the landscape, or allow areas or parts of it to evolve naturally, as abandoned sites exist and/or are emerging in the landscape, such as those left after mineral extraction. In appropriate cases, it is desirable to leave parts of these abandoned sites to evolve spontaneously based on natural processes.[338] *In the currently intensively farmed and populated landscape, there is a shortage of habitats providing suitable conditions for the permanent existence of diverse biological species and their typical communities. This includes small wetlands, river floodplains, natural river and streambeds, field margins, coppices, species-rich forests, including light forests, old trees, traditional pastures, or flower meadows.*

The aforementioned Nature Restoration Regulation will heavily target the issue of biodiversity. The related NNRP will introduce monitoring and reporting obligations. Topics resonating on a broader European platform will be processed, such as the restoration of pollinator populations, the restoration of river connectivity, and agricultural and forest ecosystems including peatlands. The re-creation of natural habitats will be carried out in stages, with goals for 2030, 2040, and 2050 of 30%, 60%, and 90% restoration, respectively. This, however, is a task for the future.

The steps taken so far are not sufficient, and the goals are not being met. The goals and measures to support biodiversity contained in the State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025 have so far made only limited progress. A lack of available data hinders the evaluation of the entire strategic objective.

13.1. The diversity and stability of habitats and populations of native plant and animal species are increasing

The purpose of Objective 13.1 is to restore interconnected natural elements to the Czech landscape. This requires more attention to the landscape outside protected areas, the strengthening of ecosystem services, including through farm planning, and the preservation of the diverse historical composition of the cultural landscape. The system for evaluating the effect of species protection on biodiversity is still awaiting implementation.[339]

Support for landscape mosaic creation, such as subdividing plots or land blocks, could restore elements like hedgerows, ditches, tree rows, windbreaks, etc., which contribute to drought resistance and maintain, support, and restore the landscape's retention capacity and support biodiversity. Landscape elements and areas used for ecological purposes are also addressed by the *Biodiversity Protection Strategy*.[340] Landscape fragmentation leads to the loss of original habitat qualities and their connectivity, which is crucial for animal migration. In this regard, the negative trend is clear: between 2000 and 2018, the proportion of non-fragmented landscapes decreased from 63.5% of the area in 2010 to 60.6% in 2016, and the downward trend continues (see also Objective 12.5). According to forecasts, by 2040, the proportion of non-

[338] Indicator 13.1.1

[339] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025.* Objective 1.1.1.

[340] MoEnv (2016) *Biodiversity Protection Strategy of the Czech Republic 2016–2025.* Objective 3.1. Measure: Landscape elements and area used in ecological interest

fragmented landscapes will reach only 53%.[341] Under greening,[342] the protection of permanent grasslands and environmentally sensitive grasslands is ensured. For agricultural areas, 5% of land is required to be designated for ecological purposes (GAEC 1 from 2023). These are areas with trees or hedgerows, or land that has been left fallow. They have a positive impact on biodiversity and natural habitats and support biodiversity preservation (e.g. fallow land with vegetation used for ecological purposes, bee-friendly fallow land used for ecological purposes, landscape elements for ecological purposes, buffer zones, areas with fast-growing trees, reforested areas, areas with catch crops, or areas with nitrogen-fixing crops). All this aims to both carefully maintain existing valuable habitats and ensure their preservation, while also creating new habitats, which should be done by sowing species-rich, regional mixes of grass on arable land or creating food sources and shelter for birds, small vertebrates, and pollinators in the agricultural landscape.

Progress has been made in invasive species management, as non-native invasive species pose a serious risk to biodiversity globally. Invasive species, along with habitat destruction and degradation, are among the most significant factors threatening biodiversity worldwide. Some species also pose a health risk. It is estimated that there are more than 12,000 non-native species in Europe, of which 10–15% are considered invasive, meaning they spread rapidly and cause environmental, economic, and other types of damage.[343]

The management of invasive species has been regulated in the EU since 2015 by Regulation (EU) No 1143/2014 of the European Parliament and the Council on the prevention and management of the introduction and spread of invasive alien species (the "Regulation"). In the Czech Republic, the implementation of the Regulation has been governed by Act No 364/2021 since 1 January 2022. Member states will have their own action plans addressing the spread of invasive alien species. The draft action plan was prepared by the Ministry of the Environment and aims to address priority pathways and prevent the unintentional introduction and spread of invasive alien species.[344] Given that this is the first draft, or the first period of its implementation, the action plan focuses mainly on more general and cross-cutting issues. The draft action plan was published for public consultation at the turn of 2023 and the comments received were addressed. The action plan must be reviewed at least once every six years and the government will be informed of the progress made no later than 31 March 2029, meaning an assessment of its impacts is not yet possible.

Species and habitat protection has long been the subject of numerous projects funded under the Operational Programme Environment and national subsidy tools (the *Landscape Management Programme, Support for the Restoration of Natural Functions of Landscapes, managed by the Nature Conservation Agency)*,[345] as well as support from international sources (e.g. the *LIFE Programme* or *EEA* and *Norway Funds*). However, in specially protected areas, the adequate (comprehensive) implementation of necessary measures has not yet been ensured, and only partial activities are carried out through some of the aforementioned subsidy schemes. The *Concept of Active Species Protection Tools in the Czech Republic 2023–2032* is a document adopted by the Ministry of the Environment that summarises the approach to the preparation and implementation of rescue programmes and care programmes for specially protected species of fauna and flora. The concept addresses species of wild animals and naturally growing plants that are threatened with extinction, as well as species that are extraordinarily important for nature conservation but also conflict with human economic interests, and species for which active

[341] CENIA (2022) *Report on the Environment of the Czech Republic 2021,* section 3.2.1. Available here.

[342] The basis of greening is to motivate farmers, through subsidies, to engage in better and more environmentally friendly farming in order to protect the environment.

[343] Losses and costs related to non-native species are estimated at EUR 12 billion per year in the EU and continue to rise. From an ICP document dated 24 April 2023

[344] Originally, the Action Plan was supposed to be developed and submitted to the European Commission within three years of the adoption of the EU list of invasive non-native species, i.e. by 13 July 2019. However, the Czech Republic was unable to fulfil this obligation due to the length of the legislative process (from the ICP document of 24 April 2023)

[345] Nature Conservation Agency (2023) *National subsidy schemes*. Available here.

protection is required by international commitments to which the Czech Republic has acceded. Priority species are divided into four groups with different regimes and measures intended for their benefit.[346]

Another important factor for the good condition of the landscape is the *Good Agricultural and Environmental Conditions* (GAECs),[347] specifically GAEC 7, whose main objective is the landscape and ensuring a minimum level of care for it. GAEC 7 focuses on the protection of trees and landscape elements (hedgerows, terraces, grassy thalwegs, groups of trees, tree avenues, solitary trees, ditches, and wetlands), and on limiting the contiguous area of a single crop to a maximum of 30 ha. Monocultures must be separated by landscape elements, buffer strips, or different crops must alternate on the land (each covering no more than 30 ha).[348]

For the importance of biodiversity-aimed activities to be understood, public awareness and outreach are also necessary. This agenda has its place within nature conservation bodies. Both the Nature Conservation Agency and national parks understand its importance and engage in high-quality public outreach, including the fostering of cooperation with the public.

Without systematic monitoring of impacts on biodiversity, measures would have no significance. Monitoring takes place through various types of biomonitoring, for example, in areas with obligations supporting the restoration, preservation, and strengthening of biological diversity, in control plots demonstrating the positive impacts of introducing obligations under subsidy schemes, or through the biodiversity monitoring of selected groups of invertebrates and vegetation in different types of locations.[349] For example, trends in bird populations have high explanatory value, as changes in bird populations reflect changes in land use, and, since the mid-1990s, climate change has been a factor increasingly influencing the composition of birds in the Czech Republic. As a result, northern species are disappearing from Central Europe, while heat-loving species that were previously found mainly in southern Europe are gradually increasing. The issue of declining bird species is addressed by the Czech Society for Ornithology, which counts and monitors the distribution and abundance of bird species in the Czech Republic, with broad public involvement, allowing the public to gain a better understanding of the issue of biodiversity loss.[350]

For other European-important species of animals and plants, we are registering only local improvements (in insects, amphibians, reptiles, mammals, mosses, and lichens). Species associated with aquatic communities, such as fish and lampreys, are in an unfavourable condition.[351] As for the index of endangered species on the red list and invasive species, we only have data up to 2017, so trends cannot yet be determined.[352] The Nature Conservation Agency operates an extensive database on the Nature Conservation Information System portal, providing access to map and data sources.[353] Goals and measures aimed at supporting biodiversity are further included in the State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025, but so far progress has been limited. An evaluation of the State Programme will take place in 2025.

---

[346] MoEnv, Nature Conservation Agency (2023) *Concept of Active Species Protection Tools in the Czech Republic 2023–2032.* Available here.

[347] The GAECs were revised and renumbered in the CAP Strategic Plan. The single crop area limitation is now dealt with in GAEC 7b, and the conditions relating to the conservation and protection of landscape features have been taken over in GAEC 8b.

[348] *Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020).* According to CENIA (2022) *Report on the Environment of the Czech Republic 2021*, 59.8 % of animal species are in poor or unfavourable condition and 50.8 % of plant species were in poor condition in 2013–2018. Available here.

[349] Indicator 13.1.2, quality of life indicator 9.9., MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050,* Specific Objective 3.2.1. Type-based measure: Area-wide and continuous monitoring and evaluation of the status of species and habitats.

[350] Czech Society for Ornithology (2023) *Bird Research and Conservation*. Available here.

[351] Indicator 13.1.3.

[352] Indicator 13.1.4 and 13.1.5.

[353] Nature Conservation Agency (2023) *Data Provision.* Available here.

The objective has not been achieved and the progress towards it has been slow. The uptake of programme subsidies cannot be presented as progress and only public outreach and work with the public can be considered a step in the right direction.

13.2 Natural restoration of human-modified ecosystems is commonly used

In the coming decades, biodiversity will be significantly influenced by human factors and climate change. If these negative pressures are not at least partially compensated by a more suitable landscape structure, the result will be the overall depletion of original biological diversity. Climate change benefits only a limited number of highly adaptable species, often ruderal species or species that spread quickly, and some non-native species. Conversely, it reduces the range of rare species with very specific environmental requirements. To preserve biodiversity, it is essential to protect areas that are environmentally or aesthetically significant or unique, and to maintain or improve their condition through targeted management planning, sometimes even leaving areas or parts of them to natural development.

Some progress has been made in the legislative or methodological areas. It has been possible to amend the Agricultural Land Protection Act so that agricultural land that is naturally reforested can be reclassified as forest land free of charge.[354] Another positive step is the development of a Methodology for the Assessment of Alternative Ways of Restoring Post-mining Landscapes.[355] One of the ambitions of the *Environmental Security Concept 2021–2030 and Outlook up to 2050* is to establish thresholds for irreversible damage to ecosystems and biodiversity (also in light of ongoing climate change) with a target date of 2030. The long-awaited amendment to the Mining Act completed the legislative process in 2021 and is now in force. This amendment affected the regulation of reserves for reclamation and rehabilitation, the settlement of mining damage, payment for extracted minerals, mining-technical records, the publication of information on protected deposit areas and extraction zones, and mineral policy. The new requirement for the creation of reserves has been extended to land reclamation affected by mining.[356]

If disturbed areas cannot restore themselves in the necessary way, their nature-friendly restoration must be institutionally ensured. The potential of mining areas, or other human activities, for the creation and preservation of valuable habitats through appropriate reclamation of mining areas, is addressed by the *State Environmental Policy*.[357]

Assessments of progress towards the objective, however, are hampered by a lack of underlying data, as some administrators have provided neither indicators nor relevant information. For example, we know that the loss of agricultural land in areas affected by surface mining (and also near large towns, especially Prague and Brno) is significant,[358] but in many cases it is temporary.

Partial steps in legislation and methodology are positive, but the process is still in its infancy. Evaluation of the objective as a whole is inhibited by a lack of underlying data.

[354] *Act No 334/1992 on the protection of agricultural land stock.*

[355] Technology Agency (2019) *Methodology for the Assessment of Alternative Ways of Restoring Post-mining Landscapes*. Available here.

[356] The *amendment to Act No 88/2021* provides that, as at the date of permanent cessation of mining, from 2030 at the latest, reserves for rehabilitation and reclamation will be held in special accounts that can only be disposed of with the consent of the mining office. The aim is to gather as much money as possible to mitigate the effects of mining activities.

[357] MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050,* Specific Objective 3.2.1.

[358] MoA (2020) *Decrease in Agricultural Land Recorded in the LPIS between July 2005 and October 2019.* Available here.

14 The landscape is adapted to climate change, and its structure supports water retention.

Strategic Objective 14 focuses on the issue of the water regime of the landscape and adaptation to climate change, which has a profound impact on the water regime. Water is a fundamental component of all organisms and ecosystems; it is essential for their existence, crucial for the quality of life, and an irreplaceable raw material for the economy. The landscape's ability to retain water has been weakened in the past, primarily by extensive technical modifications of watercourses and the drainage of agriculturally or forest-managed lands. The diminished ability of the landscape to retain water affects not only the stability and function of ecosystems, but also the potential availability of drinking water for humans, both directly (e.g. by reducing the volume and quality, especially of surface waters, but also groundwater) and indirectly by further weakening the landscape's ability to retain water. This is also due to the geographical location of the country, where most of the water from the Czech Republic flows away, and water management is highly dependent on water from atmospheric precipitation. The nature of agricultural practices, including the removal of several natural barriers to runoff and the draining of wetlands, as well as modifications of watercourses, an increase in impermeable paved areas (especially urbanised areas, road infrastructure, and industrial and logistical zones), has led to a serious situation in water management.

In the Czech Republic, the key legislation is the Water Act (Act No 254/2001). From a strategic perspective, strengthening the natural water regime of the landscape and ensuring the needs of society and the sustainable use of water are addressed by the Climate Change Adaptation Strategy and the National Action Plan for Adaptation to Climate Change. Another relevant document is the Strategy of the Ministry of Agriculture and Outlook up to 2030.

Many measures adopted by ministries, particularly the Ministry of Agriculture, undoubtedly make progress towards the objective, but they have not yet been effective enough to consider the objective as achieved. Landscape adaptation is still lagging behind climate change, and in the area of water regime in the landscape and water management, there has not yet been a systematic effort to slow down water runoff from the landscape or to ensure a long-term balanced quality balance of surface and groundwater.

14.1 Water runoff from the landscape is significantly slowed

The water regime in the Czech landscape is critical for maintaining the stability of ecosystems and the ecosystem services they provide, as well as for mitigating the effects of hydrological extremes related to climate change. When water is no longer available in the soil, evaporation and the associated air cooling will decline. This development increases the likelihood of heatwaves, droughts, and forest fires. Warmer air can also hold and retain more water, leading to more intense rainfall events. These are directly related to processes of erosion and soil runoff, along with fertiliser residues, into watercourses and reservoirs.

Over the last 20 years, an increase in the frequency of extreme rainfall events has been observed in the Czech Republic. Climate change has led to a reduction in groundwater levels and a decrease in flow, particularly during dry periods between summer and autumn. Low flow rates and slower flow speeds mean that water stays longer in rivers and reservoirs, which increases water temperature, creating conditions for the growth of cyanobacteria and algae, reducing oxygen levels, and worsening the living conditions for aquatic life. Lower flow rates also mean a smaller volume of water for diluting pollution, leading to higher concentrations.

According to the Report on the State of Water Management in the Czech Republic in 2021, the quality of surface waters has significantly improved compared to the early 1990s; however, a large number of watercourses still fall into categories III, IV, and V (polluted, heavily polluted, and very heavily polluted water).[359] The presence of pesticides in surface waters is relatively high –

[359] MoA, MoEnv (2022) *Report on the State of Water Management in the Czech Republic in 2021.* Available here.

149 were found in 2021. The contamination of surface waters with pharmaceuticals is also significant, with 2,463 samples (89.7% of samples) testing positive.[360] The situation in this respect is not good, and it remains uncertain how long-term reduction in the discharge and degradation of these substances in surface waters will be achieved. In terms of water retention in the landscape, which is a key activity for the water regime, various measures are being implemented through programmes from the Ministry of Agriculture.[361] Other significant measures are being introduced through the NAP CC as measures to improve the state of basins in terms of water retention, as well as defining priority sections of watercourses for revitalisation and renaturalisation (natural restoration). In the updated NAP CC (2021), relevant measures include complex land adjustments focusing on a range of activities related to water management. However, their implementation is long-term in nature and in some cases problematic. An evaluation of the updated NAP CC (2021) is planned for 2025.

Progress has been made in water erosion, where an anti-erosion decree was approved in 2021, aimed at protecting soil from water erosion, which threatens up to 60% of valuable agricultural land through shear. Since the decree's enactment, the permissible level of erosion risk has been set at 9 tonnes/ha/year for deep and medium-deep soils and 2 tonnes/ha/year for shallow soils.

The decree has been in effect since 2021, so an evaluation will need to wait, but it is a step in the right direction.

Improvement in water retention in forests is also expected during the review of various measures aimed at amelioration.[362]

Comprehensive re-parcelling, a tool for change in land arrangements, can help to slow water runoff from the landscape. These adjustments involve changes in the spatial and functional arrangement of land and the consolidation or division of land plots. They ensure accessibility and use of land and define its boundaries to create conditions for rational land management. The State Land Office is responsible for re-parcelling. According to its records, it spent CZK 2.965 billion on these measures in 2021, the highest amount ever. The Land Re-parcelling Concept for 2021–2025 foresees the initiation of, work on, and completion of a total of 2,472 land adjustments, covering a total land area of 1,171,000 hectares, by 2025. However, no evaluation is yet available.

The evaluation of the NAP CC, presented to the government in January 2020, identifies that the largest share of tasks being tackled on an ongoing basis does not lie in matters related to the Water Regime in the Landscape and Water Management, but in areas such as Incidents, Education and Awareness, and Forest Management. In relation to the Water Regime in the Landscape and Water Management, two specific goals are addressed: "Increase the natural retention capacity of watercourses and floodplains" and "Effective protection and use of water resources". These have been partially fulfilled. The NAP evaluation is set for 2025, so data is not yet available.

A strategic document focused solely on addressing the issue of long-term drought through a series of measures to mitigate its effects in the Czech Republic was the *Drought Protection Concept for the Czech Republic for 2017–2022*. It was evaluated in a *Progress Report*, which led to the adjustment and supplementation of its content. The evaluation revealed that most measures to mitigate the effects of drought and water scarcity are of a long-term nature and should continue.[363] The subsequent Drought Protection Concept for the Czech Republic for 2023–2027, approved by the government in May 2023,[364] includes revisions responding to climate change and clarifying long-term measures. It briefly assesses the hydrological situation, where, until 2020, significant droughts and water scarcity were prevalent, dependent

[360] The most frequently found substances were drugs for hypertension, gout, diabetes, antirheumatic drugs and analgesics, antidepressants and, of course, antibiotics. Available here.

[361] *Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020)*.

[362] MoA (2021) *Application Document for the Concept of State Forestry Policy up to 2035*: Measure A.3.3.

[363] MoA (2023) *Drought Protection Concept for the Czech Republic for 2023–2027*. Available here.

[364] MoA (2023) *Drought Protection Concept for the Czech Republic for 2023–2027*. Available here.

by targets. As none of these objectives has been achieved yet, it would on irregular precipitation and high summer temperatures. The Concept complements and expands on measures under the NAP CC. Specific activities for improving drought impact management are under way for all proposed measures, but there has not been sufficient progress in achieving the strategic goals of the *Concept*. Soft, supplementary measures are being implemented successfully, but the implementation of technical measures remains minimal. The main cause of this is the lack of or restrictive legislative regulations, which have not yet been amended. Early in 2023, the progress report to the government noted that the average annual spend on measures under the Concept in the 2017–2021 reporting period was CZK 13.2 billion on measures by the Ministry of Agriculture and CZK 2.7 billion on measures by the Ministry of the Environment.

In the sub-region of the Czech Republic, where territorial protection is implemented according to the Nature Conservation and Landscape Protection Act,[365] water runoff from the landscape is slowed through the implementation of planning documentation (in the form of plans or principles for management in specially protected areas, summaries of recommended measures in sites of Community importance or European SPAs). These tools, although not directly aimed at mitigating the impacts of climate change and inappropriate past land use, inherently contribute to the retention capacity of natural and nature-like communities by proposing optimal care.

The objective has not yet been achieved, even though progress – even significant progress – has been reported in the measures adopted by the ministry. The objective is still far from being reached. The water runoff from the landscape has not been significantly slowed. Some NAP CC measures have not been implemented at all, and an assessment of the anti-erosion decree requires sufficient data before the trend can be determined. One positive development is the update of the *Drought Protection Concept*; however, the issues with the implementation and effectiveness of measures are the same as with the NAP.

14.2 The quality of both surface and groundwater is improving

The purpose of the mentioned objective is clear – to implement measures and procedures that prevent further pollution of surface and groundwater and ensure the gradual improvement of their quality. The share of surface water bodies with good or very good quality in relation to the total number of surface water bodies has worsened since 2012 at all monitored sites.[366] Since Strategic Framework indicators for the period after 2018 are not available, there is no basis for a relevant evaluation for the last five years. A similar situation applies to the chemical status of surface and groundwater, where the data series ends in 2018,[367] and to the quantitative status of groundwater bodies, which is measured every six years. The next cycle will take place in 2024. However, an evaluation can draw on the Ministry of Agriculture's Blue Reports, which indicate that developments in the quantitative status of groundwater and spring yields for 2020 fluctuated considerably during the year, reaching normal levels only in 2021. Similarly, regarding the quality of groundwater, fewer locations with excessive concentrations of monitored substances have been found, showing a slight decreasing trend since 2019.[368] It is worth noting that the measurement methodology used for the Blue Reports may differ from the measurement of values[369] for the *Strategic Framework CR 2030* indicators.[370]

[365] *Act No 114/1992 on nature conservation and landscape protection, as amended*.

[366] Indicator 14.2.1.

[367] Indicator 14.2.3.

[368] MoA (2021) *Report on the State of Water Management in the Czech Republic in 2020* and MoA (2022) *Report on the State of Water Management in the Czech Republic in 2019, 2020, 2021. CENIA (2018, 2019, 2020, 2021) Report on the Environment of the Czech Republic 2018, 2019, 2020, 2021.* In 2021, pesticides were found in almost 28% of the samples monitored, a slight increase from 2018, while ammonium ion and nitrate pollution remain at standard levels of around 10% to 11% of samples.

[369] Czech Hydrometeorological Institute (2022) *Hydrological Yearbook of the Czech Republic 2021*

[370] Indicator 14.2.2. The most frequently monitored parameters were basic physicochemical analyses, including nutrients. Of these substances, the most significant exceeded the limits or were ranked in worse classes of indicators of individual forms of nitrogen and phosphorus, Escherichia coli and thermotolerant coliforms.

Other measures contributing to Specific Objective 14.2 are reflected in the river basin management plans, which are developed in six-year cycles (currently 2022–2027). These include measures to improve the hydromorphological condition and improve the situation of small watercourses (channels and banks) to achieve good ecological status.

Another significant measure contributing to the quality of surface and groundwater is the decree on the protection of agricultural land against erosion (for further details on the decree, see 15.2). It has been in effect since 1st July 2021, with the aim of protecting soil from water erosion, which threatens up to 60% of valuable agricultural land due to soil shear. This soil shear removes the most valuable parts of the soil, leading to its degradation. Measures against water erosion may also positively affect the soil's resistance to wind erosion. It is expected that the anti-erosion decree will pave the way for the inspection and penalisation of farmers engaged in improper agricultural practices. However, it is still too early to evaluate the long-term trend because the decree has only been in effect for a short duration.

Measures to improve the quality of surface and groundwater should also include those aimed at reducing the amount of pollutants from so-called *diffuse pollution sources* (especially in agriculture). More environmentally friendly farming methods (e.g. organic farming or precision farming) and forestry (e.g. ensuring water infiltration from forest road networks into sub-surface waters) contribute to improved groundwater quality.[371] Similarly, improving the morphology of surface water bodies, such as river restoration, improving watercourse permeability (fish passages, removal of obstacles, see objective 12.5), has an impact on water quality. For the four-year period up to 2024, the Ministry of Agriculture has defined measures aimed at reducing nitrogen input into the soil or its more intense incorporation into the soil.[372] Linked to this is the interest in supporting activities that will reduce the input of pesticides[373] into groundwater and surface waters, as well as the introduction, in the protection of water sources, of electronic records for controlling the amount and types of pesticides used. The occurrence of pesticides is associated with the use of plant protection products (PPP) in agriculture. General measures associated with the use of PPPs are outlined in the *National Action Plan for Safe Pesticide Use in the Czech Republic 2018–2022.* Its main tool is adherence to the principles of the proper application of PPPs, particularly by ensuring protective distances from water bodies and sources of water intended for human consumption.[374] An evaluation is not yet available.

Based on various data sources, it can be assessed that the status of groundwater is not dramatically worsening. The highest concentrations of pollutants have long been related to pesticides. [375]

[371] MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050*, Specific Objective 1.1.1.

[372] *Government Regulation No 262/2012 on the designation of vulnerable areas and on an action programme.* The last amendment to the above regulation was made in June 2020, with effect from 1 July 2020; the next amendment is planned for June 2024.

[373] Plant protection products (PPPs) are pesticides used to combat harmful organisms, pests and diseases. Their use can be a significant burden on the environment, threatening surface and groundwater and soil quality, biodiversity and, through residues in food, human health.

[374] *Report of the Ministry of the Environment of the Czech Republic relating to the evaluation of CR 2030* (2020).

[375] CENIA (2018, 2019, 2020, 2021) *Report on the Environment of the Czech Republic 2018, 2019, 2020, 2021*. MoA (2019, 2020, 2021) *Report on the State of Water Management in the Czech Republic in 2019, 2020, 2021.* In 2021, pesticides were found in almost 28 % of the samples monitored, a slight increase from 2018, while ammonium ion and nitrate contamination remain at standard levels of around 10 % to 11 % of samples.

15 Soils are protected from degradation, and the potential of the landscape is maximally utilised for carbon capture and storage.

Increases in the organic matter content in the soil and maintaining the natural state of the soil type are crucial for making soil more fertile. In overly intensively farmed soils, the proportion of organic matter decreases, especially if minimal organic matter is returned to the soil. Its depletion has a number of negative impacts, and combined with other factors, such as soil compaction, the soil's vulnerability to water and wind erosion increases and its filtration and retention capacities decrease. A low proportion of organic matter also leads to increased acidity, weakens the soil's ability to bind contaminating substances, and reduces its ability to retain nutrients, which increases nitrate content, negatively impacting plant nutrition and both surface water and groundwater quality. The Czech Republic's objective is to implement farming methods that focus on increasing the long-term carbon content in the soil, managing carbon stocks and flows, and reducing greenhouse gas emissions at the agricultural enterprise or land level, all aimed at mitigating climate change.[376]

Part of the strategic objective cannot yet be sufficiently assessed, as we lack sufficient data on soil degradation and the monitoring of organic matter content in the soil. The fact is that the Czech Republic still has an average land block of too large size, contributing to a high risk of water and wind erosion. Even reducing land block sizes as a measure to limit erosion events has not yet had the expected impact. A key part of achieving the strategic objective is also focusing on improving forest conditions and changing their species composition. A significant proportion of similarly aged forests with inappropriate species composition is affected by both ongoing bark beetle outbreaks and the impact of other biotic and abiotic harmful factors. Given the limited potential for the natural regeneration of forests in large outbreak-affected clearings, forest owners do not always utilise the full spectrum of site-appropriate native tree species during artificial regeneration. It is absolutely necessary to adapt forestry practices to changing conditions caused by climate change.

15.1 The organic content and structure of the soil correspond to the natural state of the given soil type

Organic matter is the carrier of most functional soil properties, and it is therefore appropriate to regularly monitor its quality and quantity. There are many dangers to soil quality – soil erosion, loss of organic matter, contamination, or compaction, all of which negatively affect its production and non-production properties. Regarding soil compaction, there is an Envirometr indicator to show its levels – high compaction has consistently been found in around 16% of soils.[377] Increasing the quality of agricultural soil, its resistance to extreme weather events, and its ability to retain water requires sufficient expertise to assess soil biodiversity, which is an important component of the soil's biological properties.[378]

The state of organic matter in the soil is regularly monitored in natural forest areas (NFAs), where the condition of forest soils and the nutritional status of forest trees are compared.[379] Further surveys of forest soils are also conducted across the Czech Republic. In addition to *ICP Forests* (a European programme for monitoring forest conditions, of which the Czech Republic is a

[376] MoA (2021) *What is carbon farming and why is it significant?* As a means to implement carbon farming, in 2021 the European Commission published a technical guidance handbook called *Setting up and implementing result-based carbon farming mechanisms in the EU*, which summarises the results of research on carbon storage in agriculture and provides guidance on implementing results-based carbon farming mechanisms. Available here.

[377] Envirometr (2022) *Compaction of agricultural land*. Available here.

[378] Detailed measures are listed, for example, in MoRD (2021) *Rural Development Concept 2021–2027,* MoEnv (2021) *Climate Change Adaptation Strategy in the Czech Republic* and the *National Action Plan for Adaptation to Climate Change,* and MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025*

[379] The MoA report states that, in 2019, a survey was carried out in NFA 1 Krušné hory – 321 soil samples (basic nutrients, microelements and selected risk elements) were taken and analysed from a total of 107 sampling points.

member),[380] there is the *National Forest Inventory*, which also addresses soil including organic matter.[381]

Agricultural management in accordance with environmental protection is ensured by the GAECs (*Good Agricultural and Environmental Conditions*). They aim to contribute to mitigating and adapting to climate change as well as protecting and improving soil quality. The GAECs do not specifically address the content of organic matter in the soil, but compliance with them can help to maintain or increase organic matter (they focus on protection of groundwater from pollution, minimal soil cover, and the prohibition of stubble burning).[382] The State Agricultural Intervention Fund monitors compliance with the GAECs conditions and in case of non-compliance support may be reduced or completely rejected. The exact number of inspections checking compliance with the GAECs standards cannot be precisely determined, as they mostly occur as part of other types of inspections. In 2021, the State Agricultural Intervention Fund conducted 195 separate inspections of GAECs,[383] a decrease of 53 inspections compared to 2020.[384]

Fertilising with manure and organic fertilisers is significant for soil organic matter, as they supply nutrients, organic substances, and microorganisms. Envirometr data, which track their consumption, show that consumption has remained at the same level since 2014 with minor fluctuations. This can be viewed positively – it has not decreased.[385] There is still no nationwide calculation of the organic matter balance due to the complexity of its implementation. However, individual users can calculate the carbon balance for a specific soil block or entire agricultural entity. By entering crop data, users can determine the carbon balance on a given plot, and the result indicates whether current or planned farming is sustainable in the long term or if it depletes the soil's organic matter excessively.[386]

Despite various measures aimed at protecting organic matter, the objective of maintaining organic components in the soil has not yet been achieved. This is partially given by the high ambitions it sets, such as conducting regular monitoring of soil organic matter across the Czech Republic and achieving balanced inputs and losses of soil organic matter (SOM) to maintain favourable levels of SOM on agricultural land.

The issue of organic matter in soil does not receive the attention it requires. The lack of indicator measurements complicates the assessment of this objective.

Erosion is a significant form of soil degradation. In natural conditions, it is a long-term process, compensated by the formation of new soil. Intensive farming significantly accelerates this process, in case of certain crops, even by a factor of multiple times. For example, in the case of wind erosion, the area of soil that is not at risk has decreased by tens of percentage points in recent years.[387] In 2018, almost 75% of the land was not at risk of wind erosion, but by 2021, this had dropped to only 52%. It can be estimated that, due to climate change, erosion-related damage will double by 2030 compared to the current situation unless the structure of the Czech landscape and farming practices improve by then.[388] Objective 15.2 highlights the danger that the Czech Republic is losing agricultural land at a rapid pace due to water and wind erosion, and that by 2030 it will be essential to stop this trend and reverse it. Serious consequences of erosion include

[380] Forestry and Game Management Research Institute (2023) *Forest Monitoring Yearbooks*. Available here.

[381] Forest Management Institute (2019*) National Forest Inventory 2011–2015*. Available here.

[382] Bohemian-Moravian Union of Agricultural Enterprises (2023) *Standards with new conditions: GAEC 6 – baseline soil coverage to prevent the exposure of bare soil during critical periods.* Available here.

[383] State Agricultural Intervention Fund (2022) *State Agricultural Intervention Fund Annual Report 2021*, p. 54

[384] State Agricultural Intervention Fund (2021) *State Agricultural Intervention Fund Annual Report 2020*, p. 56.

[385] Envirometr (2022) *Consumption of manure and organic fertilisers.* Available here.

[386] Research Institute for Soil and Water Conservation (2023*) Balance Calculation.* Available here.

[387] Envirometr (2022) *Proportion of agricultural land potentially at risk from wind erosion*. Available here. However, the time series is not too long to determine firmly whether a positive or negative trend is emerging.

[388] Research Institute for Soil and Water Conservation, Czech Hydrometeorological Institute (2016), *Impact of Expected Climate Change on Soils in the Czech Republic and Assessment of Their Production Function*

15.2 The threat of soil erosion by water and wind is decreasing

reduced soil profile depth, loss of topsoil from agricultural areas, and negative effects on soil chemical properties, including a decrease in organic matter and mineral nutrients. Erosion also impacts production – on heavily eroded soils, hectare yields can be significantly lower compared to soils of the same type in good condition. Secondary impacts of water erosion, such as sedimentation in watercourses and reservoirs, should also be considered.

Water erosion is primarily caused by heavy rainfall of high intensity and short duration. Wind erosion is particularly dangerous in areas with large fields planted with one crop species and lacking windbreaks, whether natural or artificially planted. In 2021, 53.4% of agricultural land was at risk of water erosion (2.6% at extreme risk), and the threat of wind erosion also increased (18.1% of agricultural land is at risk, and 4.5% is among the most at risk).[389] The long-term trend is unfavourable, and a particularly worrying fact is the significant increase in the potential risk of extreme erosion. Over the long term, the biggest problem is the loss of soil in areas with the most fertile land, which is both a result of poor farming practices and the deterioration of site conditions due to climate change (more frequent heavy rainfall, prolonged drought, rising temperatures, etc.). All applicants for direct payments and area-based payments on arable land have complied with GAEC 5, which requires farming practices that reduce the risk of soil degradation and erosion, including consideration of slope.[390] New voluntarily selectable one-year practices, focusing on appropriate regimes for climate and the environment, known as *Eco-schemes*, follow the conditions of GAECs.

The protection of agricultural and forest land in the Czech Republic is not unified; it is addressed through various instruments under applicable laws. At European level, a unified approach to soil protection does not yet exist. A framework directive creating a Union-wide approach to soil protection is still in the preparatory phase. In the Czech Republic, there is a proposal to amend agricultural land protection through an amendment to the Agricultural Land Protection Act, e.g. by clarifying the responsibilities of landowners and tenants and increasing protection against degradation processes, including erosion. The results of erosion monitoring show the high susceptibility of the Czech agricultural landscape to erosion events. RISWC data shows that 45% of erosion events occurred on land blocks sized 10–30 ha. After a change in conditions (the application of different strip and planting variants), the occurrence of erosion events stagnated. Their annual frequency dropped to 5–8% in 2022, compared to 15–18% in 2019 i.e. before the change. Meteorological and climatic conditions are difficult to influence, and changes can be expected. It is likely that changes will occur in the structure of crops grown. Soil-protective farming techniques and practices should allow for efficient agricultural production along with soil protection.[391]

For the time being, it is possible to draw funding from the OP Environment (in previous years also from the RDP) for protection against water and wind erosion, e.g. for the establishment or restoration of meadows, copses, drainage ditches, and windbreaks. In the past, the Ministry of Agriculture has provided subsidies under national schemes for the planting of ameliorative and stabilising trees, and the state-owned company Lesy ČR has been a significant source of funding. Under the *National Recovery Plan*, *components* 2.6 (Nature protection and adaptation to climate change) and 2.9 (Support for biodiversity and combating drought) will be available from 2023 onwards.

The Ministry of Agriculture has published the anticipated erosion risk layer in the LPIS land register based on the new *Common Agricultural Policy Strategic Plan 2023–2027*. This new erosion risk layer will apply to fields with deep or moderately deep soils, from which 9 tonnes of topsoil per hectare per year are washed away due to erosion, starting in 2024.

[389] Indicator 15.2.1 and CENIA (2022) *Report on the Environment of the Czech Republic 2021*.

[390] MoA (2022) *Conditions for GAEC standards in the new CAP period.* Available here.

[391] Research Institute for Soil and Water Conservation (2022) *Agricultural soil erosion monitoring. Final report.* Available here.

A supporting tool – the *Erosion Calculator*[392] application – allows soil users to simulate the long-term loss of soil through water erosion on their land, indicates actions to take in case that an erosion event is detected, and also provides a mapping service for erosion layers. The *Final Report on the Monitoring of Agricultural Soil Erosion* reports a total of 2,537 erosion events in 2022, with the largest number occurring in May and June. The report also shows that the most erosion-prone crop is clearly maize.[393] The report further highlights that in most cases erosion events occurred on land blocks, where soil-protective technologies were not applied (or technologies that were applied could not be identified during field inspections). This finding points to the need to increase support for agrotechnical measures.

The further development and effectiveness of the measures will only be assessable after several years of implementation. While the size of land blocks has been decreasing since 2004, which is a positive development as the size of contiguous arable land correlates with the soil's susceptibility to erosion, the Czech Republic still has an average land block size that is too large. Its landscape is highly fragmented with over 18% of agricultural land at risk of wind erosion and over 50% at risk of water erosion.[394] The long-term effect on reducing water erosion will undoubtedly be influenced by the anti-erosion regulations that have been in force since 2021. However, the reduction in land erosion risk is proceeding slowly as a whole, with uneven progress across regions, and the most at-risk soils are found in the South Moravian and Moravian-Silesian Regions.[395] According to data from the RISWC, erosion also has a significant impact on production: on slightly eroded soils, hectare yields decrease by 15–20%, on moderately eroded soils by 40–50%, and on severely eroded soils by as much as 75%.[396]

Overall, it can be summarised that erosion is a long-standing issue that has attracted attention, as improving the quality of agricultural land and its resilience to extreme environmental impacts, limiting water and wind erosion of agricultural land, and introducing tools to support anti-erosion measures significantly contribute to the reduction of soil threats and improvements in their quality.[397] Additionally, reducing wind erosion will improve air quality by limiting dust.

The forest, as a distinct ecosystem, influences an environment much larger than its own area. It affects air quality, local climate, and water quality. It is crucial for the life cycle of the animals and plants that inhabit it, has aesthetic and recreational significance, and, not least, plays a production role. Its high vulnerability to the effects of climate change also impacts other ecosystems. Defoliation and an unsuitable composition of trees, with a predominance of spruce monocultures, contribute to poor resistance to drought and insect pests. Spruce monocultures further contribute to the acidification of forest soils already disturbed by acid rain from the past. A specific process occurs with forest clearings (areas where the forest was either cut down or destroyed by natural disasters and has not yet been restored) – clearings are a common part of forest management and provide space for natural regeneration. However, large-scale clearings, such as those created after the removal of bark beetle-infested wood, cause changes in the properties of forest soils and hinder subsequent reforestation. The total area of clearings has increased since 2004, with a sharp rise in 2019–2021 due to the bark beetle outbreak (in 2018, there were 24,000

[392] Research Institute for Soil and Water Conservation (2022) *Agricultural soil erosion monitoring. Final report.* Available here.

[393] Research Institute for Soil and Water Conservation (2022) *Agricultural soil erosion monitoring. Final report.* Available here.

[394] Indicator 15.2.1

[395] Indicator 15.2.2 records the time series for each region from 2004 to 2020, inclusive.

[396] Research Institute for Soil and Water Conservation (2022) *Agricultural soil erosion monitoring. Final report.* Available here.

[397] The topic of erosion is addressed in all key strategies and programmes, such as MoEnv (2021) *Climate Change Adaptation Strategy in the Czech Republic* and the *National Action Plan for Adaptation to Climate Change*, MoEnv (2016) *Biodiversity Protection Strategy,* MoEnv (2020) *State Programme for the Protection of Nature and the Landscape of the Czech Republic 2020–2025*, and MoRD (2021) *Rural Development Concept 2021–2027*.

15.3 The species composition of planted forest stands corresponds to the site conditions and prevents further degradation of forest soils

hectares of clearings, by 2021, nearly 71,000 hectares).[398] In 2021, approximately 14.2 million m^3 of spruce bark beetle wood was harvested in the Czech Republic. Compared to 2020 (around 22 million m^3), this represents a decrease of one third (in 2019 it was around 21 million m^3).[399] The bark beetle outbreak has another negative consequence – it causes an adverse development in emissions from land use, land use changes, and forestry (LULUCF), where, as a result (and also due to climatic factors), forests become a source of additional greenhouse gas emissions leading to a process opposite to what is desirable.[400] However, the amount of incidental logging is gradually decreasing. According to statistical data, incidental logging (mainly bark beetle-infested wood) in 2022 decreased to 79% of the previous year, and its share in total logging is shrinking. This was partly due to weather conditions, as the bark beetle population did not have such favourable air temperatures for swarming as in previous years.[401] Reforestation proceeded in approximately the same manner and volume as the previous year,[402] which, according to data from the statistical office, means just under 40,000 hectares. Another factor threatening forest soils is acidification and the reduction of basic elements in the soil. In the past, forest soils were acidified mainly by anthropogenic emissions. Acidification is, however, a natural process that can be significantly influenced by forest management, such as species composition and logging intensity,[403] which has been the situation in recent years. The level of defoliation (leaf loss) in Czech forests is also among the highest compared to other European countries. Besides Central Europe, high average defoliation is observed in Mediterranean parts of Italy, France, and Spain.[404] In the Czech Republic, long-term monitoring shows a very slight increasing trend with certain fluctuations. Pine trees, both younger and older, are most affected by defoliation.[405] Spruce, the dominant tree species in Czech forests, is among the trees most sensitive to the effects of emissions.[406] It should be noted that forest stands react to changes with a delay. The combination of drought and an extended growing season increases the damage caused by insect pests in forests. In the future, it is desirable to restore and establish forests with a rich species composition and to regenerate stands with site-appropriate tree species.

Sustainable forest management also includes types of management that use natural regeneration with regard to site suitability and the succession of appropriate tree species, as well as suitable management methods, such as selective and understorey management, where forest regeneration occurs under the protection of the parent stand. In 2021, the area of natural regeneration increased, and its share in total forest regeneration reached 18.3%.[407] Since 2010, the species composition has been gradually changing with the share of conifers decreasing from almost 60% to 55%, while the share of broadleaved trees increased from 40% to 44%. The proportion of broadleaved trees in forests increased from 22.3% to 28.7% between 2000 and

[398] ENVIROMETR (2022) *Total area of clearings.* Available here.

[399] MOA (2022) *REPORT ON THE STATE OF FORESTS AND FOREST MANAGEMENT IN THE CZECH REPUBLIC IN 2021.* Wood is infested by the European spruce bark beetle, which is usually accompanied by the spruce wood engraver and nowadays, in most areas, also by the double-spined bark beetle.

[400] CENIA (2021), *Evaluation of Climate Policy in the Czech Republic 2021.* Balance of emissions and sinks in the LULUCF sector: +13.6 Mt CO_2 eq. in 2019. Total net GHG emissions, including the LULUCF sector, increased by 12.7% between 2015 and 2019.

[401] Czech Hydrometeorological Institute (2023) *Bark beetle spread*. Available here.

[402] Czech Statistical Office (2023) *Intensive forest regeneration continued last year.* Available here.

[403] CENIA (2022) *Report on the Environment of the Czech Republic 2021*

[404] Ministerial Conference on the Protection of Forests in Europe – FOREST EUROPE (2020), *State of Europe Forests*, pp. 73*ff*.

[405] ENVIROMETR (2022) *Defoliation of basic tree species.* Available here.

[406] MOA (2020) *REPORT ON THE STATE OF FORESTS AND FOREST MANAGEMENT IN THE CZECH REPUBLIC IN 2019.* Available here.

[407] CENIA (2022) *Report on the Environment of the Czech Republic 2021*

2021.[408] This is also evidenced by data at the regional level, showing a more favourable proportion of broadleaved and coniferous trees than in the past, both in natural and especially artificial regeneration.[409] However, there is still a lack of seedlings of suitable tree species to kick-start sufficiently rapid natural regeneration, particularly in calamity clearings of site-risky tree species.[410] The Post-disaster Forest Regeneration Framework, which covers the entire Czech Republic, is regularly updated.[411] For some regions, specifically the Moravian-Silesian, Olomouc, and Vysočina Regions, a Methodology for the Regeneration of Calamity-stricken Clearings has also been developed.

Support for a diverse species composition that preserves the timber production function is the objective of various strategic documents, such as the *State Forestry Policy* and its application document, the *Climate Change Adaptation Strategy in the Czech Republic*, and the *National Action Plan for Adaptation to Climate Change*. In conclusion, it can be stated that it will be necessary to look for native tree species with increased drought resistance, or begin testing introduced species to support species diversity.[412] In principle, the trend is on the right track, but for various reasons, it is significantly slower than needed. Only further assessments will show whether the unfavourable situation has been reversed.[413] Ensuring natural forest regeneration is particularly difficult in non-state forests, where the state can provide motivation primarily through financial incentives.

Another factor that has recently come to the forefront and places demands on the healthy state of forests is the optimisation of deer populations, which cause significant damage to forest plantations. This is a long-term task, where gradually increasing hunting should achieve balanced populations and by that prevent excessive damage to forests and agriculture. In 2022, deer populations reached record levels,[414] and the annual damage caused by deer in forests amounted to CZK 7 billion.[415] The first step here is legislative adjustment. A new amendment to the Hunting Act, which is still awaiting consultation, is expected to focus primarily on properly setting hunting plans and ensuring their consistent implementation. Meanwhile, there is at least a methodological instruction for government hunting authorities on reducing deer populations to limit their impact on forest regeneration.[416]

A specific situation exists at *Natura 2000* sites, where, for the coming years, efforts should focus on converting stands of non-native tree species, both geographically and ecologically, to stands of natural tree species composition, in line with the framework management directive, which is part of the sets of recommended measures up to 2027.[417] We currently do not have data to assess

---

[408] Indicator 15.3.2, for a comparison with more recent data see the indicator Forest Management Institute (2023) *Forest Restoration,* available here.

[409] Indicator 15.3.1 compare with the indicator from the Forest Facts website, available here.

[410] MoEnv (2020) *State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025.* CENIA (2022) *Report on the Environment of the Czech Republic 2021*

[411] Forest Management Institute (2020) *Post-disaster Forest Regeneration Framework, Stage III.* Available here.

[412] MoA (2021) *Application Document for the Concept of State Forestry Policy up to 2035:* Measure A.1.3

[413] *Decree No 298/2018 on the development of regional forest management plans and the delimitation of management units* replaced Decree 83/1996 and significantly increased the proportion of ameliorative and strengthening trees, which should help to accelerate the desired trend.

[414] Czech Statistical Office (2022) *Basic data on hunting grounds, game numbers and hunting – from 1 April 2021 to 31 March 2022.* Available here.

Forest Management Institute (2023) *Hunting records.* According to Forest Management Institute data, the numbers of European deer have increased more than twice (2.25 times), roe deer 1.5 times, fallow deer more than 10 times, moufflon almost 5 times and sika deer (invasive) 29 times over the last 55 years. In detail here.

[415] Forest Management Institute (2022), Kamil Turek, *Wildlife Damage as a Limiting Factor in Forest Regeneration (Not Only) in Disaster-response Clearings*

[416] *Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2020).*

[417] MoEnv (2022) *Priority Action Framework for Natura 2000 in 2021–2027.* Available here.

whether this measure is being successfully implemented, partly due to the relatively short time since its introduction.

The slow improvement in forest conditions can be attributed to the long production cycle and the need to maintain all forest functions. It is evident that there is an effort to meet the objective, with the bark beetle outbreaks contributing to the acceleration of changes in species composition. However, success remains patchy, as the current increase in the representation of broadleaved trees in regeneration will logically not show its effects for some years yet. A key opportunity for a change in species composition lies in the regeneration phase. The efforts made so far are commendable, as the problem has been long-standing and a solution has been postponed for decades.

4. Municipalities and Regions

Focal Area 4 focuses on the sustainable development of municipalities and regions. Responsible land use should lead to the development of municipalities and regions that promotes the increase of their resilience, the reduction of regional inequalities, and guiding migration trends, and it also supports the creation of conditions for better access to public services and improving the quality of life for inhabitants. It supports public participation in strategic and spatial planning and, last but not least, actively contributes to adaptation to, and the mitigation of, the negative impacts of climate change. Municipalities and regions face a range of challenges in achieving this ideal state.

These include the loss of agricultural land, below-average accessibility of some public services, population decline in certain regions, social inequalities, differing economic performance across regions, insufficient use of sustainable development tools, lack of green spaces in towns, the absence of water retention measures in the landscape, and municipal waste management.

The availability of services remains problematic, particularly in specific regions and communities. There is currently insufficient coordination of strategic and spatial planning to ensure this. Binding standards for the availability of public services and infrastructure do not exist; however, in some municipalities and regions, the methodology for assessing public infrastructure availability is being used. Cooperation on regional development continues through integrated tools such as CLLD, ITIs, and integrated territorial development plans.

Quality of life in the Czech Republic shows regional disparities, primarily between socio-economically advanced regions and lagging ones, rather than between urban and rural areas. A significant portion of rural areas has seen long-term population growth from migration. The situation should improve thanks to the emerging Housing Support Act and continued support for local entrepreneurs.

The quality of urban development is still limited by the ongoing loss of agricultural land to new built-up areas. Although infrastructure and services are becoming more accessible for people with mobility and orientation difficulties, their availability remains limited. Successful public participation in decision-making tends to happen mainly in larger municipalities.

The issue of climate change is being addressed by an increasing number of municipalities in their strategic documents, while national adaptation and mitigation measures are supported by effectively targeted subsidy schemes. However, the proportion of green space in most regional capitals has decreased. The share of new buildings completed in energy class A remains slow, as does the growth in the number of vehicles using alternative fuels and corresponding infrastructure. Although the number of newly built cycle paths is rising, cycling infrastructure in the Czech Republic is still in poor condition. The country is moving further from the objective of reducing the amount of municipal waste being landfilled; this has, in fact, increased in recent years. Additionally, the landfill ban has been postponed until 2030. At national level, there are many activities targeting the elimination of heat stress in towns, but the reduction of urban heat islands cannot be assessed due to a lack of data.

Although a relatively large number of tools for sustainable local development exists, they are only used by some municipalities and regions, which may be due to inadequate systematic support from the state. It is likely that, as the impacts of climate change worsen, there will be greater incorporation of sustainable development into the daily agendas of local public administration.

16 Public services in the region are more accessible to all residents.

Responsible land use is pivotal in ensuring conditions for the harmonious development of municipalities and regions. Strategic and spatial planning should ensure balanced development, preventing towns from expanding too much into the open landscape, ensuring efficient mobility for residents, and providing access to public infrastructure and services. Given the fragmented settlement structure of the Czech Republic, the state should set minimum standards for the availability of public services, linked to standards for the availability of public infrastructure; this should be considered in strategic and spatial planning. Integrated planning within municipalities and the strengthening of intermunicipal cooperation is in the municipalities' interest. Many towns are undergoing gradual transformations and face various negative trends that hinder their development. One of these is the gradual decline of the town centres, which may be due to people migrating for work, poor solutions for public spaces or their degradation, excessive suburbanisation, and the concentration of activities outside the town centre. Suburbanisation leads, among other things, to higher costs for infrastructure, services, and transportation. The task of municipalities and towns is to provide citizens with civic amenities, well-situated public spaces, and accessible housing for all age groups. The planning of public spaces, appropriate strategic investments in renovations, and new construction lie in the hands of local governments. The increasing share of the ageing population will also put pressure on the demand for accessible public infrastructure, services, and urban and municipal support.

Coordination of strategic and spatial planning at all levels is insufficient. This is partly due to limited vertical coordination of strategic planning and a lack of human resources across local public administration. Currently, there are no binding standards for the availability of public services and corresponding public infrastructure. The availability of public infrastructure and services shows regional and local differences, with some important public amenities (e.g. certain categories of outpatient care) worsening over time. The quality of public service availability during the planning phase differs across municipalities and regions. The continued cooperation within integrated tools such as CLLD, ITIs, and integrated territorial development plans, and to a limited extent within voluntary municipal associations, offers potential for improvement of the overall situation.

16.1 Strategic and spatial planning is coordinated at all levels

The interconnection of documents should be ensured both horizontally (e.g. alignment of various regional or municipal sectoral documents or coordination between documents of neighbouring regions and municipalities) and vertically (e.g. alignment between international, national, regional, and municipal levels). The aim is to ensure thoughtful sustainable planning and prevent the chaotic approval of individual poorly thought-out projects. Document consistency requires human resources, which are currently insufficient, as well as a shift in mindset and approach.[418]

The fundamental conceptual document for spatial planning at national level is the Czech Republic's *Spatial Development Policy*, which is binding for the preparation and issuance of spatial planning documentation, such as the area spatial development plan, area development principles, land-use plans, and regulatory plans, as well as for decision-making in the region. Similarly, spatial planning documentation is binding for decision-making in the region, with higher-level documents being binding for lower-level ones. A spatial development plan is prepared for the whole Czech Republic and defines areas and corridors of international and national significance. Regional spatial development principles apply within each region but do not delve

[418] OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*.

into local details. Downstream from these documents are local municipal plans.[419] The most detailed are regulatory plans issued for the parts of a municipality's territory (e.g. for specific development areas or historical city centres). Therefore, vertical connections to individual documents are ensured in spatial planning. However, the staffing of spatial planning authorities and building authorities faces many obstacles, including a lack of human resources relative to the volume of work required, inadequate pay, and a shortage of suitable candidates. Despite this, no significant steps have yet been taken to improve this situation.[420]

Currently, there is no mechanism in place to ensure vertical alignment between the strategic planning of bodies at sub-national levels (regions, municipalities, or groups of municipalities) and national strategic documents.[421] An opportunity for improvement is presented by the *Strategy Database*, into which a sustainable development descriptor was introduced at the beginning of 2023. This descriptor can be assigned to specific objectives of strategic documents, thus capturing their alignment with the *CR 2030* framework. However, assigning the descriptor requires a thorough review of all documents, for which there are currently no available staffing capacities.[422] A new development in strategic planning at the microregional level is the new competence of communities of municipalities, namely the creation of strategies for the development of communities of municipalities. Communities of municipalities, as defined in the currently prepared amendment to the Municipalities Act,[423] are a higher level of intermunicipal cooperation (i.e. *Voluntary Association of Municipalities 2.0*) at microregional level. One of the main goals of such communities is to coordinate strategic development in a given area.[424]

The coordination described above views strategic and spatial planning as two separate processes. However, for the spatial sustainable development, their interconnection, or coordination, is crucial.[425] The coordination of spatial and strategic planning in the Czech Republic differs across levels of public administration. At regional level, some coordination exists, and its outputs are represented by two methodologies. The Ministry of Regional Development, in cooperation with the regions, has issued a methodology for the categorisation of settlement centres within the settlement structure of the Czech Republic. This is intended to serve for spatial planning activities and the strategic planning of regions, as well as for the potential use of funds from the Integrated Regional Operational Programme (IROP).[426] There is also a Methodology for the Strategic Management and Planning of Regions of the Czech Republic, several parts of which take into account the interaction of regional strategies with spatial planning documentation.[427] However, there is no information on how this methodology is being used by the regions. At national level, there is no methodology for coordinating spatial and strategic planning, the

[419] Institute for Spatial Development (2022) *Overview of the Current State of Spatial Planning Documentation and Selected Spatial Planning Data.* Available here. 97% of municipalities in the Czech Republic have valid and/or developed spatial planning documentation.

[420] MoRD (2023) *Spatial Development Policy of the Czech Republic.* Available here; MoEnv (2022) *Second Implementation Plan for the Strategic Framework Czech Republic 2030 for 2022–2025);* MoRD (2023*) Information from the Department of Spatial Planning relating to the evaluation of CR 2030.*

[421] OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*. Paris: OECD Publishing.

[422] MoRD (2023) *Evaluation of the Implementation of the Second Implementation Plan for CR 2030*.

[423] Current version of the *amendment to Act No 128/2000 on municipalities, as amended*.

[424] MoI (2023) *Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030.*

[425] MoRD (2021) *Opportunities for Positive Influence on Settlement Structure Development through Spatial Planning Tools.*

[426] MoRD (2022) *Centres of Settlement in the Czech Republic.* MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

[427] Association of Regions of the Czech Republic (2014) *Methodology for the Strategic Management and Planning of the Regions of the Czech Republic.*

development of which lacks political support.[428] At municipal level, no methodology exists for coordinating both types of planning,[429] although a theoretical foundation for it was laid in an academic text by Šilhánková (2015).[430]

In rural areas, an integrated approach to regional development is applied through the implementation of community-led local development (CLLD). Based on the CLLD strategies drawn up, 11,775 projects were implemented between 2020–2022, focusing on areas such as supporting public services and infrastructure, including education, social inclusion, and transport, supporting agricultural entrepreneurs, etc. The highest number of projects (5,418) was implemented in 2021. The majority (73%) were financed from the Rural Development Programme (RDP), followed by the IROP, Operational Programme Employment, and Operational Programme Environment. The project activity of individual local action groups (LAGs) logically differs depending on the number of members. There are LAGs implementing a few projects, but also LAGs with dozens of projects.[431] A limiting factor for the integrated activities of some LAGs, especially in less socio-economically developed rural areas, may be the lack of experts who are essential to implement the strategies of the LAGs, for example, in the field of energy.[432]

For metropolitan areas and agglomerations, integrated territorial investments (ITIs) and integrated territorial development plans are available. In 2020–2022, 691 projects were implemented under 13 strategies and plans; 17% of these projects were in the Ostrava agglomeration. These projects were financed from the IROP, OPT, OPEmp, OPEI, and Open, and typically focused on improving social cohesion, protecting the environment, or enhancing education and scientific research activities.[433] The implementation of integrated strategies under CLLD, ITIs, and integrated territorial development plans is coordinated by the Ministry of Regional Development, which for the current programming period 2021–2027 issued a methodological instruction facilitating the fulfilment of the goals of ITI and CLLD strategies using sources other than EU funds.[434]

The coordinating tool for regional policy at regional level is the regional standing conference, which brings together regional and local government bodies, institutions, and other partners. This is a communication, planning, and coordination platform within each region (except for Prague), which, with the help of a regional action plan, defines a common vision of needs and directions for selected topics, primarily those where the principle of spatial dimension will be applied and which will be supported by EU funds or national subsidy schemes.

Strategic and spatial planning is still not coordinated at all levels, as there is insufficient vertical alignment of strategic planning, and the interconnection of strategic and spatial planning is reflected to a limited degree only at regional level. The coordination of both types of planning is restricted by a lack of personnel capacities. However, the continued implementation of integrated projects through CLLD, ITIs, and integrated territorial development plans is ongoing. The Ministry of Regional Development and the Ministry of the Interior are continuing discussions on joint strategic and spatial planning at the level of metropolitan areas and agglomerations, or metropolitan unions.

---

[428] MoRD (2023) *Evaluation of the Implementation of the Second Implementation Plan for CR 2030*.

[429] Indicator 16.1.1.

[430] ŠILHÁNKOVÁ, V. (2015) *Models of Coordination for Strategic, Spatial, and Financial Planning at Municipal and Regional Levels.* In JEŽEK, J. *ET AL. Strategic Planning for Municipalities, Towns, and Regions: Selected Problems, Challenges, and Possible Solutions*.

[431] Indicator 16.1.2.; MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment*.

[432] MoEnv (2023) *Information from the Focus Group with LAG Staff.*

[433] Indicator 16.1.3.; MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment*.

[434] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

16.2 Binding standards for the availability of basic public services and the corresponding public infrastructure for civil amenities, valid for all types of development, are established

Public services can be defined as "services that: (1) are provided in the public interest and cannot be provided by market mechanisms or cannot be provided at the required quality by them; (2) are financed or co-financed through public budgets; (3) are carried out, organised, or ordered by public administration bodies; (4) are inherently non-profit because the primary purpose of public service providers is to provide public service for the local population, not economic profit."[435]

The availability of public services and infrastructure continues to be a problem in the Czech Republic, which is linked to administrative fragmentation at local level.[436] A solution is being sought by the Working Group on the Availability of Public Services (led by the Ministry of the Interior and co-led by the Ministry of Regional Development). One output of its work is the voluntary methodology "Public Service Availability Standards and Their Practical Use" from 2021, which addresses availability at various geographical (territorial) levels and proposes future availability standards for selected services. Besides sectoral managers of public services, it is also intended for regions, microregions, and municipalities, which can use it to create their strategic documents.[437]

Demand for services and their provision changes over time in response to various mega trends and crises (e.g. the COVID-19 pandemic, which worsened the availability of most services due to strict COVID measures), so an update of the methodology is planned in the coming years.[438] One problem that remains is that public services are a broad concept, so the methodology does not cover their entire scope. Representative data on the use of the methodology currently does not exist.[439]

The Ministry of the Interior is starting to work on an analysis of the geographical aspects of selected public services provided at different hierarchical levels, from which proposals for their future organisation in the context of planned reforms of territorial administration in the Czech Republic should arise. However, personnel capacities are lacking for the efficient completion of this task.[440] In addition to this activity, the Ministry of the Interior intends to continue supporting and developing intermunicipal cooperation to improve coordination and availability of public services in the area (see communities of municipalities in the current version of the amendment to Act No 128/2000 on municipalities).[441]

A specific category of public services is social services, where the rules for developing their network are addressed individually by each region, with methodological support provided by the Ministry of Labour and Social Affairs (MoLSA). In 2020, the project "Ensuring Support for Medium-term Planning of Social Services at Regional Level" was completed, and its output included an update of methodological recommendations for coordination between regions and municipalities

[435] MoI, MoRD (2021) *Standards for the Accessibility of Public Services and Opportunities for their Practical Use,* p. 4. The definition is not statutory, but is the output of the Working Group on the Availability of Public Services, or the output of an agreement between ministries, local government bodies, the private sector, and academia.

[436] OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*.

[437] MoI, MoRD (2021) *Standards for the Accessibility of Public Services and Opportunities for their Practical Use*. Available here.

[438] MoI, MoRD (2021) *Standards for the Accessibility of Public Services and Opportunities for their Practical Use.*

[439] MoI (2023) *Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030.*

[440] MoI (2023) *Evaluation of the Implementation of the Second Implementation Plan for CR 2030*.

[441] MoI (2023) *Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030.*

in social services planning.[442] At the same time, a project, overseen by the Ministry of Health, is being prepared to support the development of the system of integrated health and social services through so-called *Regional Health and Social Plans*, which will also focus on coordination between regions.[443]

In the Czech Republic, there are 6,254 municipalities; this translates into a high level of administrative fragmentation and limited cost-effectiveness in the provision of public services, particularly in small municipalities in sparsely populated areas,[444] but even, for example, in Prague, which is divided into 57 administrative districts.[445]

Assessing whether public services are truly more accessible is a problematic task for two reasons: first, a legislative definition of public services has not yet been established. A working group led by the Ministry of the Interior has developed standards for the availability of public services. This output, which proposes accessibility according to six geographical levels, can be viewed as filling a gap in the debate about what constitutes public services.[446] Second, the actual availability of these defined services has not been mapped, and other studies or partial data must be relied on (for example, the lack of a centralised data collection method and information transfer is highlighted in the Analysis of the Burden on Public Administration from Data Collection (2016)).[447]

The situation with the availability of public services can be illustrated by the example of social services, for which there is partial data on their availability. For example, a study conducted for the Ministry of Labour and Social Affairs in 2021 shows that the availability of specialised social services for people at risk of domestic and gender-based violence is characterised by spatial differences, with border areas and regions on the borders of individual regions generally having worse access to these services.[448]

Public infrastructure, compared to public services, is characterised by a clearer definition and a more comprehensive data foundation. Public infrastructure is defined by the Building Act and includes transport infrastructure, technical infrastructure, civic amenities, and public spaces. Since quality public infrastructure is a fundamental prerequisite for the provision of public services,[449] evaluating its availability is meaningful within the context of Objective 16, particularly the availability of civic amenities, which is most relevant for this objective.

The development of civic amenities is also part of the Czech Republic 2030 indicator (which includes selected elements of amenities in municipalities with populations of up to 10,000). Between 2005 and 2020, there was a decline in the number of independent dental practices for children by 39%, vocational schools by 29%, health centres by 25%, independent practices for general practitioners for children and adolescents by 17%, independent dental practices by 14%, and independent practices for adult general practitioners by 3%. On the other hand, there was an increase in the number of primary schools with both first and second tiers by 7%, kindergartens by 6%, and hospitals by 5%.[450]

---

[442] MoLSA (2022) *2021 Report on the Implementation of the National Strategy for Social Service Development 2016–2025.*

[443] MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

[444] OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*.

[445] Prague City Hall (2023) Prague City Hall information relating to the evaluation of CR 2030.

[446] MoI (2023) *Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030.*

[447] MoI (2016) *Analysis of the Burden on Public Administration from Data Collection.* Available here.

[448] MoLSA (2021) *Analysis of the Availability of Specialised Social Services for People at Risk of Domestic and Gender-Based Violence in the Czech Republic.* Moore Czech Republic s.r.o. Available here.

[449] OECD (2015) *Towards a Framework for the Governance of Infrastructure*. Available here.

[450] Indicator 16.3.1.

The situation with the availability of civic amenities in municipalities with fewer than 3,000 inhabitants is further illustrated by the research results in Table 1. In addition to the share of municipalities with the presence of individual elements of civic amenities (the set of elements is far from exhaustive, not including, for example, technical and network infrastructure), it also sets the so-called *normal standards of amenities*. These indicate from which size category of municipalities the given amenities appear in more than two thirds of municipalities. In addition to the table itself, the research presents key findings.[451]

Peripheral municipalities (the so-called *internal periphery*, i.e. municipalities in remote locations, with population stagnation or decline, an older age structure, and worse socio-economic conditions) are equipped above average, while suburban municipalities (suburban and per-urban areas) are equipped below average. Relatively worse facilities are found in municipalities with population growth and a younger population. Municipalities with a significant tourist influence are better equipped than others. In individual settlements, the facilities available, apart from population size, strongly depend on their status within the municipality. Practically all services studied are most available in the largest settlements within each municipality. In contrast, smaller settlements in municipalities made up of several settlements are the least equipped.

A clear decline in amenities from the 1990s to the present has only been recorded for food and mixed goods stores. However, the pace of decline in the number of stores has gradually slowed. A slight decrease can also be seen in the number of paediatricians, dentists, and gynaecologists. The largest group consists of infrastructure, which has stagnated or fluctuated in small municipalities. This includes primary and nursery schools, restaurants and pubs, post offices (comparing the current situation), and general practitioners' practices. An increase in sports fields and pharmacies can be observed.

In the Czech Republic, there are few places where the spatial distance from basic infrastructure would significantly complicate their accessibility. Areas with reduced accessibility to various types of infrastructure are concentrated in regions with the most fragmented settlement structures, where there are so many small settlements that they cannot even provide basic types of amenities. These areas are also frequently located on the borders of districts. The eastern part of the country generally has better spatial accessibility to basic infrastructure than the western part.

[451] These are edited citations of research results: BERNARD *ET AL*. (2020) *Civic Amenities in Small* Municipalities. *Research Report*, Institute of Sociology of the Czech Academy of Sciences, pp. 8–10, p. 84. The amenity elements analysed in this research are referred to by Maier *et al.* (2020) as public infrastructure, not public services.

Table 1 Civic amenities in municipalities with fewer than 3,000 inhabitants (data from 2018–2020)

Typ služby nebo infrastruktury	Podíl vybavených obcí s méně než 3000 obyvateli	Běžný standard (dvoutřetinová vybavenost)
Sportovní hřiště	83 %	200–300 obyvatel
Dětské hřiště	76 %	200–300 obyvatel
Prodejna potravin	71 %	300–400 obyvatel
Restaurace nebo hospoda	69 %	300–400 obyvatel
Mateřská škola	51 %	500–600 obyvatel
Pošta a Pošta Partner	38 %	800–900 obyvatel
Základní škola	37 %	600–700 obyvatel
Tělocvična	29 %	1300–1400 obyvatel
Ordinace praktického lékaře	23 %	1400–1500 obyvatel
Sběrný dvůr	16 %	ne
Čerpací stanice	14 %	2200–2300 obyvatel
Zubní ordinace	12 %	2000–2100 obyvatel
Ordinace dětského lékaře	12 %	2000–2100 obyvatel
Lékárna	7 %	2000–2100 obyvatel
Gynekologická ordinace	4 %	ne
Bankomat	4 %	2800–2900 obyvatel
Služebna Policie České republiky	2 %	ne

Type of service or infrastructure	Municipalities smaller than 3,000 with the facility (%)	Ordinary standard (size category as of which two thirds of municipalities have the service)
Playing field	83%	200–300 inhabitants
Playground	76%	200–300 inhabitants
Grocery store	71%	300–400 inhabitants
Restaurant/pub	69%	300–400 inhabitants
Nursery school	51%	500–600 inhabitants
Post office and post office partner	38%	800–900 inhabitants
Primary school	37%	600–700 inhabitants
Sports hall / gym	29%	1,300–1,400 inhabitants
GP	23%	1,400–1,500 inhabitants
Waste collection site	16%	no
Petrol station	14%	2,200–2,300 inhabitants
Dentist surgery	12%	2,000–2,100 inhabitants
Children's dentist	12%	2,000–2,100 inhabitants
Pharmacy	7%	2,000–2,100 inhabitants
Gynaecology clinic	4%	no
ATM	4%	2,800–2,900 inhabitants

Police station (state police)	2%	no

Source: BERNARD *ET AL.* (2020) *Civic Amenities in Small Municipalities.* Research Report, Institute of Sociology of the Czech Academy of Sciences, pp. 8–10.

Currently, there are no binding standards for the accessibility of public services and its corresponding public infrastructure in the Czech Republic. Overall, the assessment of civic amenities indicates that public infrastructure, and thus public services, are generally not better accessible to all inhabitants.

16.3 The prerequisites for the availability of basic public services are covered in the spatial and strategic planning phase

Based on an initiative by the Ministry of Regional Development, an update to the methodology "Standards for the Availability of Public Infrastructure" was created in 2020 (the first version was from 2016), aimed at creating conditions for ensuring the availability of public infrastructure through the unification of spatial planning practices. The application of this methodology should prevent the use of undesirable alternatives for spatial development in regional and municipal planning documentation.[452]

The key to positive change lies in the following intervention logic: 1) considering the methodology when creating regional and AD MEP spatial analysis data, which serves as a basis for the preparation of regional and municipal planning documentation and evaluates the availability of transport infrastructure, technical infrastructure, and civic amenities; 2) addressing issues (including existing problems with accessibility) arising from the spatial analysis data. These issues must be described in both the Report on the Application of Regional Development Principles and the Municipal Report on the Application of the Municipal Land-use Plan.[453]

There is currently no representative data on the use of the aforementioned methodology. It is assumed that the quality of spatial analysis data, in terms of the application of accessibility standards, will vary across local government bodies.[454] However, it is apparent that in the Czech Republic there are some municipalities with extended powers and regions that use the methodology and others that do not (or at least they do not reference it in their outputs).[455]

The ability to predict future challenges and opportunities for sustainable development,[456] which will naturally be linked to changes in demographic characteristics and the spatial distribution and form of infrastructure and services, is becoming increasingly important. The ability to make predictions at regional leadership level is also addressed by the *Regional Development Strategy of the Czech Republic 2021+* (RDS 21+), which plans to create a system of population forecasts for effective spatial development planning. It was piloted in the Hradec Králové Region.[457]

Requirements for the availability of basic public services are generally covered in planning processes, although the quality of provision is likely to vary across territorial self-government bodies and territories.

[452] MAIER, K. *ET AL.* (2020) *Standards for Public Infrastructure Accessibility.* The methodology does not deal with commercial infrastructure. An alternative to accessibility standards is the concept of a "*common standard"* (Bernard *et al.* 2020), discussed above.

[453] *Act No 183/2006 on spatial planning and building regulations*; Decree No 500/2006 *on spatial analysis data*; see, for example, the draft report, available here, on the *application of the Lučina Municipal Land-use Plan*.

[454] MoRD (2023*) Information from the Department of Spatial Planning relating to the evaluation of CR 2030.*

[455] The methodology is referred to, for example, by the City of Prague, the town of Rosice, the market-town of Průhonice, the Olomouc Region, the South Bohemian Region, and others. By contrast, for example, the Liberec Region does not refer to it in its analysis of sustainable development here.

[456] This is *foresight*, see České priority (2022) *Foresight: Methodological Guide*.

[457] MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

16.4 Strategic and spatial planning procedures are coordinated at a level beyond individual municipalities

The basic form of intermunicipal cooperation in the Czech Republic is voluntary associations of municipalities, whose members can be only municipalities. There are 702 voluntary associations of municipalities in the Czech Republic, which vary in how active they are. Cooperation aimed at providing specific public services is typical for most voluntary associations of municipalities and generally concerns education, infrastructure, cleaning, property management, and other local government competencies, with the development of these services often dependent on external financial resources (e.g. the state budget and EU funds). In contrast, multi-purpose cooperation for long-term strategic planning is less common, and its absence can be an obstacle to development, particularly for small municipalities.[458] Examples of good practice in multi-purpose municipal associations in the Czech Republic are described in an analysis by the Ministry of the Interior (MoI).[459] Cooperation between municipalities in this area is expected to be strengthened by the upcoming amendment to Act No 128/2000 on municipalities, which introduces the concept of communities of municipalities, whose activities will include the coordination of public services across member municipalities and the strategic development of these areas. The expectation is that current multi-purpose voluntary associations of municipalities will gradually transform into communities of municipalities.[460]

Another form of municipal cooperation involves local action groups (LAGs), which bring together various types of stakeholders – non-governmental organisations, enterprises, citizens, municipalities, associations of municipalities, and other institutions. The coordination of strategic planning beyond the municipal level is an integral part of the functioning of LAGs, which implement their activities based on their own CLLD strategies created by the stakeholders grouped within the LAG.[461]

In terms of coordinating development in the rural landscape (i.e. undeveloped areas), landscape planning studies are important for administrative districts of municipalities with extended powers, as their objective is to place a stress on landscape solutions within spatial planning. A landscape planning study, as a foundation for spatial planning documentation, focuses on formulating specific measures concerning landscape care. The implementation of a landscape planning study requires coordination among relevant stakeholders – municipalities, associations of municipalities, LAGs, and competent authorities. The creation of landscape planning studies was supported in the 2014–2020 programming period under the IROP and NEP; in the 2021–2027 period, it is supported by the Operational Programme Environment.[462] Overall, by 2022, landscape planning studies covered 24% of the Czech Republic's territory.[463]

Two working groups have been established within the framework of long-term cooperation between municipalities. The Intermunicipal Cooperation Working Group (led by the Ministry of the Interior) brings together functioning multi-purpose voluntary associations of municipalities from different regions of the Czech Republic, territorial partners, and relevant ministries, with the aim of establishing intermunicipal cooperation in functional microregions. The outputs of this working group have been incorporated into the upcoming amendment to Act No 128/2000 on

[458] OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*; BAKOŠ, E. *ET AL.* (2021) THE PERCEPTION OF INTERMUNICIPAL COOPERATION BY LOCAL OFFICIALS AND MANAGERS. *Central European Journal of Public Policy*, 15(1); Act No 128/2000.

[459] MoI (2020) *Intermunicipal Cooperation in the Czech Republic: Best Practice Examples and Recommendations for Implementation.* Available here.

[460] MoI (2023) *Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030.*

[461] National Network of Local Action Groups (2023) *What LAGs are*. Available here.

[462] MoRD, MoEnv (2016) *Methodological Guideline for the Assignment of a Landscape Planning Study for an Administrative District of a Municipality with Extended Powers;*WIRTH, K. (2022) *Presentation of the Draft Update of Landscape Planning Study Methodology and the Related Handbook.* Available here.

[463] Indicator 16.4.2.

municipalities. The Metropolitan Areas and Agglomerations Working Group (led by the Ministry of the Interior and the Ministry of Regional Development) is tasked with addressing opportunities to establish metropolitan cooperation in the Czech Republic. For this purpose, foreign metropolitan cooperation has been researched and municipalities in Czech metropolitan areas and agglomerations have been surveyed.[464]

Strategic planning is primarily coordinated through the activities of local action groups and, to a limited extent, through voluntary associations of municipalities. In a quarter of the Czech Republic's territory, landscape management coordination is part of spatial planning.

[464] MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

17 Improving the quality of life in individual municipalities reduces regional inequalities.

Quality of life cannot be expressed solely through GDP values, which primarily indicate economic performance per capita. Although economic growth may be a condition for achieving a higher quality of life, development must be grasped as a broader concept closely linked to an individual's standard of living, education, health, life expectancy, relationships with family and others, access to culture, etc. The goal is to achieve a quality of life in municipalities and regions that reduces structural inequalities in society; these often have regional and local dimensions.

Quality of life itself varies across regions and municipalities.[465] Rural areas are more likely to experience population retention than depopulation.[466] Support for qualified opportunities in small and medium-sized enterprises mainly focuses on connecting businesses with researchers. A law on housing support is being drawn up, and financial support for various forms of housing continues, as the housing situation has worsened in recent years. Social disparities are being reduced at local level, partly thanks to the work of local action groups, but region-specific problems with crime persist. The goal is thus only partially being achieved.

17.1 Today's rural and peripheral areas are not depopulating, and their populations are not ageing more than in urbanised areas

Population development in the Czech Republic is geographically and temporally variable. The overall population increase, which includes both natural population changes and migration, has been positive since the last decline in 2013. Between 2016 and 2019, it actually regularly increased (by +44,000 people in 2019), but in 2020 (+8,000) and 2021 (+22,000), it was lower, likely due to the COVID-19 pandemic. A very significant increase in total population growth occurred in 2022 (+311,000) due to the refugee wave caused by Russia's aggression in Ukraine. However, this extraordinary situation cannot yet be meaningfully factored into the assessment of depopulation in today's rural and peripheral areas.[467] When considering regions as whole entities,[468] there has been a long-term and relatively significant increase in the population in Prague (12.6‰ in 2021) and the Central Bohemian Region (10.3‰ in 2021). There has also been long-term positive relative growth in the Plzeň and South Moravian Regions. In contrast, the most significant population decrease over the past decade has been in the Karlovy Vary Region (−6.4‰ in 2021) and the Moravian-Silesian Region (−4.6‰ in 2021), while the stagnating Ústí nad Labem Region saw a marked decline in 2020 and 2021 (−3.4‰ in 2021). The population in the Zlín and Olomouc Regions has also long been declining. These five regions experience more frequent occurrences of the phenomenon of "*shrinking cities*", that is, cities characterised by long-term population decline. A typical example of a shrinking city and the associated processes is Ostrava.[469] The population in the South Bohemian, Pardubice, Liberec, and Vysočina Regions has remained relatively stable. Migration plays a dominant role in population changes within regions, although overall, migration between regions and abroad exceeds migration between regions.[470] Overall (excluding migration between regions), internal migration in the Czech Republic is a significant phenomenon. In 2012, there were 233,000 internal migrants in the Czech

[465] Technology Agency (2020) Quality of Life in Municipalities: Data and Methodological Resources – TL02000499. Available here. The kdejedobre.cz project analysed eleven relatively complex dimensions of quality of life in municipalities in the Czech Republic, see also STEM, DATLAB (2022) *A website presenting a database of quality of life in municipalities*.

[466] Based on an analysis of data at the level of municipalities with extended powers, see below.

[467] Czech Statistical Office (2023): Population Movement. Available here.

[468] The following analysis at the level of regions and municipalities with extended powers does not include persons with temporary protection in the context of the armed conflict in Ukraine.

[469] RUMPEL, P., SLACH, O. (2022) *Why is Ostrava in Czechia still shrinking?* In: Chung-Tong Wu *et al.* (eds.): Postsocialist Shrinking Cities. Abingdon: Routledge.

[470] Czech Statistical Office (2021) *Population Development in the Regions of the Czech Republic.* Available here

Republic. This number grew to 251,000 in 2016, then stagnated and significantly decreased during the COVID-19 year of 2020 (232,000). In 2021, the number of internal migrants increased again to 248,000.[471]

To assess the development of depopulation[472] in rural areas between 2012 and 2021, both migration balance and gross migration balance rate (migration balance per 1,000 inhabitants)[473] are used at the level of administrative districts of municipalities with extended powers, which are linked for evaluation purposes to the typology of regions defined in the Rural Development Atlas. Here, administrative districts of municipalities with extended powers are divided into five types depending on their position in the settlement system and key stakeholders and development mechanisms, based on expert literature. These are metropolitan cores, metropolitan hinterlands, urban regions with metropolitan functions, urban regions, and rural areas.[474]

A total of 59% of all 205 administrative districts of municipalities with extended powers report a positive migration balance (measured as the absolute sum for 2012–2021). Among rural areas (a total of 137 administrative districts of municipalities with extended powers), 53% show a positive migration balance over the past decade. Positive migration balance is further observed in 33% of urban regions, 83% of urban regions with metropolitan functions, 83% of metropolitan hinterlands, and in two out of three metropolitan cores.

However, when considering the aggregate figure just for the years 2020 and 2021, the situation in rural areas overall slightly improves – 66% of rural areas show a positive migration balance in these two years. Positive migration balance is also observed in 50% of urban regions, 88% of urban regions with metropolitan functions, 88% of metropolitan hinterlands, and in two out of three metropolitan cores.

When all administrative districts of municipalities with extended powers are analysed by regional affiliation, additional regionally specific trends of depopulation emerge. The best long-term situation (average of the gross migration balance rate for the decade 2012–2021) is in the Central Bohemian, South Moravian, and Plzeň Regions, where metropolitan hinterlands around Prague, Brno, and Plzeň have long been experiencing significant migration gains. In the Central Bohemian Region, migration to all rural areas is also occurring, while in the South Moravian and Plzeň Regions, growth is observed in most rural areas. The situation is quite different in the Moravian-Silesian Region, where there is a more significant migration outflow from the Ostrava metropolitan area, while migration seems stabilised in rural areas. The Ústí nad Labem Region has seen an increase in some rural areas, with the situation varying in other areas. In the Karlovy Vary Region, no significant trend is observed by type of area. The situation in other regions is shown in Figure 1. It follows from this that the mere fact that an area is rural (i.e. that rural processes prevail there) does not necessarily mean it is experiencing a migration decline. The depopulation of rural areas depends on both regional affiliation and the isolation of regions in the internal peripheries of the Czech Republic.[475]

---

[471] Czech Statistical Office (2021) *Population Development in the Czech Republic*. Available here

[472] Depopulation is taken to mean depopulation by migration, see also the statement of the director of the Czech Statistical Office Marek Rojíček.

[473] In order to effectively compare data within the scope of municipalities with extended powers, the migration balance is related to 1,000 inhabitants as at 31 December of the given year, and not to the median population. Prague is omitted from the analyses at the level of administrative districts of municipalities with extended powers .

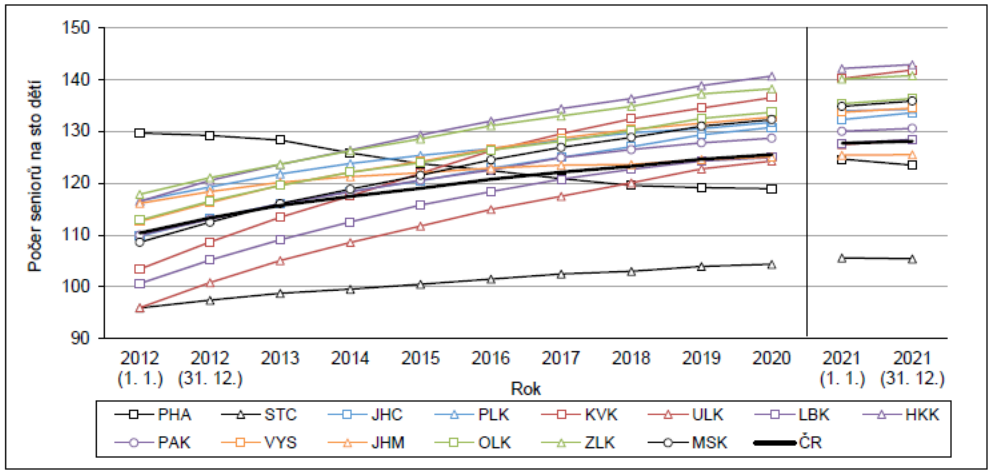
[474] ŽENKA, J., KRTIČKA, L. (2021) *TYPOLOGY OF CZECH TERRITORY AT THE LEVEL OF STATISTICAL DISTRICTS OF MUNICIPALITIES WITH EXTENDED POWERS.* Available here.

[475] Indicator 17.1.1.

The ageing of the Czech population presents, and will increasingly present, a major challenge – not only for the sustainability of social cohesion and finances.[476] At regional level, three clear trends can be traced over the last decade, as illustrated in Figure 1.

[476] SÁNCHEZ A, JIMÉNEZ-FERNÁNDEZ E. European Union Cohesion Policy: Socio-Economic *Vulnerability of the Regions and the COVID-19 Shock. Appl Res Qual Life*. 2023;18(1), p. 200; OECD (2023) *OECD Economic Surveys: Czech Republic 2023*.

Fig. 1 Ageing Index in Czech Regions, 2012–2021



Y axis: Number of seniors per 100 children

X axis: Year

HA	Prague
TC	Central Bohemian Region
HC	South Bohemian Region
LK	Plzeň Region
VK	Karlovy Vary Region
LK	Ústí nad Labem Region
BK	Liberec Region
KK	Hradec Králové Region
AK	Pardubice Region
YS	Vysočina Region
HM	South Moravian Region
LK	Olomouc Region
LK	Zlín Region
SK	Moravian-Silesian Region
R	Czech Republic

Sourced from the Czech Statistical Office (2021).

Firstly, a long-term decrease in the ageing index in Prague (although with an increase in 2021). This trend stands out from the rest of the Czech Republic. Secondly, a slight increase in the ageing index, though still relatively low, in the Central Bohemian Region. Thirdly, a long-term increase in the ageing index in all other regions. The largest long-term increase in the ageing index was in the Karlovy Vary Region (+33 between 2012 and 2021).

The development of ageing in rural areas is evaluated based on the ageing index at the level of administrative districts of municipalities with extended powers (the average for 2020–2021)

classified according to the Rural Development Atlas. The vast majority (95%) of all administrative districts of municipalities with extended powers have an ageing index higher than 100, meaning that the older population (65 years and older) predominates over the child population (0–14 years) in almost all administrative districts of municipalities with extended powers in the Czech Republic. The exception is only six metropolitan hinterlands in the Central Bohemian Region and four metropolitan hinterlands in the South Moravian Region, where a relatively large number of young people live. In rural areas, there is not a single place where the child population predominates over the oldest age group.

Rural areas, on average, report the highest ageing index (the average for rural administrative districts of municipalities with extended powers for 2020–2021 is 137 people over 64 years old per 100 children) and are a relatively homogeneous group with no significant differences (variation coefficient = 11%). A slightly lower ageing index is found in urban regions and regions with metropolitan functions (129). Metropolitan hinterlands are overall the youngest (105), but there are relatively large differences between them, caused mainly by younger administrative districts of municipalities with extended powers near Prague and Brno (variation coefficient = 22%). An interesting difference is also observed between Prague (121), administrative districts of municipalities with extended powers in Brno (134), and Ostrava (137). Over a ten-year period (2012–2021), rural areas are the group with the second-largest average increase in the ageing index (an increase of 23), with only urban regions experiencing a larger increase (an increase of 27).[477]

Overall, rural areas are more likely to retain population than to depopulate. The degree of depopulation tends to be dependent on specific socio-economic processes reflecting long-term development in regions and internal peripheries of the Czech Republic, rather than the mere fact that an area is rural. The population of rural areas is currently the oldest on average and is ageing in the long term.[478]

17.2 Highly skilled job opportunities in small and medium-sized enterprises harnessing local and regional potential are supported

Small and medium sized enterprises (SMEs) play an important role in regional and national economies, contributing to the social and cultural development of regions and strengthening social cohesion at the local level.[479]

The state has longtime supported SMEs in various ways. In recent years, the total volume of grants and financial instruments contributed to the growth of some SMEs, thanks to the OPEI (loans, guarantees, venture capital) and the grant schemes TRIO and *The Country for the Future*. This support ballooned from nearly CZK 8 billion in 2018 to CZK 30 billion in 2020, then dropped to CZK 23 billion in 2021. The OPTAC, which primarily targets SMEs, focuses on supporting research, development, innovation, and energy.

The COVID-19 pandemic negatively affected a large portion of SMEs, mainly due to a decline in orders and the enforced suspension or restriction of activities, to which SMEs responded with a series of support measures (e.g. *compensation bonuses* and the *Antivirus* programme). In 2020–2021, the Ministry of Industry and Trade disbursed a total of CZK 111.867 billion to SMEs from

[477] Indicator 17.1.2.; ŠLACH, O., ŽENKA, J. *et al*. (2021) *Challenges and scenarios for rural development*. Ostrava: En Face.

[478] However, ageing rural regions seem to be "catching up" with ageing urban regions without metropolitan functions in the long run.

[479] MoIT (2021) *Strategy for Supporting Small and Medium-sized Enterprises in the Czech Republic 2021–2027*, p. 6

national sources as part of COVID support. It should be noted that some parts of SMEs, or specific business sectors (e.g. postal and courier services), actually benefited from the pandemic.[480]

Since the beginning of 2021, energy prices have also increased, further exacerbated by the Russian invasion of Ukraine.[481] The state responded to this crisis with a *Support Programme for Increased Costs of Natural Gas and Electricity* due to the exceptionally sharp price rise. SMEs were also eligible under this scheme.[482]

The territorial dimension is reflected in SME support,[483] primarily through the implementation of regional RIS3 strategies. Examples include regional Smart Accelerator projects.[484] From the perspective of this objective, the emphasis on strengthening cooperation between schools, research institutions, and the business sector has led to the announcement of another Smart Accelerator call, which can also support newly starting researchers.[485]

SMEs in so-called *economically and socially vulnerable areas*, which are targeted by RDS 21+, find themselves in a specific situation. These economically and socially vulnerable areas, along with areas with a higher-than-average unemployment rate, will be prioritised for SME support under the OPTAC and are also the focus of regional activities under Smart Accelerator projects.[486]

Regarding local and regional potential, the state supports family businesses through preferential bank loans in cooperation with the National Development Bank. The Ministry of Industry and Trade also supports cashless economies in rural areas through the "*Obchůdek"* programme. This makes it possible to finance the operation of payment terminals in small rural shops after the initial period in which shopkeepers do not have to pay for the terminal.[487]

Support for highly skilled job opportunities is limited – according to research among SMEs and entrepreneurs, the lack of qualified and skilled workers is the biggest barrier to employee recruitment and a significant obstacle to successful digitalisation, automation, and robotisation.[488]

Recently, social innovations have gained in importance; these are innovations that include improvements in social relationships and the well-being of individuals and communities.[489] Social innovations concern both SMEs and the business sector in general. The key to these innovations is cooperation between public administration bodies, which themselves exhibit "entrepreneurial behaviour" by connecting local businesses with externally acquired know-how based on the gathering and evaluation of information. In addition to traditionally defined support for SMEs, social innovations are a broader concept that connects the spatial transfer of knowledge, public administration, and SMEs. Social innovations for SMEs are supported by the EU under the

[480] Indicator 17.2.1; IPSOS (2021) for the Association of Small and Medium-sized Enterprises and Crafts of the Czech Republic. Available here; MoIT (2023) *OPTAC (2021–2027)*. Available here. Czech Statistical Office (2021) Services – Q4 2020. Available here.

[481] OECD (2022) *Tax Policy Reforms 2022: OECD and Selected Partner Economies*. Paris: OECD Publishing, p. 128.

[482] MoIT (2023) *CALL 1 under the Support Programme for Increased Costs of Natural Gas and Electricity due to the Exceptionally Sharp Price Rise.* Available here.

[483] MoRD (2021) *Territorial Dimension in Operational Programmes 2021+*.

[484] MoIT (2022) *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027. Annex 2. Cards of Regional RIS3 Strategies.* Available here.

[485] MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

[486] MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024*. Available here.

[487] MoIT (2022) *Report on the Development of the Business Environment in the Czech Republic in 2021*.

[488] IPSOS surveys (2020; 2021) for the Association of Small and Medium-sized Enterprises and Crafts of the Czech Republic. Available here (2020) and here (2021).

[489] European Commission (2023) *Social Innovation*. Available here.

Horizon Europe programme, the successor to Horizon 2020.[490] The results of an ESPON study show that the number of social innovation projects in the public sector (together with market innovators from other regions) was highest in Prague in 2021. This suggests that there is a space for improvement in social innovations in other regions of the Czech Republic.[491]

Support for highly skilled job opportunities in small and medium-sized enterprises across regions mainly exists due to the emphasis on cooperation between businesses and research workers. The shortage of skilled workers is also a major barrier to the development of SMEs and entrepreneurs.

17.3 Various forms of housing, especially affordable rental housing for all segments of society, are supported

One of the factors crucial for the quality of life in the Czech Republic is sustainable housing, which is related to a range of socio-economic, ecological, legal, and cultural phenomena.[492]

Between 2011 and 2021, the structure of ownership of inhabited dwellings across the Czech Republic developed in line with long-term trends established since the early 1990s. Housing in private buildings accounted for 36% of all inhabited buildings in both years. The share of dwellings in personal ownership grew from 20% in 2011 to 25% in 2021, which likely reflects the rising proportion of housing loans relative to GDP. The share of cooperative flats decreased from 9% to 3%. Dwellings in rented housing, which are the subject of Objective 17.3 and accounted for 22% of all inhabited dwellings in 2011, fell to 20% in 2021 (a total decrease of 30,000 such dwellings, which may be linked to relatively low mortgage rates between 2014 and 2021 and the phenomenon of investment housing).[493]

The trend of rented housing in the Czech Republic is characterised by regional variability. The proportion of households living in rented accommodation is consistently highest in Prague (31% in 2021), followed by the Ústí and Liberec Regions (both 25%), the Karlovy Vary Region (24%), the Moravian-Silesian Region (23%), and the Plzeň Region (22%). The lowest proportion of households living in rented accommodation is in the Zlín and Vysočina Regions (both 9%). The largest increase in the share of households living in rented accommodation between 2012 and 2021 occurred in the Plzeň Region (+10 p.p.) and the Karlovy Vary Region (+9 p.p.). The largest decrease was in Prague (-4 p.p.) and in the South Moravian Region (-3 p.p.).[494]

The complex reality of housing accessibility is further illustrated by Figure 2. In absolute terms, housing hardship is most significant in the Moravian-Silesian Region, Prague, and the Ústí Region, where the highest number of people are also at risk of housing hardship. Most of the people at risk of losing their homes live in rented accommodation.[495]

By sorting households according to the proportion of total housing expenditures to disposable household income, we can express the situation for the “median household” in the region (i.e. how much of its income the median household must spend on housing). In all regions, there was a decrease in the median between 2012 and 2021, i.e. an improvement in the situation regarding housing expenses. The most significant improvement occurred in the Moravian-Silesian Region (median = -6%), with the smallest improvement in the Karlovy Vary, Central Bohemian, and

[490] European Commission (2023) *Social Innovation*. Available here.

[491] ESPON (2022) *Entrepreneurial regional governance. Territorial cohesion through open innovation*. Available here.

[492] United Nations (2015) *Geneva UN Charter on Sustainable Housing;* Healthy Cities, Towns and Regions of the Czech Republic (2020) *How to Evaluate Housing Sustainability? A Methodological Guide for Municipalities.* Available here.

[493] Czech Statistical Office (undated) *Housing*. Available here. This data is from the Population and Housing Census; Indicator 17.3.4.

[494] Indicator 17.3.2.

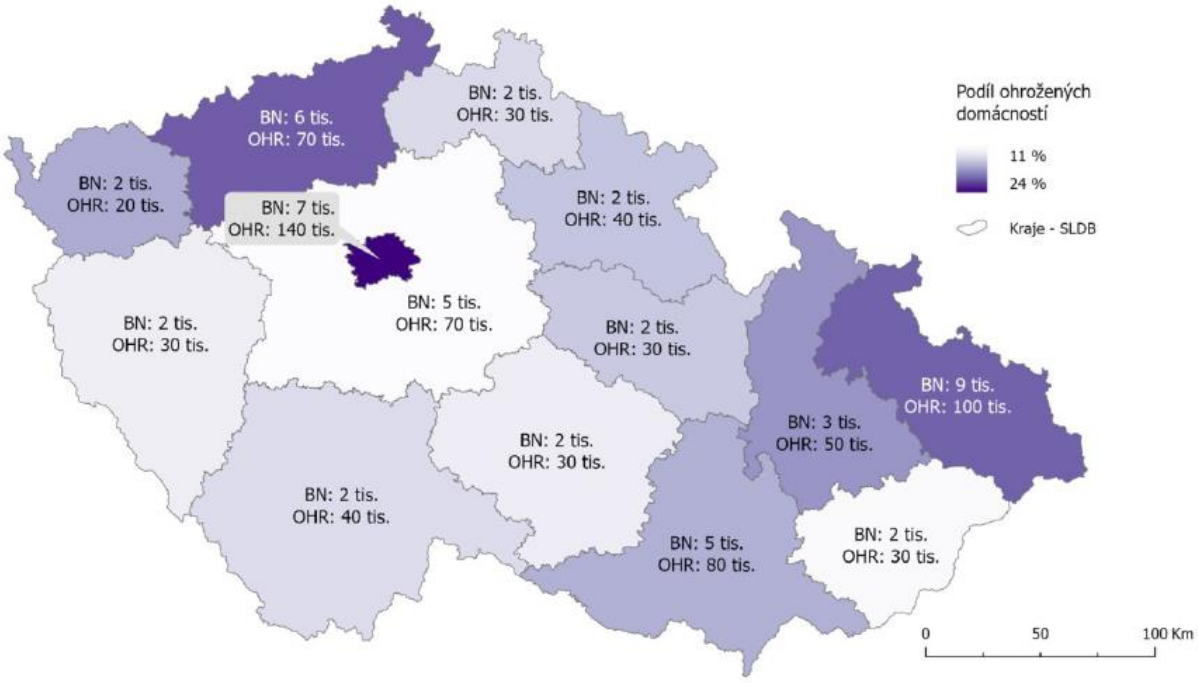
[495] MoRD (2023) *Final RIA Report on the Housing Support Bill*. See Indicator 17.3.3.; Note: The proportion of people living in defective housing is going down gently; in 2021 it was 6%. See Indicator 17.3.5.

Pardubice Regions (all -3%). From a long-term perspective, it is important to note that the inter-regional variability in the decrease of the median has remained almost unchanged over the years, as evidenced by the values of the variation coefficients calculated from the data. In other words, the situation for households (in the middle of all households in the region, based on the share of total expenditure on housing) slightly improved, with no significant widening of the gap between regions. At the same time, it should be noted that the median does not reflect the situation for households in the most extreme situation at the end of the data set.[496] The complexity involved in evaluating the housing situation is further illustrated by the fact that, over the last ten years, the financial accessibility of (self-owned) housing has generally worsened, which, among other things, forces residents who cannot afford their own housing to seek alternatives in the form of rented accommodation, at a time when rental prices have been rising faster than household incomes in recent years.[497]

[496] Indicator 17.3.1

[497] MoRD (2023) *Final RIA Report on the Housing Support Bill.*

Fig. 2 Approximate number of households in housing hardship and at risk of housing hardship, by region (share of total regional population), data from 2021–2022



Share of vulnerable households
11%
24%
Regions – Census

N	housing hardship
HR	at risk of housing hardship
is.	thousand

Sourced from MoRD (2023) *Final RIA Report on the Housing Support Bill.*

The Housing Support Bill, presented by the Ministry of Regional Development, aims for systematic improvements in the availability of rented housing and support for people in housing hardship.[498] The bill proposes the introduction of new tools to address housing hardship, which will allow municipalities and other providers via different support measures to systematically address the housing situation of inhabitants and contribute to the more effective use of existing social policy tools in the housing sector. The bill also formulates methods and rules for financing the newly established tools. A related objective is the use of the housing support infrastructure to obtain quality data on the extent of housing hardship and the effectiveness of tools for handling it.[499]

The state supports various forms of housing primarily through the State Investment Support Fund and the Ministry of Regional Development's grant schemes. Financial resources come from the state budget and from the Integrated Regional Operation Programme (IROP). Overall financial allocations for housing support are gradually increasing. In 2018, the total support was worth CZK 908 million (the sum of nine forms of support); in 2021, it amounted to CZK 2.6 billion (16 forms of support). In the coming years, housing support allocations will increase significantly, with more than CZK 20 billion expected by 2026, including substantial resources from the updated National Recovery Plan (NRP).[500]

[498] MoRD (2023) *Housing Support Act.* Available here.

[499] MoRD (2023) *Final RIA Report on the Housing Support,* p. 1.

[500] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

Housing support is not tied solely to grant schemes. Buildings are being reconstructed to create municipal flats, and new municipal flats are being built in municipalities, even without this support, and municipalities can take out loans for this purpose.[501]

Although various forms of housing are supported, their impact is limited, as evidenced by the deteriorating accessibility of both owner-occupied and rented housing, as well as the region-specific situation of people in housing hardship and those at risk of housing hardship. However, the situation could improve with the upcoming Housing Support Bill.

[501] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

17.4 Local integrated strategies reduce social disparities in the area, strengthen non-conflictual coexistence, and improve the quality of life for everyone

The integrated approaches are generally highlighted by RDS 21+ and the Rural Development Concept. Within integrated strategies, which directly address social inequalities at local level, the most important strategies are (Community led local development (CLLD) and the follow-up activities of Local Action Groups (LAGs) across the Czech Republic. LAGs significantly assist citizens who: (a) are socially excluded in some way; (b) are at risk of social exclusion; or (c) are generally affected by various inequalities. LAGs play a crucial role in improving social cohesion in the localities where they operate. This is achieved, for example, through the development of community centres, support for field services, the training of citizens, and the organisation of children's camps. One typical example of significant assistance is the support provided to elderly citizens and families in worse economic situations with the administration of applications for support under the *New Green Savings Light* scheme (including practical aspects such as communication with institutions), which they would otherwise struggle to process themselves.[502]

Social disparities in the Czech Republic are geographically specific and reflect the socio-economic development in regions, microregions, and localities. This can be illustrated by the social exclusion index.[503] The highest value of this index for 2021 at regional level was in the Ústí Region (index=14), the Moravian-Silesian Region (13), the Karlovy Vary Region (11), and Prague (11). The best situation was in Vysočina (4), Zlín, Pardubice, and Central Bohemia (all 5). However, the issue cannot be reduced solely to the regional level, as even in regions where the overall situation is better, there are municipalities with a significant degree of social exclusion, particularly those located in *internal peripheries*.[504] The complexity of the social exclusion issue is well illustrated by the map of the social exclusion index in municipalities (Fig. 3). It is immediately evident from the map that social exclusion is spatially concentrated in structurally affected regions and partly corresponds with the territory of the former Sudetenland.[505] However, social exclusion in these areas is not spatially homogeneous, as there are also a considerable number of municipalities with a low level of social exclusion. The map also shows higher social exclusion in parts of the aforementioned internal peripheries (e.g. the internal periphery north of Slaný).

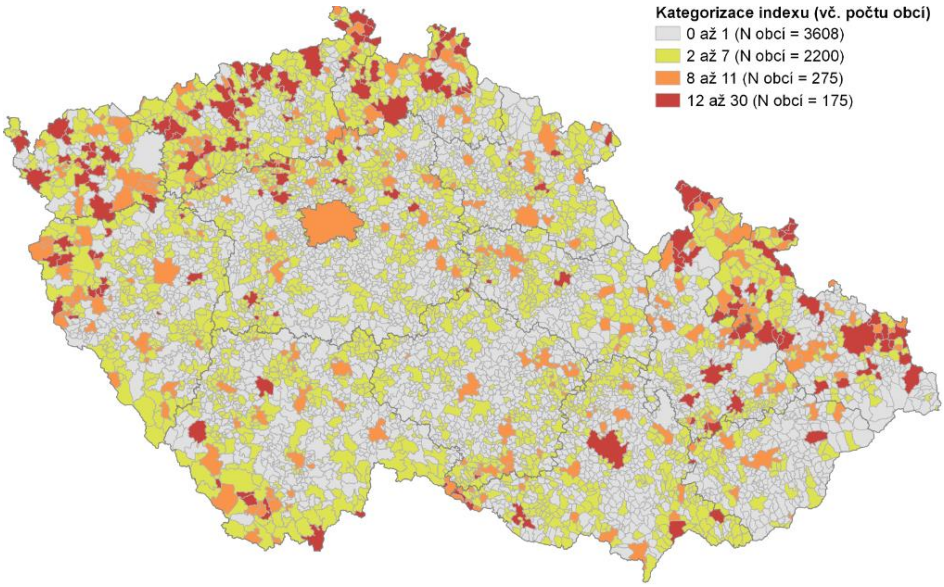
Fig. 3 Social exclusion index in municipalities in 2021

[502] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.* An evaluation of LAG activities is currently being completed in the regions. The results will be available in the coming months.

[503] LANG (2022) *SOCIAL EXCLUSION IN THE CZECH REPUBLIC: SCOPE IN 2021.*

[504] BERNARD, J., ŠIMON, M. (2017) *INTERNAL PERIPHERIES IN THE CZECH REPUBLIC: THE MULTIDIMENSIONALITY OF SOCIAL EXCLUSION IN RURAL AREAS*. *SOCIOLOGICKÝ ČASOPIS* 53(1), PP. 3–28.

[505] MUNIECON (2023) *On the Consequences of the History of the Sudetenland*. Available here.



Index categorisation (including number of municipalities)
0–1 (N municipalities = 3,608)
2–7 (N municipalities = 2,200)
8_11 (N municipalities = 275)
12–30 (N municipalities = 175)

SOURCED FROM LANG (2022) *SOCIAL EXCLUSION IN THE CZECH REPUBLIC: SCOPE IN 2021.*

Between 2016 and 2019, the number of recipients of subsistence benefits per 1,000 inhabitants in the Czech Republic significantly decreased (from 12 to 6 recipients per 1,000 inhabitants; this is one of the dimensions of the social exclusion index). However, in the following two years, the improvement stalled. The worst situation (average 2020–2021) occurred in structurally affected regions. In the Moravian-Silesian and Ústí Regions, there were 13 recipients per 1,000 inhabitants, followed by the Karlovy Vary Region (10). The best situation was in Vysočina (3). A closer look at the three structurally affected regions in terms of administrative districts of municipalities with extended powers reveals a regionally specific pattern in the Moravian-Silesian Region, where there are slightly more pronounced differences between administrative districts of municipalities with extended powers (50% higher variability) compared to the other two regions. Specifically, there are four rural areas with fewer recipients per 1,000 inhabitants (2–4) than, for example, in the administrative districts of municipalities with extended powers of Ostrava (19). By far the worst situation is in Karviná (25) and Most (23).[506]

The number of municipalities with socially excluded localities has been steadily decreasing, though not consistently. In 2016, there were 785 such municipalities, which dropped to 441 over the next three years. However, in 2020, there was a slight increase, and in 2021, their number again decreased to 450. Due to the sensitivity of the data, regional information is not available.[507]

In response to the challenging situation in structurally affected regions, activities of the Ministry of Regional Development are carried out through the Strategy for Economic Restructuring of the Ústí, Moravian-Silesian and Karlovy Vary Regions (RE:START). The national support to the development activities, however, was slowed down by the COVID-19 pandemic, which required ministries to address priority tasks related to the pandemic. It is clear that the COVID-19 pandemic had secondary impacts on the implementation of the RE:START strategy, particularly in areas like health care, culture, and SMEs support. Many financial resources were redistributed and used

[506] Indicator 17.4.2.

[507] Indicator 17.4.1.

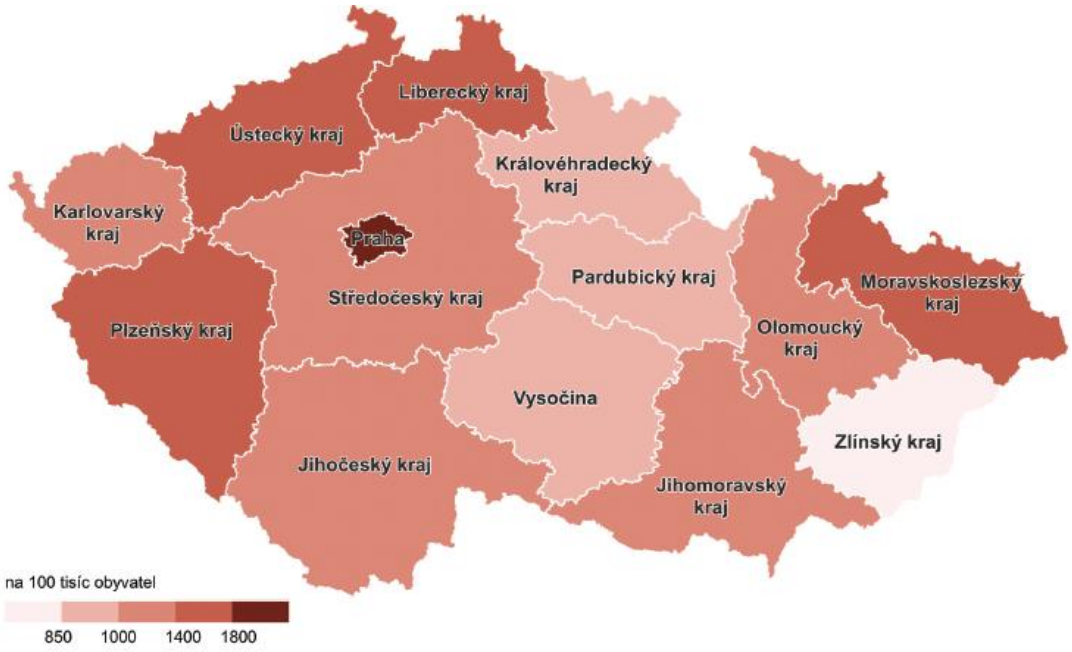
across the country to mitigate the pandemic's effects. Even so, under the RE:START strategy, many projects were supported from 2017 until now with a total allocation of CZK 10 billion.[508]

For a high quality of life in municipalities and regions, objective safety, which relates to factors such as criminality, and subjective feelings of safety are important. Overall crime rate in the Czech Republic has been declining for a long time, but there are regional differences, illustrated by the crime index by region in Figure 4. By far the worst situation is in Prague (2,775 crimes per 100,000 inhabitants in 2021). The lowest crime index is in the Zlín Region. At the same time, the number of people who feel unsafe in their place of residence has been decreasing (14% in 2015, 10% in 2021).[509]

[508] Modified quote from MoRD (2022) *Report on the Implementation of Measures under the Comprehensive Action Plan RE:START for 2021*, p. 11; see also further information from the report.

[509] Indicator 4.2. Quality of life.

Fig. 4 Number of crimes per 100,000 inhabitants by region, 2021



per 100,000 inhabitants

Karlovarský kraj	Karlovy Vary Region
Plzeňský kraj	Plzeň Region
Ústecký kraj	Ústí nad Labem Region
Liberecký kraj	Liberec Region
Královéhradecký kraj	Hradec Králové Region
Pardubický kraj	Pardubice Region
Středočeský kraj	Central Bohemian Region
Praha	Prague
Jihočeský kraj	South Bohemian Region
Vysočina	Vysočina (Highlands Region)
Jihomoravský kraj	South Moravian Region
Olomoucký kraj	Olomouc Region
Moravskoslezský kraj	Moravian-Silesian Region
Zlínský kraj	Zlín Region

Sourced from Czech Statistical Office (2023) *Crime in the Czech Republic and the EU 2011–2021.*

The reduction in social disparities across regions through the implementation of integrated strategies by local action groups contributes to the quality of life for residents. A barrier to social cohesion is the social exclusion of certain groups of inhabitants, particularly in structurally affected regions and in Prague. Despite improvements in peaceful coexistence in recent years, significant problems with crime persist, especially in Prague and some border regions.

18 The quality urban development of settlement structures is safeguarded.

Municipalities and communities in the Czech Republic should find a natural balance between the role of large towns, which are considered growth poles, and historically developed polycentric areas with a dispersed settlement structure. It is necessary to strengthen cross-border cooperation for external peripheries and to ensure that remote municipalities have access to public services, including basic civic amenities for all age groups and accessible public transport, particularly barrier-free, low-emission, and zero-emission forms, as well as regional transport systems. Municipalities and communities must plan and ensure balanced development of their territories and manage suburbanisation trends. This phenomenon occurs mainly around metropolises, agglomerations, and other significant regional centres. It brings with it many negative factors, such as building on agricultural land and open landscapes, higher costs of public infrastructure, and increased mobility to areas outside the centre. The public should be involved in strategic and spatial planning, and local government bodies should consider their needs.

The quality development of settlement structures in the Czech Republic is only partially ensured. There continues to be a significant loss of agricultural land, especially in the Central Bohemia and South Moravia Regions. The loss reflects the ongoing expansion of built-up areas, and their actual area in the Czech Republic is probably inadequately recorded. Barrier-free access to public infrastructure and services is gradually increasing, and the state supports municipalities in improving citizens' comfort, including specific support for people with limited mobility and older inhabitants. However, there are still places in municipalities that are difficult to access, especially for people with disabilities. Public engagement in decision-making in territorial issues is developing, but it varies across municipalities, with larger municipalities and especially larger towns generally having more capacity for participatory processes.

18.1 Agricultural land-take in towns and open landscapes is decreasing. Brownfields are being regenerated and revitalised

The soil is a finite resource that plays a range of production and ecological roles. Its original functions, retention properties, and biological diversity are disrupted by the transformation of the landscape.[510]

The basic principle of guiding development within the framework of spatial planning in the Czech Republic is governed by the Building Act. Certain issues arise from the Building Act itself, which limits constructions with its requirements, such as the number of parking spaces for cars – this significantly increases the cost of building projects. These aspects contribute, among other things, to gradual suburbanisation, which comes at the expense of agricultural land and the open landscape. Legislative regulation in this regard is insufficient. Conceptual documents, such as the *Spatial Development Policy of the Czech Republic* and the *Architecture and Building Culture Policy of the Czech Republic*, favour construction within existing built-up areas. The *Urban Policy Guidelines* also view construction in this way.

While there has been no change in the procedure for calculating fees for land removed from the agricultural land stock, and no additions been made to the list of exemptions from the payment of fees in Section 11a of Act No 334/1992,[511] the area of agricultural land continues to decrease. The effectiveness of Decree No 271/2019 *laying down procedures to ensure the protection of agricultural land*, which responds to terminology and spatial planning procedures, has still not been evidenced.

The total area of agricultural land in 2022 was 4,196,624 hectares. Over the course of 10 years (2013–2022), its area decreased by 23,000 hectares, with this decline slowing down between 2018 and 2021, but slightly increasing again in 2022 (decline between 2021 and 2022 = -2,100

[510] See Objective 12 of the CR 2030 Strategic Framework. See, for example, GREGORY, A. S. *et al.* (2015) A review of the impacts of degradation threats on soil properties in the UK. *Soil Use and Management*, 31 (Suppl. 1), pp. 1–15.

[511] *Act No 334/1992 on nature conservation and landscape protection, as amended*.

hectares).[512] The most agricultural land was permanently removed in 2021 in the Central Bohemian Region (230 hectares), nearly half for residential purposes. Another region with a high rate of land-take is the South Moravian Region (136 hectares). The main reason for the decrease in agricultural land is construction, i.e. for residential purposes (400 hectares of land-take), storage facilities (181 hectares), transport infrastructure (162 hectares), recreational and sports purposes (52 hectares), and mineral extraction (25 hectares).[513]

The built-up area[514] now (2022) accounts for 1.71% of the total area of the Czech Republic, i.e. 134,519 hectares, and has increased by 2,429 hectares over the past 10 years. The significance of built-up areas can be more deeply assessed using the proportion of built-up land to the total area of regions and municipalities with extended powers. The largest proportion of built-up land (data as of 2021) is in Prague (10.24%); the smallest is in the Karlovy Vary Region (0.93%). The largest ten-year increase in the proportion of built-up land (2012–2021) occurred in Prague (+0.17 percentage points), the South Moravian Region (+0.09 percentage points), and the Central Bohemian Region (+0.06 percentage points). Conversely, the most significant (though relatively small) decrease occurred in the Karlovy Vary Region (-0.02 percentage points), but the situation remains relatively stable in several other regions. At the level of administrative districts of municipalities with extended powers, the most significant ten-year increase in the proportion of built-up areas occurred in Břeclav (+0.43 percentage points) and Židlochovice (+0.34 percentage points, both administrative districts in the South Moravian Region). On the other hand, the largest decrease occurred in the Central Bohemian town of Hořovice (-0.27 percentage points) and in Rokycany in the Plzeň Region (-0.17 percentage points). The greatest variability in long-term trends (i.e. the variation in changes across municipalities with extended powers within a given region, 2012–2021) can be found in the South Moravian and Central Bohemian Regions.[515]

Statistics from the European Statistical Office provide more comprehensive data on built-up areas at NUTS 2 level.[516] From this perspective, in the Czech Republic 4.4% of the land was built-up in 2018. The largest proportion of built-up land is in Prague (25.9%) and the NUTS 2 region of Moravia-Silesia (5.5%). The smallest proportion is in the Southwest and Southeast (both NUTS 2 regions at 3.4%).[517]

The above data suggests that figures tracked solely on the basis of Decree No 357/2013 do not provide a complete picture of the significance of built-up areas in the Czech Republic. The state should, therefore, move towards better monitoring of the development of settlement structures and built-up areas.

A major problem for the sustainable development of settlements are underutilised and neglected sites known as *brownfields*.[518] The re-use of abandoned or underused properties can help to reduce new construction in the open landscape. This issue is also addressed in RDS 21+ and the *National Brownfield Regeneration Strategy 2019–2024* (a joint strategy of the Ministry of Industry and Trade, CzechInvest, the Ministry of Regional Development, the Ministry of Health, and the Ministry of the Environment).

CzechInvest disposes its own database of business properties, including long-term unused ones, i.e. brownfields, and provides advisory services through regional offices. The *National Brownfield*

[512] Indicator 18.1.1.

[513] Self-processing based on data from the database of consent to the removal of agricultural land stock entered in the EOZPF IS in the “closed” status.

[514] More precisely, what is referred to in Czech records as *built-up area and courtyard*, see *Decree No 357/2013 (Cadastral Decree*).

[515] Indicator 18.1.2 in the version modified by the team of MoRD authors.

[516] EUROSTAT (2018) Land Use / *Cover Area Frame Survey. Technical reference document* C3. Available here.

[517] For data, see here, Southwest = Plzeň and South Bohemia Regions. Southeast = Vysočina and South Moravian Regions. The data for 2022 is still emerging.

[518] CENIA (2022) *Report on the Environment of the Czech Republic 2021*. Available here.

Database (NBD) records these properties/sites in order to provide an overview of the number of brownfields in the Czech Republic, offer them to potential investors, and provide an overview of direct and indirect support for their regeneration since April 2023, the new CzechInvest brownfield database lists over 4,300 sites designated for reclamation across the Czech Republic, covering an area of 13,200 hectares. The majority of brownfields listed in the database are in private ownership (60%), followed by public ownership (22%), with the least in combined ownership (11%). In terms of previous use, most brownfields were industrial (30%), agricultural (28%), or originally used for civic amenities (17%).[519]

The Ministry of Industry and Trade had a subsidy scheme for the regeneration of brownfields for business purposes until 2021, but this programme was replaced by support under the National Recovery Plan (NRP), which has been running since 2022. It is component 2.8, with a total allocation of CZK 3.3 billion, covering investment support for the regeneration of specific brownfields, brownfields owned by municipalities and regions for non-business use, and support for the regeneration of brownfields owned by municipalities and regions for business use.[520] The Ministry of Regional Development prepared a draft call for the regeneration of specific brownfields and brownfields for non-business use. The State Investment Support Fund announced two calls for support for non-business brownfields with a total allocation of CZK 1 billion. The subsidy and loan scheme takes into account the territorial dimension, with different levels of support depending on the type of area in RDS 21+.[521]

In terms of results, it is important to note that brownfield sites are gradually being regenerated in the Czech Republic, as demonstrated by the deactivation of 157 locations in the National Brownfield Database due to sale or successful regeneration, which are partly supported by subsidy schemes.[522]

18.2 Towns are friendly to all age and user groups

Historical monuments are another key element of the urban structure. If monuments are large, in a state of disrepair, or unused (e.g. chateaus or manor houses), they can be a significant burden, especially for smaller municipalities. However, in the Czech Republic, the situation has been improving in last years, thanks in part to contributions from subsidy schemes run by the Ministry of Culture and operational programmes, especially the IROP. Total spending on the rescue, protection, and preservation of cultural heritage (expressed in constant purchasing power dollars) increased between 2012 and 2021, although, compared to 2012, expenditure was lower from 2013 to 2018. A more significant increase was recorded between 2019 and 2021, with 2019 reaching 201 constant purchasing power dollars. Expenditure has increased both from the state and from regional and local government bodies. It should be noted that a significant part of these expenditures (32% in 2021) came from private sources.[523]

The pace of agricultural land-take has slowed, but it continues, primarily for residential construction, and most notably in the Central Bohemian Region. Built-up areas are also expanding, mainly in Prague, the South Moravian Region, and the Central Bohemian Region. The Czech Republic has several brownfield regeneration programmes. The most used programme is for non-business purposes, but several thousand brownfield sites are still waiting for revitalisation.

Creating sustainable communities and municipalities that will be open and friendly to all age groups is an important task. One of the main factors influencing the friendliness and accessibility

[519] BROWNFIELDS (2023) *National Brownfield Database.* Available here and indicator 18.1.3.

[520] NRP (2023) *Decarbonising transport and industry for a better environment*. Available here.

[521] Excerpt from the implementation of the activity "Brownfield revitalisation" described in MoRD (2022) *Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024.*

[522] CENIA (2022) *Report on the Environment of the Czech Republic 2021.* Available here.

[523] Indicator 11.4.1 under Agenda 2030.

of municipalities is the accessibility of barrier-free transport infrastructure, civic amenities, and public spaces.[524] Accessible environments in towns and municipalities concern people with disabilities, seniors, families with young children, people of short stature, and other individuals.[525] Naturally, barrier-free housing is also important for the quality of life.[526]

According to Czech Statistical Office statistics, some 13% of the population over the age of 15 has a disability.[527] The issue of disability, which can prevent some individuals from participating in social, cultural, or economic activities, is addressed by the *National Action Plan for the Promotion of Equal Opportunities for Persons with Disabilities 2021–2025*, which also includes measures to improve accessibility and availability. Under this plan, the Ministry of Regional Development announces a "Barrier-free residential buildings" call, which provides grant support for the removal of barriers at building entrances and for the construction of passenger lifts. In 2021, CZK 81.5 million was used for housing with newly created barrier-free access. The current call, announced in November 2022, supports 54 applications (mainly from homeowners' associations) with a recommended grant of over CZK 80 million.[528] Another key national document is the *Strategic Framework for Preparing for an Ageing Society 2020–2025*, for which no available evaluation exists yet.

The Ministry of Labour and Social Affairs manages the non-investment grant scheme "Family- and Senior-Friendly Community". The aim is to support measures and activities focused on families and seniors to improve the environment in which they live. It also aims to raise awareness and educate about the position of seniors in society and their needs based on equality principles, and to reduce their discrimination. The competition is held in five size categories based on population. In 2023, based on the results, 27 municipalities were supported, with grant amounts ranging in the hundreds of thousands of crowns per municipality.[529]

For quality of life in municipalities, the provision of public administration services and the friendliness of government offices are important. Therefore, for the past seven years, the Ministry of the Interior has been holding the *Friendly Office* competition. The most recent year (2022) involved 125 municipalities (or municipalities with extended powers and several Prague boroughs). Factors of friendliness evaluated in the competition include accessibility, the presence of space for parents with children, and extended opening hours. However, the number of participating municipalities has been steadily decreasing.[530]

Public administration does not provide representative data on the accessibility and barrier-free nature of transport infrastructure at a local (or at least regional) level. The Ministry of Transport provides data on the share of low-floor public transport vehicles in towns across the Czech Republic, showing that, since 2015, when 69% of vehicles were low-floor, this number increased to 87% in 2021, indicating a significant improvement.[531] On the other hand, in Prague, for example, a large number of tram services still operate that wheelchair users cannot board.[532] The situation with barrier-free transport is also well illustrated by the development of accessibility in

[524] See, for example, YEH, J. C. *et al.* (2016) Building Inclusion: Toward an Aging- and Disability-Friendly City. *American Journal of Public Health*, 106(11), pp. 1947–1949.

[525] Czech Chamber of Authorised Engineers and Technicians Active in Construction (2022) *Barrier-Free Use of Buildings – Basic Principles of Accessibility. Technical Tool TP 1.4.* Czech Chamber of Authorised Engineers and Technicians Active in Construction. Available here. See also here.

[526] European Commission (2021) *Union of Equality: Strategy for the Rights of Persons with Disabilities 2021–2030*. Available here.

[527] Czech Statistical Office (2019) *Sample Survey of Persons with Disabilities in 2018.* Available here.

[528] MoRD (2023) *Barrier-free residential buildings.* Available here.

[529] MoLSA (2022) *Family- and Senior-Friendly Community 2022*. Available here.

[530] MoI (2022) *Friendly Office, Type III Municipalities 2022*. Available here.

[531] Indicator 18.2.3.

[532] PID (2023) *Trams*. Available here.

the Prague metro, one of the key transport systems for daily mobility for Prague inhabitants and people commuting to Prague. Currently, 75% of stations in the Prague metro are barrier-free, but since the beginning of 2020, only one additional station has been made accessible. A quarter of metro stations, including several in the city centre, are still inaccessible to wheelchair users.[533]

In terms of the needs of wheelchair users, barrier-free locations in public spaces in the Czech Republic are mapped in the Vozejkmap database, which includes data from various institutions and wheelchair users themselves, who use it in their daily lives. Currently, over 14,000 locations are recorded in the database, but it is impossible to determine from the data how much the number of barrier-free locations has changed over the years.[534]

Travel by public transport fell during the COVID-19 pandemic. In 2019, a total of 361,000 vehicle kilometres were covered by public transport (trams, metro, trolleybuses, and buses), while in the COVID years of 2020–2021, this dropped by more than 20,000 vehicle kilometres.[535] This decline likely worsened the accessibility of public transport for people with disabilities, young families with children, and seniors, who were dependent on, for example, the fewer transport lines that were deployed.

At national level, support exists for municipalities to increase the comfort of citizens, including people with disabilities, families with children, and seniors. This is done, for example, through grant schemes for barrier-free housing or by holding competitions for municipalities. Public transport accessibility in towns is increasing. However, there is still much room for improvement in making towns more user-friendly for all age and user groups.

18.3 Municipalities regularly plan development together with the public

Participation is an important element for involving inhabitants in decision-making about the development and future of the municipality in which they live. This may specifically involve the form of a plan (e.g. spatial/strategic), project, or measure (e.g. budgetary). Through various forms of participatory mechanisms and activities, a municipality can increase inhabitants' awareness, prevent potential conflicts, and support the success of short- and long-term solutions based on the actual needs of local inhabitants. By systematically involving inhabitants in public planning, a municipality strengthens democratic values, fosters partnerships between the municipality and citizens, builds trust in the authorities, and helps to co-create a sustainable public space where everyone lives. However, due to administrative burdens, changes in political leadership, a lack of human resources or experts, or time constraints, a municipality may abandon already established participatory mechanisms or not attempt them at all.

Compared to Western European countries, there is generally less tradition of public participation in planning and decision-making processes in post-communist countries such as the Czech Republic.[536] The Czech Republic does not yet have a unified definition of citizen participation, nor there is any system of coordination or centrally provided support for the entire public administration.[537]

Nevertheless, municipalities in the Czech Republic have been using a range of participatory tools for several years. It must be acknowledged, however, that the number of tools that serve public participation at municipal level – whether they are one-purpose tools or have participation as just one component among many – does not reflect a desire to provide municipalities with a menu of

[533] PID (2023) *Accessible travel in the metro.* Available here. The archived version of this website, available here, was used for the early 2020 figure.

[534] Indicator 18.2.1;

[535] Indicator 18.2.2.

[536] PÁNEK, J. *ET AL.* (2021) *What is the current state of geoparticipation in Czech municipalities*? *GeoScape*, 15(1), pp. 90–103.

[537] OECD (2023) *Public Governance Reviews: Czech Republic.*

tools that complement and combine well. Instead, this has historically arisen from the separate, domain-specific efforts of individual ministries (the Ministry of the Interior, Ministry of the Environment, and Ministry of Regional Development) and independent initiatives. As a result, friction areas sometimes arise, and some approaches are more competitive than synergistic.

The Ministry of the Interior helps to promote citizen participation across public administration bodies, with a special focus on municipalities with extended powers, for example, through the "Friendly Office" competition. The results from the 2022 competition, which involved 125 municipalities with extended powers and several Prague boroughs, have revealed the information outlined below. 62% of participants allocate part of their budget to participatory budgeting, and 70% hold at least two regular planning meetings with citizens each year. 50% of municipalities enable youth participation in decision-making, and 62% organise educational events for students from local schools. The competition results are published in a clear brochure, including examples of best practice from selected local government bodies.[538] The ministry is also working on a brochure about possible forms of citizen participation in public affairs.[539]

Methodological support for participatory planning is provided by the Ministry of Regional Development through the *ObcePRO* application, which enables municipalities or their associations to more easily process development programmes, and offers tools for strategic management and for evaluating the implementation of development programmes. More than 1,800 municipalities from across the Czech Republic are already registered in the application, with 90% of them having fewer than 3,000 inhabitants.[540] As part of the project *Strategic Management and Planning Support in Public Administration*, the methodological tool *Communication, Participation, and Marketing of Strategies and Projects* was created, with a significant part focusing on involving the public in decision-making at municipal and regional levels.[541] Participation issues are also included in the *STRATeduka* course, which focuses on developing competencies in strategic planning and management. One of the pillars of the CLLD tool is local community participation. New community-led local development strategies for the 2021–2027 period must describe how the community is involved in the strategy development process.[542] Local inhabitants' participation is also expected in Ministry of Regional Development calls under the sub-programme *Support for Rural Renewal and Development*.[543]

Participatory budgeting is a common tool for increasing public involvement in decision-making in municipalities. According to available data, as of 2020, 124 municipalities had tried participatory budgeting, but the actual number is likely much higher.[544]

Participatory budgeting is a modern trend in the democratic development of municipalities, which is one of the ways to actively involve citizens in the management of public affairs. While expenditure on participatory projects forms only a small part of the overall municipal budget, typically amounting to a fraction of a percentage, the impact can be many times greater, especially with regard to the opportunity for citizens to engage in the planning and development of the municipality. In 2022, participatory budgeting was implemented in 88 municipalities in the Czech Republic, marking a significant increase from 2014, when this approach was in its infancy and

[538] MoI (2022) *Friendly Office 2022: Best Practice Examples of Municipalities with Extended Powers.*

[539] MoI presentation from the sixth meeting of the *Working Group for the Implementation of the Client-oriented Public Administration.*

[540] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

[541] MoRD (2023) *Communication, Participation, and Marketing of Strategies and Projects.* Available here.

[542] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

[543] MoRD (2023) *Support for Rural Renewal and Development.* Available here.

[544] PARTICIPATORY BUDGETING (2023) Are you implementing a participatory budget and need assistance? Available here.

was only adopted by one municipality – the borough of Prague 7. Currently, participatory budgeting is mainly being implemented in municipalities of the third type (municipalities with extended powers), which leaves plenty of space for other municipalities to engage their inhabitants in dialogue and, at the same time, teach local government bodies to listen to the needs of their citizens.[545]

Various forms of participation have been systematically compiled by the *Prague Institute of Planning and Development* in the form of a participation manual.[546] This manual systematically helps other municipalities with their participatory mechanisms by providing training and by linking up participation coordinators from various towns in the Czech Republic and Slovakia. Prague has one of the best infrastructures for participation in the Czech Republic, including the *Participatory Planning Coordinators* programme, which aims to establish a participation standard in all the city's boroughs. For public consultations on the *Metropolitan Plan*, new and highly successful forms of participation were used, such as "mobile containers", which aimed to present specific proposals to the public in their place of residence. Local Agenda 21 (LA 21) also oversees the education of towns in the field of civic participation, where implementers of participatory activities begin at the lowest category D. However, the number of Local Agenda implementers has been gradually declining since 2018.[547] Another organisation focused on providing education on participation for towns and municipalities is National *Healthy Cities Network.*[548]

The most comprehensive evaluation of whether municipalities are planning development together with the public is an analysis of the use of participatory tools at municipal level across the Czech Republic, conducted in 2019 by Palacký University in Olomouc. Based on an analysis of municipal websites, it tracked whether a municipality uses external participatory applications (e.g. pocitovemapy.cz), organises participatory budgeting, holds planning meetings or round tables with citizens, and whether it conducts surveys (this is one of the three components of the so-called *geo-participation index*, which further examines transparency and communication within the municipality). The results showed that the potential for public participation increases with the significance of municipalities in the settlement hierarchy – regional and statutory cities were rated the highest, followed by municipalities with extended powers, smaller towns, and townships. The potential for participation also increases with the growing size of the municipality. However, the two basic trends described above are not universal, and municipalities vary within the given categories; for example, in small communities, participation may take the form of informal meetings that are not organised through web interfaces. The analysis results further show that, in general (at local level), there is almost no correlation between the geo-participation index and the social exclusion index mentioned in Objective 17.4. Paradoxically, however, the analysis revealed a specific group of eight municipalities with high social exclusion indices and simultaneously high geo-participation index all of which are located in either the Moravian-Silesian or Ústí nad Labem Regions.[549]

Civic participation, particularly innovative forms of public involvement in urban planning, is still a relatively new discipline in the Czech Republic; however, many municipalities have already adopted certain forms. There is also an increasing emphasis on involving schools and young people in local affairs. The Czech Republic has a relatively strong infrastructure for educational activities related to participation, with municipalities exchanging experiences both at national level and among themselves. The implementation of

[545] Data on participatory budgeting was provided by Agora CE.o.p.s

[546] Prague Institute of Planning and Development (2016) *Participation Manual: How to Involve the Public in Urban Planning.* Available here.

[547] Indicator 18.3.1.

[548] HCCZ (2023) *HCCZ activities*. Available here.

[549] PÁNEK, J. *ET AL.* (2021) *What is the current state of geoparticipation in Czech municipalities? GeoScape*, 15(1), pp. 90–103.

participation in municipalities could be limited by insufficient funds, administrative complexity, understaffing, and other factors.

19 Towns and municipalities have reduced greenhouse gas emissions and adapted to the negative impacts of climate change.

Climate change generates a number of adverse effects for society and nature. The task of adaptation measures at the local level is not only to prepare communities and municipalities for the impacts of climate change, but also to prevent these impacts by reducing greenhouse gas emissions, using alternative energy sources, supporting sustainable mobility, and so on. Adaptation to climate change at local level requires both political and administrative cooperation. An important role play local political elites' attitudes and the approaches taken by public administration bodies, including spatial planning, environmental protection, and municipal financing. Adaptation strategies for towns and communities are often incorporated into broader strategic documents. In these documents, towns respond with specific measures to climate change (flood protection measures, drinking water management, temperature reduction in the town, etc.).

Climate change and environmental protection are challenges growing in importance year by year. Municipalities have the potential to adapt to climate change and contribute to local reductions in greenhouse gas emissions with the support of subsidy schemes, developed strategies, and methodological and professional assistance in many forms.

In summary, it can be stated that partial progress has been made at the local level, but it is not straightforward; it is uneven across places and time. The complexity of solutions at local level encompasses a wide range of measures, the effectiveness of which is uneven due to irregular implementation.

The number of municipalities with an integrated or development strategy addressing climate change and effectively targeted subsidy schemes is increasing. However, the proportion of green space in most regional capitals has decreased. There is still insufficient progress in increasing the share of buildings adapted to climate fluctuations; only a slow increase in the share of newly completed buildings in energy class A has been recorded. Data is lacking to evaluate the goal of renovating existing buildings at least to energy class C. Strategic and financial support in this area is also available. Cycle paths and routes suitable for cyclists have been extended. Overall, however, cycling infrastructure in the Czech Republic is in poor condition. One negative trend is the fact that the Czech Republic is moving away from the goal of reducing the amount of municipal waste sent to landfills, which has actually increased in recent years. Additionally, the landfill ban has been postponed until 2030. In general, it can be stated that simply sorting and recycling is not enough; the goal is to minimise the creation of municipal waste – here, municipalities still have a great challenge for improvement. Data is still lacking in areas such as the elimination of heat islands, making it impossible to evaluate progress. However, there are many national activities aimed at reducing heat stress in towns.

This strategic goal is being met partially and progressively; in some areas, the Czech Republic is moving further away from the target state, and for other areas, relevant data is still missing.

19.1 Level III municipalities are combating the impacts of climate change and are capable of adapting

The specific goal is focused on the ability of municipalities to prevent climate change and manage its impacts. An increased emphasis is placed primarily on larger towns and administrative regions at micro-regional level, i.e. municipalities with extended powers. Progress made towards this goal is primarily evaluated at the level of assumptions and preparedness to respond to climate change. One problem in fulfilling this specific goal is the pressure to resolve the issue and coordinate public administration at the level of municipalities with extended powers, but the responsibility of a type-three municipality for its managed area is legislatively insufficiently formulated.

This goal seeks to increase the share of type-three municipalities that have an integrated or development strategy addressing climate change. The goal is to observe the growing number

of administrative districts of municipalities with extended powers that make headway in this specific goal using their own spatial and strategic planning documents.

At national level, this specific goal is outlined in the *National Action Plan for Adaptation to Climate Change (2021–2025)*.[550] Measures in this area should focus on introducing responsible governance tools to reduce the ecological footprint of settlements resulting from growing demands for built-up areas, transport, food, water, heating, services, etc. According to the *Evaluation of the National Action Plan for Adaptation to Climate Change from 2020*, the specific goals relevant to fulfilling the Czech Republic's strategic framework goal 19.1 are being partially fulfilled.[551]

The goal is further covered in the strategic document *Rural Development Concept* (Objective 3.1) and is pursued through two-year action plans under the *Regional Development Strategy of the Czech Republic 21+.* According to the evaluation of the action plans for 2021–2022,[552] the objective "*Use of spatial planning tools for effective landscape management in municipalities"* is being fulfilled. In August 2023, applications will start to be accepted under Measure 1.3.2 (Production of studies and plans) of the Operational Programme Environment. This measure supports three types of documents, with landscape planning studies being one of them. Furthermore, this activity is being carried out through IROP 2014–2020 call 45, supporting the creation and application of spatial planning documents – CLLD integrated projects, Specific Objective 4.1. The Ministry of Regional Development is also completing the update of the methodological guideline "Methodological Guideline for the Assignment of a Landscape Planning Study for an Administrative District of a Municipality with Extended Powers" and a new related document "Guide to the Process of the Assignment, Preparation and Implementation of Landscape Planning Studies" in cooperation with the Ministry of the Environment and the State Land Office.

The performance of activities falling under the goal *Development and support of green infrastructure systems and water management in towns* is dependent on European programmes in the new programming period *EU 2021+*. Calls under the NRP, IROP, and Operational Programme Environment supporting water management in municipalities, brownfield regeneration for business use, regeneration of residential areas, biodiversity, drought combat, green infrastructure, and the implementation of nature-based flood protection measures and measures focused on rainwater management have been announced. Further planned calls under the Operational Programme Environment will include the construction and expansion of warning and alert systems, the implementation of nature-based measures in landscapes and settlements, including flood protection, revitalisation of urban greenery, creation and restoration of water and vegetation landscape elements, and the use of rainwater or greywater in public buildings.

Local responses to climate change require proper coordination in the area. The national level provides methodological and financial support, while regions and municipal administrative districts (administrative districts of municipalities with extended powers) provide coordination support. Various tools can be used to achieve this specific goal. These include political-level tools (delegating state powers to urban planning authorities in municipalities with extended powers). Another level is the environmental level, led by nature and landscape protection authorities and non-governmental organisations. The final level is the economic level, which includes securing sufficient resources.

[550] MoEnv (2017) *National Action Plan for Adaptation to Climate Change.* MoEnv (2021) *National Action Plan for Adaptation to Climate Change, First Update for 2021–2025*

[551] CENIA, Charles University Environment Centre (2020) *, Evaluation of the National Action Plan for Adaptation to Climate Change.* Relevant specific objectives under the NAP CC: 10, 13, 14, 16.

[552] MoRD (2022) *Regional Development Strategy of the Czech Republic Action Plan 2023–2024*

Since 2015, the number of municipalities that have adopted and are implementing adaptation strategies or plans has increased to 36, doubling in the last reported year (2021).[553] Envirometer, including data for 2022, reports 54 municipalities (including strategies prepared for microregions).[554] The number of affected inhabitants living in these municipalities was more than 3 million in 2021.[555] However, these figures are based on data received from individual municipalities and may not include all strategies developed by municipalities.

Municipalities can voluntarily join the European initiative Covenant of Mayors for Climate and Energy, whose participants have committed to reducing greenhouse gas emissions by 2030 by at least an amount corresponding to their national targets (in the Czech Republic by 30% compared to 2005) and implementing adaptation measures to mitigate the risks and negative impacts of climate change in their territory. Each signatory prepares and implements a comprehensive sustainable energy and climate protection plan, which, although not a standard adaptation strategy, can be considered – due to its scope – a document addressing the adaptation of settlements to climate change. The number of municipalities involved in this initiative has been increasing sharply since 2021, and currently, over 200 Czech municipalities have joined.[556] The preparation of action plans is supported under the NEP.[557] See also goal 20.1.

For the evaluation of the goal, it is still not possible to use the *Strategy Database* information system, as it is not mandatory to upload strategies to the database. The search is facilitated by the added descriptor "air and climate protection", but currently, only 22 documents at local level are assigned to it. The assignment of the descriptor requires a detailed review of all documents, for which there is currently not enough staffing capacity.[558]

Municipalities' approach to planning is not very cohesive. For example, strategies do not address the entire area of the administrative districts of municipalities with extended powers, or only deal with selected climate change-related issues. In terms of spatial planning, level III municipalities will have the opportunity to receive subsidies under the Operational Programme Environment (planned call) for the creation of a landscape planning study for entire administrative districts of municipalities with extended powers. A landscape planning study contributes to the adaptation to climate change and partly to the fulfilment of the specific goal. However, the practical implementation of the measures proposed in the landscape planning study usually depends on other stakeholders and their cooperation (individual municipalities, landowners, the State Land Office – land re-parcelling).

In terms of climate change, the number of biogas plants is also monitored. These began to emerge in the Czech Republic after 2005; with the help of subsidy support, their number increased to 404 by 2014. Since then, their number has fluctuated around this figure, with the most recent data from 2021 reporting 400 biogas plants.[559]

At national level, the goal is being fulfilled and coordinated. However, one problem in fulfilling the specific goal is the pressure to resolve the issue and coordinate public administration at the level of municipalities with extended powers. The goal is partially fulfilled by commissioning landscape planning studies and via effectively targeted subsidy schemes. This progress is, however, dependent on the activities of lower levels of administration units than on the national one.

---

[553] Indicator 19.1.1

[554] ENVIROMETR (2021) *Number of municipalities that have adaptation plans.* Available here.

[555] Indicator 19.1.1

[556] European Commission (2023) Signatories | *Covenant of Mayors* – Europe (europa.eu). Available here.

[557] State Environmental Fund (2023) *New call to support municipalities in the Covenant of Mayors.* Available here.

[558] MoRD (2023) *Evaluation of the Implementation of the Second Implementation Plan for CR 2030.*

[559] Indicator 19.1.2

19.2 The number and intensity of urban heat islands are decreasing

Urban heat islands are areas in a town that are susceptible to overheating. They are areas that deviate from surrounding areas by more than 2 °C. Only data for Prague, Brno, Ostrava, and Plzeň is available (2017). In 2017, of the four towns monitored, Ostrava had the highest percentage (15%) of areas susceptible to overheating. Plzeň was second (11%), followed by Prague (6%), while Brno had a value of 2%.[560]

This specific goal focuses on reducing the number and size of heat islands. Currently, their number and intensity are generally increasing worldwide in relation to climate change. Urbanised areas heat up during hot days. Built-up areas limit air ventilation, and the high proportion of buildings combined with impermeable surfaces (e.g. concrete, asphalt) and a small share of vegetation causes rapid runoff of rainwater, a lack of water for evaporation, and low air humidity. This process is exacerbated by emissions from road traffic, industry, and waste heat. This negatively impacts the quality of life and threatens the health of individuals with reduced thermoregulation ability. There are numerous tools for reducing the number and intensity of heat islands. For example, it is possible to reduce the energy consumption of buildings and transport, promote better water management, and increase the proportion of greenery in towns.

Although it is desirable for the number and intensity of heat islands to decrease, uniform data for monitoring the urban environment and climate across the Czech Republic is not yet available. There are ad hoc studies working with various types of thermal data and temperature regimes in relation to the structure of the urban environment, such as those by university departments. One example could be the temperature emotion map of Olomouc[561] and Plzeň,[562] created by scientists from the Faculty of Science at Palacký University in Olomouc in cooperation with Olomouc City Hall.

State administration can influence the number, extent, and intensity of heat islands in the long term through legislation, methodology, subsidy schemes, and public awareness campaigns. In general, it can be said that the elimination of urban heat islands largely rests with the towns themselves and should be considered in the preparation of spatial planning documentation. This documentation should clearly define architectural requirements, including sufficient green space – horizontal (rooftop gardens, parks) and vertical (vertical gardens) – without the need for artificial irrigation and water surfaces, which will help prevent the formation of heat islands. Other activities include ad hoc projects that use modern technologies in research and can be an important analytical basis for city management to start addressing the issue.

At national level, this specific goal is addressed in the *National Action Plan for Adaptation to Climate Change*.[563] As part of the measure *Planning in risk prevention and urban heat island management*, the task in the previous action plan was partially fulfilled. That task involved the establishment of urban planning requirements for protection against urban heat islands and the proposal of a procedure (or tools) for addressing them under spatial planning and technical infrastructure layout conditions. It also required the examination of regulations for establishing requirements to preserve the proportion of unpaved surfaces or vegetation areas in the vicinity of buildings (both existing and new). Support was intended for the promotion and an information campaign aimed at urban planners, architects, and public administration representatives concerning the issue of urban heat islands, their impact on the population and the environment of settlements, and the possibilities of mitigating these impacts.[564] According to the 2020

[560] Indicator 19.2.1.

[561] EMOTIONAL MAPS (2023) *Temperature emotion map of Olomouc* (pocitovemapy.cz). Available here.

[562] EMOTIONAL MAPS (2023) *Temperature emotion map of Plzeň* (pocitovemapy.cz). Available here.

[563] MoEnv (2017) *National Action Plan for Adaptation to Climate Change.*

[564] CENIA, Charles University Environment Centre (2020) *, Evaluation of the National Action Plan for Adaptation to Climate Change (2020).*

evaluation, training was provided by the Ministry of Regional Development. There were still significant uncertainties regarding urban planning principles for protection against UHIs.[565]

Partial results were provided by the completed project "*Identification of Sites Threatened by Heat Stress – A Tool for Sustainable Urban Planning*".[566] For example, a map of local susceptibility to heat stress and a typology of sites with a high degree of exposure to heat stress were created. Under the *Urban Adaptation Challenges: Support for Sustainable Planning Using Integrated Vulnerability Analysis* project, the methodology *Adaptation to Climate Change: Assessing Urban Vulnerability to Temperature Extremes* was released in December 2021. This methodology focuses on the integrated modelling of climate change impacts on socio-ecological urban systems and provides a procedural guide for assessing urban vulnerability to temperature extremes. It thus offers a guide on how to proceed when analysing urban vulnerability, taking into account future climate change projections, land use/land cover (LULC) change scenarios, and socio-demographic urban developments.[567]

Additionally, ongoing support was directed towards implementing suitable modifications to the historical centres of municipalities in such a way that, while respecting Act No 20/1987 on state heritage conservation and heritage protection principles in preserving historic urban complexes, climate change is also taken into account. However, optimal indoor microclimates in healthcare facility buildings (especially operating theatres and patient rooms) during extreme heat events have not been introduced and should be continuously addressed in the following period as part of the updated action plan.[568] This plan also defines further tasks for the measure *Planning in Risk Prevention and Urban Heat Island Management*, as well as the related measure Protection and Support of Green Infrastructure Planning, Establishment, Renewal, and Maintenance, which provides diverse ecosystem services and mitigates the negative impacts of climate change. The updated NAP CC (2021) is planned for evaluation of the situation as of 2025.[569]

An emphasis on proper stormwater management can be found in the "*dry amendment*" (544/2020) to the *Water Act* (Sections 5 and 5a), which has been effective since 1st February 2021. The law lists potential methods of stormwater runoff reduction through accumulation and subsequent use, infiltration on-site, evaporation, or, where none of these methods is possible or sufficient, by retention and controlled drainage, or a combination of these approaches.[570] However, legislation in the field of stormwater management from transport areas remains insufficient. The increase in construction and paved surfaces negatively affects progress towards this goal. Other issues include poor urban greenery quality and shrinking green spaces (see Objective 19.4).

Adaptation measures for buildings in response to climate change are supported by several programmes. The *Operational Programme Environment* supports the construction of new public buildings that meet passive or plus-energy building standards. Under the "Reduction of Energy Consumption in Public Buildings and Infrastructure" call, improvements in indoor environmental quality, increased adaptability of public buildings to climate change, and the construction and reconstruction of renewable energy sources for public buildings are supported. As part of the "Energy Savings in Public Buildings" call under the *National Environmental Programme*, public building owners were supported in undertaking energy-efficient renovations using a combination

[565] CENIA, Charles University Environment Centre (2020) *, Evaluation of the National Action Plan for Adaptation to Climate Change (2020).*

[566] *Identification of Sites Threatened by heat Stress* – CEP – technology Agency, Starfos (tacr.cz)

[567] SUCHÁ, L., GELETIČ, J., VAŇO, S., BAŠTA, P., JANČOVIČ, M., DUCHKOVÁ, H. (2022) *CLIMATE CHANGE ADAPTATION: ASSESSING THE VULNERABILITY OF CITIES TO TEMPERATURE EXTREMES*

[568] CENIA, Charles University Environment Centre (2020) *Evaluation of the National Action Plan for Adaptation to Climate Change*.

[569] *National Action Plan for Adaptation to Climate Change, First Update for 2021–2025*

[570] *Act No 254/2001 on water and amending certain acts (Water Act)*

of building envelope insulation, including window replacement, controlled ventilation with heat recovery, external movable shading devices, and effective energy-reducing technologies or those ensuring efficient electricity and heat production, primarily using renewable energy sources.

New *Green Savings* is one of the most effective programmes in the Czech Republic focusing on energy savings in single- and multi-family buildings. The main objective of the programme is to increase energy efficiency and reduce greenhouse gas emissions and other pollutants in the air. The support focuses on building insulation, the construction or purchase of low-energy houses, ecological heating methods including the replacement of inadequate heating sources, the use of renewable energy sources, and adaptation and mitigation measures in response to ongoing climate change.

At the national level, many activities focus on eliminating heat stress in towns. This issue is comprehensively addressed in the national *Strategy for Adaptation to Climate Change in the Czech Republic.* However, it is quite complex to assess this goal comprehensively and analyse its development in all major towns, primarily due to the division of responsibility for solutions. Some measures under the *National Action Plan for Adaptation to Climate Change* will also be implemented in the medium term.

19.3 All newly completed buildings are classified in energy class A. Existing buildings are gradually being renovated to at least energy class C

The share of completed residential buildings in energy class A as a proportion of all completed residential buildings in the Czech Republic has increased slightly each year (2018: 6.1%, 2021: 8.8%). The share for non-residential buildings fluctuated between 2.4% (2018) and 2.2% (2021), with the highest share recorded in 2020 at 3.2%.

The share of completed residential buildings in class A relative to the total number of completed residential buildings varied year on year (2018–2021) in the Pardubice, Liberec, Ústí nad Labem, Karlovy Vary, Plzeň, and South Bohemian Regions, and Prague. In other regions, a slight increase was observed each year. The highest percentage in 2021 was recorded in Prague (14.1%), the Olomouc Region (12.8%), and the Moravian-Silesian Region (12.1%). The lowest share was recorded in the Liberec and Pardubice Regions between 2018 and 2021.

For non-residential buildings, differences were also noted between regions and years. Prague had the highest share of buildings in class A (with the highest in 2019 at 10.2%). In contrast, no buildings in class A were completed in some years in the Karlovy Vary, Plzeň, Pardubice, and Hradec Králové Regions during the analysed period (2018–2021). The lowest share was recorded in the Karlovy Vary Region (2019–2021: 0%).

Although the share of completed buildings in class A is not increasing rapidly, there has been a greater increase in the number of completed residential buildings in energy class B, at the expense of a declining share in class C. At regional level, we again observe differences, with some regions showing year-on-year growth, while in others, the share fluctuates. This does not apply to non-residential buildings, where the shares of classes B and C fluctuate not only regionally, but also at national level. [571]

This goal is reflected in the *National Energy and Climate Plan of the Czech Republic* (the "*Energy Efficiency*" dimension).[572] The Progress Report on National Energy Efficiency Targets in the Czech Republic[573] presents information on the final fulfilment of obligations in the 2014–2020 period under Directive 2012/27/EU on energy efficiency. According to that report, the Czech Republic met the obligation under Article 5, which requires member states to renovate 3% of the

[571] Indicator 19.3.1.

[572] MoIT (2019) *National Energy and Climate Plan of the Czech Republic*

[573] MoIT (2022) *Progress Report on National Energy Efficiency Targets in the Czech Republic*

energy-related floor area of buildings owned and occupied by central government institutions that do not meet the energy performance requirements.

As part of the "*Fit for 55*" package, in March 2023 the Council adopted a revision of the Energy Performance of Buildings Directive which sets stricter targets. Between 2024 and 2030, member states will need to gradually increase their energy savings and reduce building emissions to zero (new buildings must be zero-emission by 2030 and existing ones by 2050).

Objective 19.3 is further detailed in the document *Long-Term Renovation Strategy to Support Renovations of the National Fund for Residential and Other Buildings, Both Public and Private*. The Long-term Strategy is one of the tools for achieving a sustainable, competitive, safe, and decarbonised system for the building sector, which is still responsible for 40% of the EU's final energy consumption, despite existing policies and investments aimed at reducing building energy intensity. By creating a comprehensive framework, the aim is to increase the number of renovations, enhance their complexity, and thus contribute to the transformation of the building stock into a highly energy-efficient one. The optimal scenario is reflected in the *National Energy and Climate Plan of the Czech Republic*, where the required milestones are expressed in terms of energy consumption for heating. To support the implementation of the optimal scenario, the state will introduce legislative measures (transposing European requirements), fiscal measures (support programmes for both investment and soft measures), and other measures, especially in education and information.[574]

According to the Ministry of Industry and Trade, a certain period must pass after the approval of the strategy before it can be adequately evaluated, as building renovations occur over a longer timeframe. The European Commission, as part of the revision of the Energy Performance of Buildings Directive, has proposed that member states be required to develop a "*National Building Renovation Plan*", which would replace the long-term renovation strategy. The revision of the directive is currently being negotiated at EU level. After the negotiations are concluded, the Czech Republic will work on a new plan rather than evaluate the existing strategy.[575] However, according to an OECD assessment,[576] the energy savings modelled under the *Long-term Building Renovation Strategy* are not high enough, and the government should urgently expand investments in the modernisation of public buildings in terms of energy efficiency and further encourage private investments in energy savings efforts.

This objective is also covered in the *National Action Plan for Adaptation to Climate Change*. According to the assessment of the action plan effective until 2020, Specific Objective 15 "*Adaptation of Buildings to Climate Change*" was partially fulfilled. Most measures were implemented on an ongoing basis, but some methodological and legislative measures were not completed.[577] The action plan[578] included measures such as adapting building standards, codes, and certifications for new buildings and reconstructions in line with the impacts of climate change, and construction solutions aimed at reducing heat stress on the population. Measures under the updated action plan[579] include programmes focused on the public sector contributing to the adaptation of public buildings to climate change, support for programmes targeting the residential and commercial sectors to adapt buildings to climate change, and support for technologies using renewable energy sources for building cooling and air conditioning.

[574] MoIT (2020) *Long-Term Renovation Strategy to Support Renovations of the National Fund for Residential and Other Buildings, Both Public and Private*

[575] *Report of the Ministry of Industry and Trade of the Czech Republic relating to the evaluation of CR 2030* (2023)

[576] *OECD Economic Surveys*: Czech Republic (2023)

[577] MoEnv (2020) *Evaluation of the National Action Plan for Adaptation to Climate Change*

[578] MoEnv (2017) *National Action Plan for Adaptation to Climate Change*

[579] MoEnv (2021) *National Action Plan for Adaptation to Climate Change* – First Update for 2021–2025

Municipalities and the public sector are supported in their support of the objective by a range of financial incentives. Subsidised energy-saving measures for the public sector include the replacement of heating, cooling, and hot water systems, the insulation of building envelopes, the reuse of waste heat, the use of solar energy, the construction of green roofs, and the installation of rainwater harvesting systems. The *Operational Programme Environment* (2021–2027) focuses primarily on investment support to reduce the energy intensity of public buildings and infrastructure. Relevant components of the *National Recovery Plan* target reductions in the energy intensity of buildings owned by state entities and public bodies. For households, there are programmes such as New Green Savings and, since 2022, *New Green Savings Light*, which focus on supporting energy savings in single- and multi-family buildings. The PANEL programme provides owners of multi-family buildings with subsidised loans to reduce energy intensity, repair defects, and modernise common areas and flats. The *Operational Programme Environment* (2021–2027) offers subsidies to low-income households to replace outdated solid fuel boilers with heat pumps and biomass boilers, and to install domestic transfer stations. The EFEKT programme is geared towards achieving energy savings and reducing energy intensity across the private and public sectors, as well as in households. Specifically, it targets pre-project preparation, consultancy activities in the form of energy consulting and information centres, education, energy management, and energy concepts.[580]

Although there are a number of measures to support this specific objective, it is clear that these measures are insufficient or not ambitious enough to meet the indicators. The main barriers include insufficiently progressive requirements for new buildings, financial barriers, and non-financial barriers (administrative burdens, inadequate promotion, insufficient knowledge of specific measures and their benefits on the part of construction investors…).

These measures are partially implemented, but the objective of achieving 100% of newly completed buildings in energy class A is far from being met. Data is lacking for the evaluation of the target of gradual renovations of existing buildings to at least energy class C.

[580] MoIT (2023) *Overview of Subsidy Programmes to Promote Energy Efficiency*. Available here.

19.4 The proportion of public green spaces in urban agglomerations is

This specific objective focuses on increasing the share of public green spaces in urban agglomerations, i.e. nature-based green areas such as forests, meadows, wetlands, and pastures. In urban environments, this includes parks, avenues, and gardens. Urban greenery helps with stormwater management, reduces surface runoff, and improves the city's adaptation to heavy rainfall. It also positively influences inhabitants' health and quality of life in the city. There is potential to improve quality of life through green roofs, facades, allotments, grassy tram tracks, and partially paved parking areas with greenery.

Municipalities have extensive competencies in this area. However, state administration can significantly influence the extent of public green spaces in urban agglomerations in the long term, through legislative amendments, methodologies, awareness-raising, and economic tools such as subsidies.

The share of green space declined between 2017 and 2020 in most regional cities.[581] The largest decreases occurred in České Budějovice (by 8.9%) and Brno (by 8.5%), where low greenery was reduced significantly, but the area of trees increased. In other cities (Zlín, Olomouc, Hradec Králové, Prague, and Pardubice), where there was a reduction in green space, the area of trees decreased more than that of low greenery. Green space decreased by less than 1% in Plzeň, Jihlava, and Karlovy Vary. Green space increased only in Ústí nad Labem (by 3.5%), where the number of trees increased significantly (by 20.3%), while low greenery decreased (by 16.8%), and in Ostrava (by 1.6%) and Liberec (by 0.2%).[582] The decline in green space is related to continuous increases in the share of impermeable surfaces in the total area of the country and built-up areas and courtyards.[583]

The average share of green and water areas in the total area of urban territory was 76% in 2020. A significant portion of this share (78%) is low greenery (e.g. mowed lawns, wastelands), which has less potential to provide ecosystem functions or increase adaptive capacity compared to high greenery (trees).[584]

Between 2017 and 2020, the largest increase in water areas was recorded in Hradec Králové (by 1.4%) and Pardubice (by 1.2%). In contrast, water areas in České Budějovice decreased by 0.3%.[585] In 2020, the highest share of water areas and wetlands in the urban territories of monitored towns was identified in Hodonín (7.4%) and Cheb (6.7%). The lowest share of water areas was recorded in Kladno (0.01%) and Vsetín (0.02%).[586]

At national level, this specific objective is addressed in the *National Action Plan for Adaptation to Climate Change*.[587] According to the assessment of the action plan effective until 2020, the measure *Regulation of urban sprawl at the expense of open areas and green spaces in determining buildable areas* was carried out on an ongoing basis. Two other relevant measures were partially implemented: *Planning and development of green and water systems within urban development in relation to density and population – improvement of functional quality*, and *Establishment, development and care of the system of settlement greenery with a view to increasing the proportion, quality and functional efficiency of settlement greenery and water*

[581] Indicator 19.4.1 characterises the representation of green areas in settlements and water bodies in the administrative and urban area of cities of the Czech Republic with a population of over 20,000. However, the data is only given for 13 regional cities.

[582] Indicator 19.1.4

[583] Envirometr (2023) *Proportion of impervious surfaces.* Available here.

[584] CENIA (2022) *Report on the Environment of the Czech Republic in 2021*

[585] Indicator 19.4.1

[586] CENIA (2022) *Report on the Environment of the Czech Republic in 2021*

[587] MoEnv (2017) *National Action Plan for Adaptation to Climate Change.*

areas, including their interconnection. The preparation and updating of studies on settlement greenery systems was supported under the Operational Programme Environment 2014–2020.[588]

The NAP CC has been updated for the period 2021–2025.[589] The update covers a measure under Specific Objective 4, "*The resilience of human settlements, including their public and green infrastructure, is significantly strengthened with an emphasis on the protection of human health*". Methodical, economic, informational, scientific and research support should be continuously provided for the infiltration of rainfall from adjacent impermeable surfaces onto green areas and the transformation of impermeable areas into permeable ones. In 2017, *Standards for Public Infrastructure Availability* were published. In March 2023, the *Methodology for Defining Green Infrastructure in Urban Planning Documentation*, particularly in the land-use plan, was published. Continuous financial support is provided for the establishment, development, and sustainable care of the settlement greenery system in urban environments, including stormwater management, the application of nature-based approaches, the restoration of small water features in settlements, and the installation of green roofs on newly constructed and renovated public buildings. Financial support is provided through grant calls held under the NEP,[590] IROP,[591] Operational Programme Environment,[592] and NRP.[593]

This objective is also reflected in the *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050*, namely in Specific Objective 1.6.4, "*The quality of green infrastructure contributing to improving the microclimate in settlements is increasing*". Measures include supporting the planning and implementation of green infrastructure, strengthening the protection of greenery in urban areas, including protective zones, adjusting legislative and technical regulations, sharing good practices, especially at the level of local government authorities, public procurement in the care of greenery in line with responsible public procurement rules, and public engagement in the greening of non-public spaces.[594] According to the evaluation of the previous NEP (2012–2020), the corresponding Specific Objective 3.3.1, "*Improvement of the functional condition of greenery in settlements*", was partially fulfilled.[595]

The objective is further covered in the strategic document *Rural Development Concept* (Objective 3.1) and is pursued through two-year action plans under the *Regional Development Strategy of the Czech Republic 21+.* The Concept includes Specific Objective 2.3. *Attractive public spaces forming environments for social and community life*, which in this context is primarily pursued via the activity *Development and support of greenery systems and water management in towns*, as described above for Objective 19.1.

Barriers in this area include the funding available to individual municipalities, restrictions on the planting of greenery in existing public spaces, such as insufficient street profile width, a deterioration of hygiene parameters in surrounding buildings, potential conflicts with heritage

[588] MoEnv (2020) *Evaluation of the National Action Plan for Adaptation to Climate Change*

[589] MoEnv (2021) *National Action Plan for Adaptation to* Climate *Change* – First Update for 2021–2025

[590] NEP, Priority Area 5: *Environment in towns and municipalities* (green regeneration, Green Ribbon, Covenant of Mayors for Climate and Energy, tree planting)

[591] IROP area *Green Infrastructure of Towns and Municipalities* (Green Infrastructure)

[592] Operational Programme Environment, Specific Objective 1.3 *Adaptation to climate change* (Support for nature-friendly measures in the landscape and settlements, Establishment and restoration of public settlement greenery, Removal or elimination of negative functions of drainage facilities in the landscape, Implementation of measures to slow down runoff, for rainwater harvesting, retention and accumulation, green roofs, measures for the use of grey water and controlled groundwater recharge, Support for preventive measures against floods and drought).

[593] NRP 2.9 *Promoting biodiversity and combating drought*

[594] MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050*

[595] MoEnv (2021) *Evaluation of the State Environmental Policy of the Czech Republic 2012–2020*

protection interests, or resistance from the public. Other barriers include insufficient greenery maintenance quality, as well as climate change and associated drought episodes.

The share of green areas decreased between 2017 and 2020 in most regional towns. Measures under the relevant strategies at lower levels should aim to reverse this trend. Those strategies are either partially fulfilled or their evaluation was not possible at the time the Report was prepared.

19.5 The length of cycling paths and roads suitable for cyclists is growing significantly

Specific Objective 19.5 focuses on the construction of new infrastructure for cycling transport. This is just one means of active mobility. Active mobility includes, in addition to purely human-powered movement, other forms of movement using various types of mobility devices (vehicles), which are typically powered by electricity.

Significant potential for the development of cycling and pedestrian transport is associated with the distance to employment. Half of the population has a commute of less than 5 kilometres. This potential must be linked to the willingness to develop infrastructure for pedestrian and cycling transport. This infrastructure must also be pleasant and safe for users. The development of cycling and pedestrian transport ultimately leads to a decrease in transportation emissions and further improves the health of the population.

Cycling infrastructure in the Czech Republic is not in good condition, lags behind the standards of other European countries, and requires significant investment and a high degree of coordination not only within the region.[596] The Czech Republic is traversed by four international EuroVelo routes and a number of main cycling routes and greenways.[597] These routes often pass through the territories of several regions and sometimes extend into neighbouring countries, making them suitable for long-distance road cycling trips. Many recently built cycling paths with asphalt surfaces appear to be unnecessarily high quality, not meeting the requirements and unnecessarily burdening the natural environment.[598]

The number of kilometres of newly built cycling infrastructure under the IROP increased significantly from 4.9 km in 2017 to 81.2 km in 2021. The longest sections were built between 2017–2021 in the Central Bohemian (56.8 km), Olomouc (38 km), and Moravian-Silesian (27.8 km) Regions. The least was built in the Liberec (5.8 km) and Pardubice (7.2 km) Regions, and no sections were added in Prague during this period.[599] We currently have no data on the extent of newly built cycling paths funded outside this operational programme.

This objective is set out in five strategic documents. The *Urban and Active Mobility Concept*[600] follows on from the National Cycling Strategy, which expired in 2020. Specific tasks include ensuring cooperation between the Road and Motorway Directorate and the Railway Administration when constructing or reconstructing major transport infrastructure where there is a demand for cycling lanes to be built. Basic tenets should be drafted for an amendment to Act No 361/2000 *on road traffic*, as amended, reflecting the needs of cycling transport. A parliamentary bill aimed at increasing traffic safety, supporting cycling, and cultivating relationships between motorists and cyclists was withdrawn before the first reading.[601] The Concept further mandates a definition of the competencies of, and institutional arrangements for,

[596] MoRD (2021) *Tourism Development Strategy of the Czech Republic 2021–2030*

[597] GREENWAYS (2023) *EuroVelo*. Available here.

[598] MoRD (2021) *Tourism Development Strategy of the Czech Republic 2021–2030*

[599] Indicator 19.5.1

[600] MoT (2021) *Concept of Urban and Active Mobility for 2021–2030*

[601] *Act No 361/2000 on road traffic*

regional and national cycling transport coordinators, active mobility, and alternative mobility based on expert discussions.[602]

The objective is further covered in the strategic document *Rural Development Concept* (Objective 2.1) and the *Regional Development Strategy 2021+* (goals 1.2; 3.2), which are being implemented via two-year *Action Plans under the Regional Development Strategy of the Czech Republic 21+.* According to the evaluation of the action plan for 2021–2022,[603] activity is proceeding in this area, particularly with regard to grant funds for the support of sustainable transport in metropolitan areas and agglomerations, specifically for the development of cycling infrastructure provided by the IROP and SFTI. Thanks to the IROP, 268 km of cycling infrastructure was built in the Czech Republic from 2017 to 2021.

Objective 19.5 is also covered in the *State Environmental Policy 2030 and Outlook up to 2050*[604] and the *Tourism Development Strategy of the Czech Republic 2021–2030*. As part of measure 2.1, "*Support for the Construction and Modernisation of Infrastructure in the Czech Republic*", the development of cycle tourism will include support for the creation of a continuous network of cycling paths and routes without unnecessary interruptions, allowing for safe passage of cyclists. Within the framework of cycling route networks, support will be provided to link them to regional and international routes or integrate them with regional tourism products – e.g. cycling paths around water bodies, a network of cycling paths in tourist-exposed locations. The signposting of long-distance (*EuroVelo, Greenways*), regional, and local cycling routes will be supported and they will be promoted to relevant target groups. For cycling paths outside built-up areas, nature-friendly surfaces will also be preferred. A strategic tool for the development of tourist routes and cycling routes is the new GIS map portal. When routes are built on solid surfaces, support will also be provided for the construction of a pedestrian strip on a nature-friendly surface.[605]

The length of cycling paths and roads suitable for cyclists is growing. However, cycling infrastructure in the Czech Republic is not in good condition, lags behind the standards of other European countries, and requires significant investment and a high degree of coordination, not only within the region.

[602] MoT (2021) *Concept of Urban and Active Mobility for 2021–2030*

[603] MoRD (2022) *Regional Development Strategy of the Czech Republic Action Plan 2023–2024*

[604] MoEnv (2021) *State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050*

[605] MoRD (2021) *Tourism Development Strategy of the Czech Republic 2021–2030*

19.6 The number of zero-emission and low-emission vehicles is increasing significantly

This specific objective aims to increase the number of zero-emission and low-emission vehicles. These are primarily vehicles that use electricity, natural gas, hydrogen, and propane-butane for propulsion, as well as non-motorised vehicles. These vehicles produce fewer greenhouse gases and fewer health-risk substances than vehicles with internal combustion engines.

This objective is primarily described in the *National Action Plan for Clean Mobility* (NAP CM) (goals 2.4.1; 4.3.1).[606] It is also included in the strategic documents *National Recovery Plan* (Component 2.4), the Rural Development Concept (Objective 2.1), and the *State Environmental Policy 2030 and Outlook up to 2050* (goals 1.6; 2.1; 1.2).

An evaluation of the NAP CM indicates that measures of a financial, legislative, and non-legislative nature have been implemented. Calls were held under the OPEI, OPD, IROP, and NEP. In the legislative area, Act No 360/2022 *on the support of low-emission vehicles through public procurement and public passenger transport services* was approved. Furthermore, *Decree No 467/2022 laying down the average price of fuels for the purposes of travel expenses* was approved. An amendment to the *Income Tax Act* introduced a change in the taxation of free-of-charge low-emission vehicles provided by employers to employees for private use, reducing the tax rate from 1% to 0.5% of the purchase price. Currently, measures are in the legislative process that will also change the taxation of free-of-charge zero-emission vehicles provided by employers to employees for private use, setting it at 0.25% of the vehicle's purchase price. It is also proposed that the special depreciation for zero-emission vehicles be extended until 2028. Additionally, faster depreciation for charging stations has been made possible. *Government Regulation No 194/2022 on requirements for professional competence to perform activities on electrical devices and in electrical engineering* has been approved. An amendment to Decree No 23/2008 *on technical conditions for the fire protection of buildings* is currently underway.[607]

As part of the implementation of the NAP CM, the *Methodology for Preferential Parking of Locally Zero-Emission and Low-Emission Vehicles in Communities and Municipalities* was issued, and a document entitled "*Installation of Wallboxes for Homeowners' Associations*" was prepared. Additionally, the *Mobility Innovation Hub* and Technological Incubation projects have been implemented, along with a project on the skills of university graduates for the automotive sector (*Beta2 TA CR* programme).[608]

For the period 2021–2027, funding has been secured from the programmes outlined below. NRP 2021–2025 funds will support Prague public transport, charging stations in residential buildings, vehicles and charging stations for municipalities and regions, NGOs, and entrepreneurs. Public charging and hydrogen refuelling stations will be funded under the OPT 2021–2027. Public transport vehicles and infrastructure are covered by the IROP 2021–2027. The Modernisation Fund will provide a larger portion of funding for railways up to 2030. The NAP CM is currently being updated.[609]

As part of the optimisation of public charging infrastructure in the Czech Republic, a web application[610] has been made available, which takes traffic intensity into account, defines accessibility areas, suggests locations for new stations based on their performance parameters,

[606] MoIT, MoEnv, MoT (2019) *Update of the National Action Plan for Clean Mobility*

[607] MUŘICKÝ, E. (MAY 2023) *PRESENTATION ON THE FULFILMENT AND UPDATE OF THE NATIONAL ACTION PLAN FOR CLEAN MOBILITY*

[608] MUŘICKÝ, E. (MAY 2023) *PRESENTATION ON THE FULFILMENT AND UPDATE OF THE NATIONAL ACTION PLAN FOR CLEAN MOBILITY*

[609] MUŘICKÝ, E. (MAY 2023) *PRESENTATION ON THE FULFILMENT AND UPDATE OF THE NATIONAL ACTION PLAN FOR CLEAN MOBILITY*

[610] Transport Research Centre (2023) *Optimisation of public charging infrastructure in the Czech Republic*. Available here.

and updates source data quarterly.[611] A hydrogen map of the Czech Republic[612] has also been created to monitor activities in the hydrogen infrastructure sector related to transport. Currently, two public hydrogen refuelling stations are in operation, with another nine at various stages of rollout.

The number of electric vehicles increased from 6,329 (2018) to 19,666 (2021), with approximately half being electric-powered in combination with petrol or diesel.[613] The share of registered electric vehicles in the Czech Republic has been rising annually, but it is the second lowest in the EU after Slovakia. Between 2017 and 2022, the share was 0.91% for battery electric vehicles (BEVs) and 0.77% for plug-in hybrid electric vehicles (PHEVs). In 2023, the share increased to 2.37% for BEVs and 2.20% for PHEVs.[614] The number of fast-charging stations on the public road network increased from 463 to 1,841 between 2018 and 2021.[615] However, according to the Ministry of Industry and Trade there were 1,364 public charging stations in the Czech Republic in the Registration of public charging stations (31st December 2022).[616]

The number of cars running on natural gas (CNG/LNG) alone or in combination with petrol or diesel has seen only a slow increase. The number of CNG-powered vehicles rose from 16,552 (2018) to 20,717 (2021), and the number of LPG-powered vehicles increased from 103,838 (2018) to 108,611 (2021).[617] The number of CNG/LNG refuelling stations on the public road network rose from 173 to 224 during the same period.[618]

The number of newly registered hydrogen vehicles in the Central Vehicle Register between 2017 and 2021 ranged from 0 to 2, with 13 vehicles registered in 2022.[619] To date, two public hydrogen refuelling stations have been put into operation on the road network.[620]

The Czech Republic, however, has the third oldest fleet of passenger cars in the EU (15.6 years).[621]

In large towns, car and bike-sharing systems are being introduced. This measure falls under the responsibility of municipalities, which are trying to implement it through *Sustainable Urban Mobility Plans*. Electromobility and clean mobility are also key elements of *Smart Cities*.

The Czech Republic is developing low-emission and zero-emission transport. Strategic and financial support is in place.

19.7 The amount of municipal waste sent to landfills is decreasing

This specific objective focuses on municipal waste, specifically with the aim of reducing the amount of municipal waste sent to landfills.

The total amount of municipal waste produced increased in most regions between 2017 and 2020.[622] For the Czech Republic as a whole, there was a rise of 4.7% (242,000

[611] KADULA, L., (MAY 2023) *PRESENTATION: CURRENT STATUS OF CLEAN MOBILITY IN THE CZECH REPUBLIC AND THE EU*

[612] Transport Research Centre (2023) *Hydrogen map of the Czech Republic.* Available here.

[613] Indicator 19.6.1

[614] KADULA, L., (MAY 2023) *PRESENTATION: CURRENT STATUS OF CLEAN MOBILITY IN THE CZECH REPUBLIC AND THE EU*

[615] Indicator 19.6.2

[616] MoIT (2023) *Report on the Status of the Public Charging Station Register in the Czech Republic as at 31 December 2022*

[617] Indicator 19.6.3

[618] Indicator 19.6.4

[619] Indicator 19.6.5

[620] Transport Research Centre (2023) *Hydrogen map of the Czech Republic.* Available here.

[621] KADULA, L., (MAY 2023) *PRESENTATION: CURRENT STATUS OF CLEAN MOBILITY IN THE CZECH REPUBLIC AND THE EU*

[622] There is a difference here between data from Indicator 19.1.7 and data from ENVIROMETR (2022) *Municipal Waste Generation*. Available here. Total amount of municipal waste generated in 2020 as per 19.7.1: 5,418,774

tonnes).[623] In the same period, the total amount of municipal waste sent to landfills also increased by more or less the same amount (249,000 tonnes, or 10.6%).[624]

Although the share of municipal waste sent to landfills decreased significantly between 2009 and 2016, it did not continue to decrease between 2017 and 2021, with 45-48% of total waste continuing to be disposed of in landfills. Between 2019 and 2020, there was actually an increase of 1.9%, followed by a decrease of only 0.2% in the following year.[625] The required material recovery of municipal waste increased to 41% by 2019, but by 2021 it went down slightly to 37.5%. The energy recovery of municipal waste remained stable at around 12% between 2012 and 2021.[626] Therefore, the waste management situation in the Czech Republic is unsatisfactory, with landfill disposal still being the dominant method of waste removal. The objective of the Czech Republic is to significantly reduce the share of landfilling in total municipal waste production, while increasing material and energy recovery, in line with the waste management hierarchy and circular economy principles aimed at meeting circular economy goals.[627]

The new Waste Act (effective from 1 January 2021) prohibits the disposal of recoverable waste in landfills from 2030, instead of the originally proposed 2024. A higher fee for landfilling of recoverable waste should help to reduce the amount of landfilled waste. The fee was increased for the first time in a long while in 2021. The Waste Act establishes a gradual increase in the fee from CZK 500 to CZK 1,850 per tonne of waste between 2020 and 2030.[628]

The law sets the basic obligation for municipalities to ensure year-round collection points for the separate collection of biodegradable waste, at least of plant origin and edible oils and fats.[629] However, biodegradable waste still makes up a significant portion of mixed municipal waste. Analyses of the composition of mixed municipal waste from municipalities in 2020 show that biodegradable waste made up 24.8%,[630] and other surveys from 2019–2022 show an average of 28.7%.[631] Additionally, there is still no obligation for separate collection of animal kitchen waste. Voluntary sorting could be encouraged by the new (2022) methodological guide on the separate collection of plant-based and animal-based food and kitchen waste from households within the framework of biological waste management systems in municipal waste sorting systems.[632]

Municipalities were required to designate locations for the separate collection of municipal waste, including hazardous waste, paper, plastics, glass, and metals. From 2020, this obligation was extended to ensure year-round collection of biodegradable waste and edible oils and fats, and from 2025, textile collection will be added. The new Waste Act sets the objective for municipalities to increase the share of separately collected recyclable municipal waste from the total amount of municipal waste they produce to 70% per calendar year between 2025 and 2035.[633]

---

tonnes. Municipal waste generated in 2020 as per Envirometr: 5,729,900 tonnes. Envirometr also provides data for 2021: 2021: 5,904,400 tonnes. The Envirometr figures tally with data from the VISHOH database. This data also shows an increase in municipal waste production.

[623] Indicator 19.7.1

[624] Indicator 19.7.2

[625] *Statistical Yearbook of the Environment of the Czech Republic 2021*, Tab. 2.6.1.11B Selected methods of municipal waste management and their share in total municipal waste generation, 2018–2021

[626] ENVIROMETR (2022) *Share of each category of municipal waste management.* Available here

[627] MoEnv (2023*) Information from the Circular Economy Department relating to the evaluation of CR 2030.*

[628] *Act No 541/2020 on waste*

[629] *Act No 541/2020 on waste*

[630] EKO-KOM (2021) *Composition analysis of municipal mixed waste from municipalities in 2020.* Available here.

[631] Technology Agency, MoEnv (2022) *Results of the average composition of mixed municipal waste.* Available here.

[632] MoEnv (2023) *Methodological guidance for the separate segregation of food and kitchen waste*. Available here.

[633] *Act No 541/2020 on waste*

On 1st October 2022, the Act on the Reduction of the Impact of Selected Plastic Products on the Environment came into effect. Among other things, this law prescribes an increasing share of the separate collection of beverage bottles, targeting 77% by 2025 and 90% by 2029.[634]

In December 2021, the government approved the *Circular Czech Republic 2040 Strategic Framework*,[635] for which the first action plan was prepared and approved by the government in June 2023. The purpose of this document is to guide the path taken by the development of the circular economy in the Czech Republic up to 2040 and to enable the use of funds from EU funds and the *National Recovery Plan*. The framework formulates assumptions, strategic goals, and measures necessary to create a resilient circular economy. It defines 10 priority areas, including *Circular Cities* and *Infrastructure*. The Ministry of the Environment is preparing an amendment to the Packaging Act (Act No 477/2001) which should introduce a deposit system for selected single-use beverage containers – PET bottles and cans. The proposal is designed so that there is a role for all participants in the current system, and it should reflect and make headway with the current Waste Management Plan, the government's policy statement, and *Circular Czech Republic 2040*.[636]

The participation of the Czech population in waste sorting is increasing, with 75% in 2022. At the same time, the amount of collected separated waste is also growing. Success in this area is mainly attributed to awareness and the good availability of the sorting system. The distance to collection bins is getting shorter every year.[637] However, according to Eurostat data, material recovery of waste in the Czech Republic is 7% lower than the EU average.[638] The share of material recovery of municipal waste from its total production decreased from 39% to 38% between 2020 and 2021.[639] Recycling of packaging waste has a higher share, increasing from 68% to 71% between 2020 and 2022 for packaging placed on the market.[640,641,642] The highest recycling rate, 91%, was achieved for paper and cardboard packaging, followed by 85% for glass, and 63% for metal packaging. The recycling rate for plastic packaging increased to 46% (up from 43%).[643]

The recommended introduction of smart waste management systems in municipalities (e.g. the PAYT incentive principle, door-to-door systems, etc.)[644] is financially supported in the new period of the Operational Programme Environment as support for the transition to a circular economy that effectively uses resources.[645]

The amount of municipal waste produced has increased in recent years. Landfilling remains the most widespread method of waste disposal from total municipal waste, and in recent years it has fluctuated by fractions to single-digit percentage points up and down. Furthermore, the landfill ban has been postponed until 2030. Available data does not allow for an assessment of whether the increase in the landfill disposal fee for recoverable waste, introduced in 2021, has already been reflected in waste management practices.

---

[634] *Act No 243/2022 on the reduction of the impact of selected plastic products on the environment*

[635] MoEnv (2022) *Circular Czech Republic*

[636] MoEnv (2023) *Deposits.* Available here.

[637] SAMOSEBOU (2023) *Waste sorting results for 2022*. Available here.

[638] The figures are different from the VISOH data (note 26). EUROSTAT (2023) HERE reports that in 2021 the Czech Republic had 43% municipal waste material recovery, while the EU average was 50%. Recycling includes material recycling, composting and anaerobic digestion; and preparation for re-use.

[639] *Statistical Yearbook of the Environment of the Czech Republic 2021*, Tab. 2.6.1.11B Selected methods of municipal waste management and their share in total municipal waste generation, 2018–2021

[640] *Statistical Yearbook of the Environment of the Czech Republic 2021*

[641] Municipal Ecology (2022) *The per capita yield of sorted waste has increased.* Available here.

[642] SAMOSEBOU (2023) *Waste sorting results for 2022*. Available here.

[643] SAMOSEBOU (2023) *Waste sorting results for 2022*. Available here.

[644] *Second Implementation Plan for the Strategic Framework Czech Republic 2030* (for 2022–2025)

[645] Operational Programme Environment (2023) 1.5 Circular Economy – *Operational Programme Environment.* Available here.

20 Territorial public administration purposefully uses the local sustainable development tools

This strategic objective focuses on using tools for the sustainable development of municipalities. These primarily involve sustainable forms of development for towns, communities, regions, and microregions, aimed at achieving a satisfied and high-quality life for their inhabitants. It is essential for local governments bodies to receive support, particularly from the national administration level, to approach governance with sustainability in mind, support in the form of methodologies and educational and awareness-raising activities. A crucial aspect is ensuring sufficient institutional capacity and promoting tools for quality management. The effort remains to support the increase in Local Agenda 21 implementers, which is still the most developed systemic tool of public administration for fulfilling the principles of sustainable development.

While it is fair to say that state administration is trying to promote sustainable development tools, only a few of them can be considered systematic methodological support. Activities to popularise sustainable development tools are being developed (e.g. regular conferences, information brochures, and methodologies). However, the application of these tools in practice still encounters insufficient institutional capacity for the implementation of the sustainable development agenda within local government.

Local Agenda 21 provides comprehensive support and monitoring, introducing sustainable development principles into practice, taking into account the specifics of a given territory. Unfortunately, it faces obstacles preventing a significant increase in the number of implementers, even though the quality of its implementation is rising. This theme requires more systematic consideration of the overall approach to sustainable development at the local level and its support from national administration.

20.1 The central government methodically supports and develops tools for sustainable development in municipalities

Tools for sustainable development at local level are taken to mean those based on the principles of sustainable development, covering one or more topics relevant to the SDGs. These tools are voluntary at the municipal level and applicable at all levels, thus being implemented in small communities, towns, microregions, and regions. This requires support from national administration, particularly in the areas of methodologies, education, and awareness-raising.

A variety of tools exists, though they are usually developed separately with a specific purpose in mind, often with permanent or temporary support from a particular ministry. In practice, this sometimes creates friction points among them, potentially leading to “responsibility overload” on municipalities. Some tools are intended directly for municipalities and are methodologically supported by state administration. Others are tools used by state administration for specific purposes, usually related to financial support. Some tools are cross-cutting, covering the full scope of sustainable development, while others only address specific topics.

Local Agenda 21: a comprehensive tool for sustainable development at local/regional level. Evaluations cover cross-cutting areas (public engagement and local partnership building, strategic planning and management, education and awareness) and 11 thematic areas of sustainable development with expert assessments and recommendations. In 2021, *Local Agenda 21* was implemented by 65 towns and communities (including nine municipalities with fewer than 2,000 inhabitants).[646]

Smart City: a comprehensive tool for the sustainable development of municipalities and regions. In 2021, the government approved the Smart Cities Concept, the main principle of which is the resilience of towns through SMART solutions for municipalities, towns, and regions. It is divided into three pillars: people and communities (resilience of municipalities and regions), local

[646] Indicator 20.3.1.

economy (competitiveness of towns and regions), and living environment (green municipalities and regions). The first phase in the implementation of its action plan is currently underway. A report on the implementation of the concept is to be completed by the end of 2023.

Integrated ESIF instruments (CLLD, ITIs, integrated territorial development plans):[647] sustainable development is a horizontal principle of ESIF supporting the creation of integrated and sustainable urban strategies. As of 2021, 180 CLLD strategies and 13 ITI/integrated territorial development plan strategies have been implemented.[648]

Covenant of Mayors for Climate and Energy: a system uniting local government bodies, primarily focused on climate and energy. This initiative is part of the EU energy union priorities to reduce emissions, mitigate energy consumption, and invest in renewable energy sources and energy efficiency. A new call with a budget of CZK 15 million was announced at the beginning of 2023. This focused on preparing Action Plans for Sustainable Energy and Climate and other activities.[649] By June 2023, a total of 270 Czech municipalities had signed the Covenant, with the vast majority joining in the last three years.[650]

Rural Development Programme: a national programme focused on supporting rural municipalities and microregions in the revitalisation of rural areas. Projects mainly focus on agricultural and forestry innovations, rural competitiveness, the organisation of the food chain, good living conditions, and the transition to a low-carbon economy with regard to climate, ecosystems, and social development in rural areas.[651]

CAF 2020 – Common Assessment Framework: a comprehensive system for managing and improving quality in public administration, encompassing both strategic and process management and leading to the partial fulfilment of sustainable development principles and goals. It includes a set of criteria allowing for self-assessment of the organisation.[652]

CSR – Corporate Social Responsibility: a voluntary commitment; it includes activities that an organisation undertakes beyond its legal obligations, whether in relation to its employees or society and the environment. Municipalities can apply CSR principles in various ways and can be inspired by relevant methodologies.[653] The purpose of CSR is to contribute to the sustainable development of society as a whole.

The Ministry of Regional Development continues to provide methodological support for the sustainable development of municipalities, focusing on the development of competencies, particularly in small rural communities. This is facilitated through the web application *ObcePRO*, where municipalities process their development programmes. Methodological handbooks for municipalities (including those issued published as part of the "*Ministry of Regional Development for Municipalities*" series, such as Recommendations for Municipalities on Visual Identity, Recommendations for Municipalities on Archaeological Cultural Heritage Care, etc.) and so-called "*inventions for municipalities*" are also continuously published on the application's website. These include practical outputs from research projects, best practice examples from municipalities, and various tips and tools for effective municipal management. At the same time,

[647] MoRD (2023) *Implementation of integrated territorial development plans from the 2014–2020 programming period to continue for at least another two years.* Source: *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

[648] Indicator 18.3.2.

[649] State Environmental Fund (2023) *New call to support municipalities in the Covenant of Mayors.* Available here.

[650] European Commission (2023) *Signatories*. Available here.

[651] State Agricultural Intervention Fund (2023) *Quoted from a description of the programme on the Fund's website*. Available here.

[652] MoI (2023) *Quality public administration.* Available here.

[653] National Quality Support Centre (2016) *CSR Guide for Public Administration: How to Act Responsibly in Society.* Available here;

seminars are being prepared for municipalities, associations of municipalities, and local action groups (LAGs). Additionally, thematic meetings of the Rural Development Working Group are organised, and research projects are initiated and addressed, leading to improvements/expansions of municipal competencies, or those of other territorial development stakeholders in the field of sustainable territorial development, its planning, and management.[654]

The Ministry of the Interior supports quality management at local government entities. In 2021, over twenty public service offices received consultations and advice on the implementation and development of quality management systems according to the Methodological Guideline for Quality Management in Public Service Offices.[655] At the same time, in 2020–21, 19 municipalities implemented and completed quality management projects or participated in completed projects within associations of municipalities (voluntary associations of municipalities).[656] The Ministry of the Interior also focuses on raising awareness of environmental safety through the creation of informational materials explaining the importance of responsible and green public procurement.

In 2021, the information web portal dedicated to responsible public procurement was improved as part of a project implemented by the Ministry of Labour and Social Affairs (MoLSA).[657] That project resulted in a series of methodologies and publications focused on responsible procurement, the use of public contracts as a tool to support local communities, the green economy, responsible procurement checklists, the organisation of sustainable events, seminars, and conferences, etc.[658] In the autumn of 2020, the Institute of Responsible Public Procurement was established, providing a unique educational platform for public procurement specialists. As of 31 December 2023, the institute had 1,568 registered participants, who took part in various seminars on responsible procurement.

Tools for the sustainable development of municipalities are supported by state administration. Among these tools, LA21 stands out for its systematic methodological support, and a new Smart Cities Concept is being prepared. There is support for rural municipalities in achieving sustainable development.

20.2 Territorial public administration has sufficient institutional capacity to pursue the sustainable development agenda

No systematically collected data is available for an assessment of the objective. This is partly due to the fact that there are many tools, each with different focuses and purposes. Evaluation is, at best, indirect. For example, due to a lack of human resources for coordinating spatial planning, it is likely that there is insufficient capacity to implement any more comprehensive approaches to sustainable development. Similarly, the fact that there are very few Local Agenda 21 implementers in higher categories suggests the same.

There is insufficient data to assess institutional capacity for the implementation of sustainable development.

20.3 The number and quality of Local Agenda 21

This specific objective focuses on *Local Agenda 21* implementers, specifically on their increasing number and quality. Achieving this objective requires cooperation between the state and the region. The state has certain political and financial tools within the framework of sustainable development areas and provides methodological support. However, at the local level, LA21 is a voluntary tool.

[654] MoRD (2023) *Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment.*

[655] MoI (2021) *Monitoring of the implementation of the Action Plan 2021–2023. Implementation of the Client-Oriented Public Administration 2030 concept as at 31 December 2021.*

[656] Indicator 20.2.1.

[657] SOVZ (2023) *Responsible Procurement.* Available here.

[658] MoI (2021) *Monitoring of the implementation of the Action Plan 2021–2023. Implementation of the Client-Oriented Public Administration 2030 concept as at 31 December 2021.*

LA21 is a programme for the development of a municipality or region, which, considering the specifics of the territory, implements the principles of sustainable development in practice. The Ministry of the Environment is the managing body at national level, and the advisory body is the Local Agenda 21 Working Group (LA21 WG).[659]

Each year, the quality and results of individual LA21 implementers – towns, municipalities, small municipalities, boroughs, regions, microregions, and LAGs – are transparently assessed. As a result, methodologies have been different to accommodate the various types of municipalities, which is a positive step. There are currently methodologies in place for assessing the sustainability of towns, small communities, boroughs, and LAGs, as well as new methodology for regions. Given the new global and European challenges, as well as feedback from local governments, the methodologies need to be updated.

For individual categories of municipalities or types of municipalities, data for the years 2006–2022 is available. This indicates that the majority of municipalities are interested in less demanding categories (C and D).[660] Yearly fluctuations are caused, among other things, by the fluctuating availability of financial support from the state and political changes in municipal leadership.

Conceptually, LA21 is embedded in CR 2030, with measures outlined in its implementation plan. It targets, for example, education on sustainable development, raising awareness about LA21, ensuring information exchanges between partners and LA21 implementers, expert evaluation in various areas of sustainable development, and more effective interdepartmental cooperation. However, cooperation is insufficient. The achievement of the objective is also hindered by a lack of skilled workers in the field of sustainable development and low interest in the tool among potential implementers.

Since the end of the 2014–2020 programming period, during which it was possible to fund and subsequently assess the qualitative progress of municipalities within LA21 under the OP Employment, there have been no subsidy schemes that would support LA21 in a similar way.

The envisaged state-guaranteed free education system for sustainable development for all target groups has not been established.[661] Only certain activities have emerged. The proposed RDS 21+ sustainable development centres were not included in the final version of the strategy. Their aim was to support education, awareness/advocacy, engagement, and the dissemination of best practices from the regional level. This would have led to the vertical integration of levels. The Ministry of the Environment has created and uses a free education system for sustainable development for LA21 implementers and experts in sustainable development evaluation as part of its training of LA21 coordinators (basic in-person and online training, e-learning, training on sustainability audits, and individual training on request for politicians and public servants).

Another barrier to achieving the objective is the administrative overload of local government bodies, which lack the capacity to implement voluntary tools. LA21 is often viewed as difficult to understand and administratively demanding, and some misconceptions and myths are actively spread. Moreover, the long-term concept of LA21 may not align with short-term electoral cycles or low interest in voluntary commitments. The time horizon, which exceeds one electoral period, the systemic approach, and the comprehensiveness are welcomed by some local politicians, but for many, it makes the agenda less attractive, especially when specific financial support is not available.[662]

[659] LA21 (2023) *Official website of the Local Agenda 21 Information System.* Available here.

[660] Indicator 20.3.1.

[661] MoI (2019) *Client-Oriented Public Administration 2030*, Measure 3.3.1.

[662] MoEnv (2023) *Information from the Ministry of the Environment relating to the Evaluation of CR 2030.*

The quality of LA21 implementers is slowly increasing. Insufficient promotion and communication not only of LA21, but sustainable development in general, particularly from ministries, means that the number of implementers is not increasing. One problem is the unclear definition of sustainable development and Local Agenda 21 and its context by different stakeholders (there is no clear context or comprehensive view of the situation). A fundamental problem is the lack of respect for a coordinated approach at national level.

5. Global Development

The Czech Republic acknowledges its global responsibility and adapts both its foreign policy and domestic policy to this responsibility when these policies have impacts beyond the country's borders. Key commitments include pursuing the 2030 Agenda and the Sustainable Development Goals, embracing specific commitments to development financing, climate protection, and policy coherence for (sustainable) development.

The Czech Republic actively supports the implementation of the 2030 Agenda and related international agreements at the international level. It has clearly demonstrated this particularly during its presidency of The Council of the European Union in 2022. As a responsible and solidarity-minded member of the international community, it responded to Russia's aggression against Ukraine and contributed to aid for third countries in their post-COVID-19 recovery. The Czech Republic has formally integrated the Sustainable Development Goals (SDGs) and specific commitments in various areas into domestic policies, including foreign development cooperation. However, in financing, it lags behind in terms of the practical implementation of these commitments. There is room for improvement in promoting the principles of policy coherence for development and evaluating the risks of the negative impacts of domestic policies abroad. The Czech Republic regularly reports on its progress in fulfilling the SDGs at the national level. In 2021, it participated for the second time in the international Voluntary National Review, which takes place under the auspices of the United Nations High-Level Political Forum on Sustainable Development.

21 The Czech Republic actively helps to shape an environment that supports sustainable development at the global and European Union levels, with a focus on national priorities.

The Czech Republic is a responsible member of the international community. To maintain this status, it must primarily adhere to its commitments in the area of sustainable development, including regular reporting. For greater democratic legitimacy, it should also provide long-term support to solutions to addressing the global sustainable development agenda within international organisations, particularly the United Nations.

On the international stage, the Czech Republic approaches sustainable development proactively and supports the global implementation of the 2030 Agenda through its foreign and development policies. Within the European Union, it has clearly demonstrated its support for sustainable development, particularly during its presidency of The Council of the European Union in the second half of 2022. Key achievements include the approval of the climate aspects of the Fit for 55 package, tightening of rules for the emissions trading market, and the use and recycling of batteries, as well as the adoption of the new Global Biodiversity Framework and Council conclusions on disaster risk reduction in the EU's external relations. Furthermore, the presidency team prepared and member states approved a "reflection paper" on progress towards the SDGs at the EU level, which became the basis for the coordination and monitoring of sustainable development in other working groups. Despite these successes and the formal integration of international commitments into national policies, insufficient practical implementation of some commitments, particularly in the area of financing, remains a barrier to achieving strategic goals. The Czech Republic's strengths and weaknesses in pursuing the 2030 Agenda were reflected in the context of the Voluntary National Review presented at the UN High-Level Political Forum on Sustainable Development in 2021.

21.1 The Czech Republic advocates for the global implementation of international commitments in the field of sustainable development, their implementation at European Union level, and their reflection in the activities of international

The *UN 2030 Agenda* and the *Sustainable Development Goals* (SDGs) are key global commitments the Czech Republic adopted in 2015. A fundamental prerequisite for fulfilling the SDGs is their integration into both the internal and external policies of individual countries. The main implementation platforms for the *2030 Agenda* in the Czech Republic are the *Strategic Framework CR 2030* and the 2030 Agenda Implementation Plan, approved by the government in 2017 and 2018. As part of the 2023 update of *CR 2030*, these documents will be merged so that there is only one platform, avoiding potential duplication or overlap.

The global implementation of the 2030 Agenda, according to the latest reports, is stagnating due to the *multiple crises*, which threaten not only the achievement of the SDGs by 2030 but also the future of humanity itself. Challenges associated with climate change, biodiversity loss, domestic and international conflicts, and uneven post-pandemic recovery are hindering the eradication of poverty and hunger and progress in health, education, the environment, and other areas.[663] According to the latest UN Global Sustainable Development Report, there is stagnation or even regression in most SDGs, the number of people living in extreme poverty and hunger is increasing, and global inequality is also rising.[664] This negative development ultimately significantly affects the Czech Republic as well.

Although international comparisons show that the Czech Republic has been relatively successful in implementing SDGs, consistently ranking among the top 15 countries globally in the Sustainable Development Solutions Network report (in 2023, the Czech Republic ranked 8th out of 166 countries),[665] in the coming years, to overcome the above-mentioned crises and start a positive trend, it will be necessary to significantly increase efforts and resources, and prioritise sustainable development. In 2021, the Ministry of the Environment prepared a comprehensive national evaluation of SDG implementation. According to this evaluation, the Czech Republic is well on its way to fulfilling half the global goals, though in eight SDGs it has not been sufficiently active. The greatest gaps are found in gender equality.[666] The national SDG assessment was presented in 2021 as part of the *Voluntary National Review* (VNR) at the *UN High-Level Political Forum on Sustainable Development*.

The Czech Republic pursues many of its international commitments by engaging in international organisations. At EU level, the Czech Republic supports the objective of achieving carbon neutrality by 2050 and, with some reservations,[667] also welcomes other sustainable development initiatives, including the European Green Deal. The Czech Republic actively promotes the implementation of the 2030 Agenda, particularly within The Council of the EU and the 2030 Agenda Working Group.

The Czech Presidency of The Council of the EU in the second half of 2022 had a positive impact on achieving the SDG target and several other *CR 2030* goals. Key achievements include the approval of climate-related parts of the Fit for 55 package, the tightening of rules for the emissions trading market, the use and recycling of batteries, and the adoption of the new *Global Biodiversity Framework* and European *Council's conclusions on disaster risk reduction in the EU's external relations*. The Czech presidency also had a favourable impact on the global implementation of the 2030 Agenda through its advocacy of international trade priorities, leading to the approval of the Council's conclusions on trade and sustainability. As a responsible and confident member of the international community, the Czech Republic also demonstrated its commitment to security

[663] UN (2022) *The Sustainable Development Goals Report 2022*, available here.

[664] UN (2023) *Global Sustainable Development Report 2023*, available here.

[665] *Sustainable Development Report*, available here. Sachs, J.D., Lafortune, G., Fuller, G., Drumm, E. (2023) *Implementing the SDG Stimulus. Sustainable Development Report 2023. Paris: SDSN, Dublin: Dublin University Press,* available here.

[666] MoEnv (2021) *Report on the Implementation of Agenda 2030 for Sustainable Development in the Czech Republic.* Available here.

[667] *Statement of the Czech Republic on the Economic Recovery Plan in Response to the COVID-19 Pandemic and the European Green Deal.*

and international cooperation, particularly through its support for Ukraine. Furthermore, the presidency team prepared and member states approved a reflection paper on the pursuit of SDGs at EU level. This became the basis for the coordination and monitoring of sustainable development in other working groups. This process is being continued by the Czech Republic in 2023.

In addition to the 2030 Agenda, the main current international commitments of the Czech Republic in the field of sustainable development arise from the *Paris Agreement* to the *UN Framework Convention on Climate Change*, the *Sendai Framework for Disaster Risk Reduction 2015–2030*, and the *Addis Ababa Action Agenda* on Financing for Development (AAAA). Climate protection and adaptation to climate changes are addressed in the Czech Republic through the *Climate Policy* (CP) and the *Strategy for Adaptation to Climate Change in the Czech Republic*. The strategy is due for an update by the end of 2023 in connection with the review of commitments under the Paris Agreement. Although, in terms of progress in the approved measures, the implementation of the CP can be considered successful, the current targets are not aligned with the EU's ambitions under the *Paris Agreement*, the *European Green Deal*, and the *EU Climate Legal Framework*. *Furthermore,* the goals are also insufficient to achieve carbon neutrality by 2050.[668] In the Czech Republic, the *Sendai Framework* is reflected in the *Environmental Security Concept 2021–2030 and Outlook up to 2050*.

A crucial component of development financing, alongside countries' domestic resources, is official development assistance (ODA). The Czech Republic has long struggled to meet its commitment to provide ODA at a minimum of 0.33% of gross national income (GNI), with the original deadline set by the OECD (DAC) and the EU for 2015. Between 2018 and 2021, the ODA share stagnated at just 0.13% of GNI.[669] Additionally, the Czech Republic failed to provide adequate support for the least developed countries, offering only 0.007% of GNI,[670] compared to the internationally set objective of 0.15–0.20%. The *External Development Cooperation Strategy 2018–2030* does not include a concrete plan to achieve this commitment. This is due to a lack of political will. The annual EDC Plan serves as a reminder of the government's commitment, including specific financial requirements and accountability options (in addition to humanitarian, development, and transformative assistance, this also covers funding for climate and biodiversity protection and support for refugees).

In the context of the AAAA, significant international attention is paid to the ability of developing countries to mobilise financial resources from domestic sources. The Czech Republic contributes through bilateral technical assistance on tax issues and by actively engaging in the activities of multilateral platforms at both the UN and the OECD. The Czech Republic continues to support the reform of the international tax system, particularly measures adopted under the OECD's Base Erosion and Profit Shifting (BEPS) Framework, which set a minimum effective tax rate of 15% for multinational corporations.

In climate finance, the Czech Republic has long planned to reach the global average level from 2012 by 2030. In quantitative terms, this objective corresponds to CZK 1.8 billion. However, the current level of contributions falls short of the indicative target. In 2021, bilateral expenditures amounted to approximately CZK 185 million and multilateral funds to around CZK 110 million, i.e. in total, the Czech Republic spent CZK 295 million. The contributions fall short even when considering other multilateral expenditures related to climate protection (e.g. contributions to international development banks), though these expenditures increased significantly between 2017 and 2020.[671] Between 2019 and 2023, the Czech Republic did not contribute to the Green Climate Fund. Its annual contribution of USD 1 million is to be resumed in 2024. As with official development assistance, there is no mechanism to anchor long-term financial goals and commitments in budgetary planning.

[668] CENIA (2021) *Evaluation of Climate Policy in the Czech Republic (2021)*, available here.

[669] Indicator 21.1.2.

[670] Indicator 17.2.1 *2030 Agenda*

[671] Indicator 21.1.1

Important tools that support the achievement of global development goals include awareness and global (development) education (“GDE”). This is addressed in the *GDE Strategy 2018–2030* and the associated *action plans*. Funding for global education and awareness projects has fluctuated in recent years. In 2021, CZK 8 million was spent – the lowest amount in the reporting period (i.e. since 2009).[672] Following the adoption of the *Dublin Declaration on Global Education to 2050*, the Czech Republic should integrate its commitments into revisions of its framework education programmes.

The Czech Republic is part of the *Team Europe* approach. Here, together with other EU member states and institutions, it has been involved in helping third countries fight COVID-19 and mitigate the pandemic’s impact in recent years. Through the new *NDICI-Global Europe* instrument, projects are financed for the 2021–2027 period that add value to their overall adaptation and transformation (“building back better”). The Czech Republic has joined many of these projects. In addition, the Czech Republic contributed to COVAX, the global mechanism providing COVID-19 vaccines to developing countries.

Within the scope of the *World Bank Group*, in 2021 the Czech Republic contributed CZK 384.76 million to the *International Development Association*, the *International Bank for Reconstruction and Development*, the *International Finance Corporation*, and the *Multilateral Debt Relief Initiative*. Key new international initiatives aimed at debt relief for the poorest countries include the *2022 SDG Stimulus*.

The Czech Republic has been a member of the UN Economic and Social Council (ECOSOC) since 1 January 2022, joining for a three-year term. This is the second time it has been part of ECOSOC since the adoption of the 2030 Agenda, having also been a member from 2016–2018. During that time, it chaired ECOSOC from July 2017 to July 2018. The main priority of the presidency and one of the priorities of its current membership is the participation of all parts of society in public affairs and good governance, which are part of Sustainable Development Goal 16 “Peace, Justice, and Strong Institutions” (“SDG 16”). The High-Level Political Forum (HLPF), which takes place annually under the auspices of ECOSOC, is the main UN platform for sustainable development and plays a central role in monitoring and reviewing the 2030 Agenda and its goals. It is therefore a key institution in the field of sustainable development. In 2021, the Czech Republic participated in the voluntary national review of the implementation of the *2030 Agenda* for the second time.[673] Its work at the helm of ECOSOC is widely regarded as a success.

The Czech Republic’s positions on sustainable development within international organisations are coordinated through several working groups and tools. Within the OECD, this function is carried out by the OECD working group managed by the Ministry of Foreign Affairs. The coordination of policies for representation in the EU is managed by the Government Office. There are also ministerial coordination groups and procedures within the DAP portal. The Czech Republic’s positions on key current issues in sustainable development at European level are specified by three core positions relating to the various implementation phases of the *2030 Agenda* in the EU. While general awareness of these positions within relevant government bodies has not been investigated, available information suggests there is general awareness of the CR 2030 agenda within the architecture of state administration, and efforts are being made to align strategic work with the sustainable development framework.[674] Although positions among Czech representatives are coordinated satisfactorily, there is room for improvement in the active use of DAP procedures by representatives of all relevant working groups. Coordination between these groups and the *2030 Agenda* Working Group is also important at the level of the Council Secretariat, and the Czech Republic is actively working to improve this. Positions in other international organisations are coordinated between the relevant ministries or within the working channels of the MoFA, the GCSD, and the EDC Council. The potential available to Czech representatives working directly in these organisations or serving in their elected bodies (for more details, see Objective 21.3) could be better utilised.

[672] Indicator 21.1.3

[673] MoEnv (2021) *Second Voluntary National Review of Agenda 2030 in the Czech Republic*, available here.

[674] Questionnaire for *Focal Points* on the use of CR 2030

The Czech Republic actively promotes sustainable development within international institutions. During the reporting period, it demonstrated this in particular during its presidency in The Council of the EU, which is rated positively. However, at the national level, there are significant gaps in its pursuit of official development assistance commitments and in its spending on international climate protection. Greater efforts should also be made to raise awareness of global interconnections and education geared towards the benefits of external development cooperation.

21.2 The Czech Republic supports the achievement of the Sustainable Development Goals – specifically SDG 16: Peace, Justice, and Strong Institutions – globally and at EU level

Beyond promoting the *2030 Agenda* as a whole at the global and European levels, the Czech Republic has committed to focusing specifically on *SDG 16: Peace, Justice, and Strong Institutions*. This emphasis is based on a long-standing priority of Czech foreign policy to support democracy, human rights, and good governance. The Czech Republic should provide support primarily through external development cooperation and its involvement in international organisations, as well as through the pursuit of SDG 16 and the corresponding measures at the national level.[675]

Support for good governance is one of the five main priorities of the *Czech Development Cooperation Strategy 2018–2030*, which focuses on shaping a democratic society that respects human rights and ensures access to justice. During the reporting period, projects were carried out within this priority area both in the Czech Republic's priority EDC countries (Bosnia and Herzegovina, Ethiopia, Georgia, Cambodia, Moldova, and Zambia) and in other countries, e.g. within the *Transition Promotion Programme*. Good governance is also one of the cross-cutting criteria of Czech EDC. It is required in all bilateral projects and is evaluated through monitoring and evaluations. Bilateral EDC funds dedicated to stronger human rights and good governance in developing countries decreased significantly in 2021 compared to the previous two years, mainly due to the impact of the pandemic in developing countries.[676] The Czech Republic has not yet set a specific objective for the financing of SDG 16. In connection with the *EDC Strategy* and programmes of cooperation with priority countries, systematic support and the pursuit of thematic and geographical priorities remain ongoing. As already mentioned in the evaluation of the previous objective, the Czech Republic also supports SDGs within international organisations. In this respect, SDG 16 has become a priority of its ECOSOC membership (2022–2024).

Since 2022, the Czech Republic has been a member of the UN Human Rights Council, which has been chaired by a Czech representative since January 2023. The Czech Republic is also active in the Council of Europe. Support for human rights, civil society, and good governance is further detailed in the Human Rights and Transition Promotion Concept. Through the Transition Promotion programme (TRANS), Czech non-governmental organisations and diplomatic missions support civil society, independent media, and human rights, particularly in eleven priority countries.[677] Every year, dozens of projects on participatory approaches, social inclusion, and the fight against disinformation and corruption are supported within this programme.

Part of SDG 16 also places stress on engagement. On a global scale, this primarily means the greater involvement of developing countries in the global economic and political system. While the Czech Republic does not oppose the expansion and strengthening of developing countries' participation in international organisations, it does not see this as a priority. Therefore, this is not included in any of the current foreign policy concepts. The Czech Republic generally supports fair and balanced representation of countries in international organisations and an international system based on multilateralism and international law. Indirectly, activities in this area include support for the modernisation of the WTO and financial support for institutions in which developing countries are represented in decision-making equally with developed countries (e.g. the *Green Climate Fund*). The strengthening of less developed countries' capacities to enable them to

[675] More on national implementation can be found in the evaluation of FA6 below.

[676] Indicator 21.2.1.

[677] Armenia, Belarus, Bosnia and Herzegovina, Cuba, Georgia, Kosovo, Moldova, Myanmar, Serbia, Ukraine, and Vietnam.

realise their interests within existing mechanisms (e.g. through the *Aid for Trade programme managed by the Ministry of Industry and Trade*) also has a positive impact.

At national level, the Ministry of Foreign Affairs collaborates and consults foreign policy with other state administration stakeholders, non-governmental organisations, and representatives of the business sector. Interministerial coordination is primarily channelled through the EDC Council. Development cooperation programmes, signed with all priority countries, reflect the specific needs of the country, and also take into account the priorities of Czech EDC. Various grant schemes (sectoral platforms, trilateral projects, B2B, the Czech *Challenge Fund* at the UNDP) exist for the involvement of partners.

In the pursuit of SDG 16, it is also crucial to work on the prevention of armed conflicts and support for the protection of human rights. The Czech Republic is a signatory of the Arms Trade Treaty, which regulates trade in military equipment. This treaty currently has 113 signatories; the Czech Republic is striving for as many states as possible to accede to it. The licensing and control of exports of military equipment from the Czech Republic complies with applicable EU legislation and respects all arms embargoes declared by the UN, the EU, and the Organisation for Security and Cooperation in Europe. The importance of military equipment in the Czech Republic's overall exports has increased in connection with the provision of military assistance to Ukraine. Exports increased even before the start of the Russian aggression; between 2009 and 2021, they tripled in volume. In 2021, 1,248 licences for the export of military equipment to 101 countries were granted, with a value of CZK 26,119.3 million.[678] In international security and human rights protection, Czech inspection authorities focus mainly on countries that do not respect international humanitarian law, countries with repressive regimes, or on systems where there is a risk that non-state armed groups will illegally become the final users of military equipment.[679] The Czech Republic fulfils its obligations under international agreements and national legislation on the illegal arms trade.

The Czech Republic actively engages internationally to support the SDGs, specifically SDG 16. It has incorporated this priority into both its external development cooperation and into its activities and priorities within the EU, OECD, and other international organisations. It is also engaged in human rights and good governance, as well as in supporting the involvement of all relevant stakeholders in foreign and development policy. The Czech Republic supports measures to prevent the emergence of armed conflicts and fulfils its obligations in both legal and illegal military material trade. However, to fulfil SDG 16, it is necessary to assess more strictly the risks of exporting this material to countries with repressive regimes and systems where its misuse is a concern.

21.3 The Czech Republic is strengthening its added value in international organisations and the European Union

Representation in international organisations (IOs) offers the Czech Republic an opportunity to directly support the implementation of sustainable development goals and principles on a global and European level. Central to these activities is the representation of the Czech Republic in the elected bodies of these institutions. The Czech Republic cooperates with nearly 500 IOs. However, in key IOs, it is still underrepresented in terms of the number of employees and share of the budget. To strengthen the added value of the Czech Republic, the purpose of this specific objective is to increase the number of Czechs in key organisations (primarily in elected positions), increase interest in internships and junior positions, which can later lead to higher managerial positions, and improve coordinating and staffing capacity for activity within IOs. In 2021, the Ministry of Foreign Affairs encouraged interest in working for EU institutions through the "You Too Can Work for the EU" campaign.

In 2022, the Czech presidency of The Council of the EU made a significant contribution to this specific objective, with up to 2,000 civil servants from across state administration involved. In connection with the presidency, 228 staff members were appointed. Staffing at the Czech

[678] MoIT (2022) *Annual Report on the Control of Military Exports, Civilian Handguns, and Dual-Use Goods and Technologies in the Czech Republic for 2021*. Available here.
[679] Council of the EU (2008) *Council Common Position 2008/944/CFSP of 8 December 2008 defining common rules governing control of exports of military technology and equipment*. Available here.

Republic's Permanent Representation to the EU in Brussels was increased by 69 diplomats. In total, approximately 270 diplomats, negotiators, experts, and interns worked at the Permanent Representation. Efforts to support key staff in their career advancement within international organisations, particularly in managerial positions, will need to be evaluated over a longer-term perspective.

The Ministry of Foreign Affairs is focusing primarily on supporting the placement of Czech citizens within EU and OECD structures. The goals of the *Strategy to Support Czechs at EU Institutions*, approved in 2015, were to strengthen cooperation with Czechs in EU institutions, support their work in strategically important positions, and generally improve the functioning of Czech state administration. Under this strategy, the Czech Republic aimed to prepare Czech candidates for recruitment procedures (EPSO), communicate with seconded officials and other Czech citizens working in EU institutions, and coordinate the dispatch of short-term and long-term placements (for more on placement assessments, see the evaluation of Objective 25.3). Short-term placements include Erasmus for Public Administration and *National Experts in Professional Training* (NEPT). Longer-term placements include *Seconded National Experts* (SNEs) and studies at the College of Europe, for which government scholarships are granted to selected candidates. In 2023, the funds earmarked for SNEs were increased.

To support Czechs working at the OECD Secretariat, the Ministry of Foreign Affairs annually provides a voluntary contribution to a programme for sending state administration staff on short-term placements, helping them to gain practical experience of working for an international organisation and increasing their chances of finding a job at the OECD or other international organisations. Many graduates continue to work within the Czech state administration, mostly in higher positions within the seconding institution or at another ministry; two graduates are working for international organisations.

In terms of elected positions in international organisation bodies where Czech representatives have been elected, in 2022 the Czech Republic was represented, for example, on the Executive Board of the UN Development Programme (UNDP), at the UN Population Fund (UNFPA), UN Office for Project Services (UNOPS), the UN Economic and Social Council (2022–2024), the UN Human Rights Council (2022–2023), the Executive Board of the International Labour Organisation (ILO, 2021–2024), and the UNESCO International Programme for the Development of Communication (the Czech Republic was a member of the Intergovernmental Council for 2021–2023), and in 2023 it was newly elected to the Executive Board of UNESCO and the Executive Board of UNWTO.[680]

The Czech presidency of The Council of the EU had a positive impact on the pursuit of this objective. However, there has not yet been a significant increase in the number of Czech representatives in higher managerial or expert positions in key IOs. Potential lies in supporting key personnel from the presidency. Following the abolition of the position of the Government Commissioner for International Organisations, there has also been a decline in the systematic and interministerial approach to this matter and the creation of specific strategies for engagement in individual key organisations. Activities to promote the representation of Czech citizens in EU institutions and international governmental organisations remain a priority of Czech foreign policy. Of the 21 key institutions, attention is currently focused mainly on the EU and OECD, and it is here that the main progress towards fulfilling the objective can be seen.

[680] Indicator 21.3.1

22 By domestic policies with an external impact more coherent, the Czech Republic is supporting global sustainable development.

This strategic objective focuses on adhering to the principle of policy coherence for development (PCD), i.e. minimising the negative external impacts of domestic policies, particularly their inconsistency with the goals of external development cooperation. Implementing this principle will enable the Czech Republic to improve the efficiency of its resources allocated to development cooperation and contribute directly to building a responsible global environment conducive to sustainable development.

The implementation of PCD places increased demands on the analytical, monitoring, and coordination capacities of public administration. The agenda primarily falls within the competence of the Ministry of Foreign Affairs and the EDC Council. In the broader context of policy coherence for sustainable development, a role is also played by the Ministry of the Environment and the GCSD. The Czech Republic has taken steps to raise awareness of the issue and has incorporated its commitment to PCD into all relevant conceptual documents. However, systematic and methodological approaches to this agenda, an analysis of areas problematic from a PCD perspective, and regular monitoring are still lacking for the objective to be pursued in practice.

22.1 The Czech Republic continuously reflects the international sustainable development commitments it has adopted, along with national priorities, in conceptual

The main conceptual document that reflects sustainable development within external policies is the *External Development Cooperation Strategy 2018–2030*. The EDC Strategy takes into account both the adoption of the *2030 Agenda* and other international commitments undertaken by the Czech Republic (a commitment to ODA levels, commitments arising from the Global Partnership for Effective Development Cooperation, a commitment to pursuing policy coherence for sustainable development,[681] etc.). Implementation of the strategy is continuously discussed within the EDC Council, and a mid-term evaluation is planned for 2024, including the presentation of outcomes to the government. Czech EDC is also evaluated by the OECD Development Assistance Committee (DAC), and the resulting recommendations contribute to its improvement. A mid-term evaluation in 2019 found that the Czech Republic was already successfully carrying out 11 out of 16 DAC Peer Review recommendations from 2016. The main criticism from the review is the low share of ODA in GDP and its insufficient annual growth, especially in relation to the commitment for 2030.[682] The original deadline for achieving this international commitment was 2015. Another review is currently underway, with results expected in September 2023.

Projects under bilateral EDC and other cooperation programmes are subject to regular evaluations. These involve systematic assessment of the benefits and impacts of development interventions in partner countries in accordance with OECD DAC evaluation criteria. The evaluations are usually carried out by independent experts commissioned through public procurement. The Ministry of Foreign Affairs commissions an average of four evaluations per year. In 2015, the Supreme Audit Office audited funds spent on EDC, highlighting decreasing expenditures on Czech EDC, sustainability issues in projects, and the setting of indicators for evaluating objectives in some projects.[683] These findings were in line with the Mid-Term Evaluation of the *EDC Concept 2010–2017*, although significant progress has been made since that period, and the evaluation's findings are now being integrated. A comprehensive mid-term evaluation of the *EDC Strategy 2018–2030* is planned for 2024.

The Czech Republic appears to be on track to meet the objective of incorporating its commitments into strategic documents and tools. The Czech Republic is very active in implementing the 2030 Agenda and the *Sustainable Development Goals* (SDGs) and is continuously monitoring the progress it has made. The Czech Republic uses EDC

[681] Fore more about PCSD, see Objective 22.2.

[682] OECD (2019) *Czech Republic Mid-Term Review*. Available here.

[683] Supreme Audit Office (2016) *Audit Findings from Audit 15/11*. Available here.

evaluations and reviews in order to make ongoing improvements. However, the practical pursuit of specific commitments (particularly ODA and PCSD) remains problematic, with no significant steps taken so far.

22.2 The Czech Republic is actively building institutional capacity to monitor the coherence of internal policies with external impacts, and is reducing their negative effects on the global drive towards sustainable development

In connection with the adoption of the *2030 Agenda*, the Czech Republic supports an expansion to the PCD concept to include the coherence of all policies with the SDGs at national level (PCSD, *Policy Coherence for Sustainable Development*). For the practical promotion of policy coherence in line with OECD recommendations, a broad range of analytical, monitoring, and coordination tools need to be used. The PCSD concept is a cross-cutting issue that intersects with all focal areas of *CR 2030*. In relation to global development it is particularly relevant in limiting risks of negative cross-border impacts among Czech policies.

The interconnectedness of the global economy and politics is so strong in a globalised world that the actions of one country or region are reflected in neighbouring countries and even on the other side of the planet. Therefore, individual states must coordinate their policies on environmental protection, global trade, and human rights, ensuring that domestic policies are not in conflict with the goals and principles of sustainable development, both within their own territory and beyond.

The interconnection of the SDGs requires an integrated approach and policy coherence at all levels. Special attention needs to be paid to spill-over effects or friction points between sectoral policies (e.g. environmental protection in the context of international energy and food security), to their synergies (e.g. progress in health through investment in education), and, in the context of global development, particularly to limiting the risks of negative cross-border impacts of domestic policies (e.g. transboundary effects such as greenhouse gas emissions, social and environmental responsibility in supply chains, etc.). Impact assessment is also crucial, and often not covered within the scope of regulatory impact assessments (RIAs). In this respect, the new manual for RIAs and SIAs (sustainability impact assessments) may be useful. While it does not cover cross-border policy impacts, it does provide guiding questions structured according to the SDGs. As of 2024, over a thousand Czech companies will be required to report on their environmental impact and human rights compliance in supply chains in connection with the Corporate Sustainability Reporting Directive (CSRD).

The concept of the coherence of all external and internal Czech policies with development cooperation goals is anchored in the *External Development Cooperation Strategy 2018–2030* and *CR 2030*. The main platform for addressing this agenda is the EDC Council, which includes all ministries and other key stakeholders in development cooperation. However, the pursuit of PCD principles in the Czech Republic still lacks institutional and analytical capacity, and the agenda has yet to be addressed methodologically.[684] Policy coherence for sustainable development should be monitored and analysed in specific thematic areas defined in *CR 2030*.[685]

Progress towards this specific objective can be seen in the collaboration established between the Ministry of Foreign Affairs and the *Technology Agency of the Czech Republic*, which in 2023 tendered a project focused on a comprehensive approach to evaluating coherence based on international experiences. In the follow-up to the outputs of this project, policy impact analyses will be conducted in the main thematic areas from a development perspective.[686]

[684] Indicator 22.2.1.

[685] Trade policy; social and environmental standards; corporate social responsibility; intellectual property; commodities and raw materials; tax and financial policy; climate change; energy; science, research and innovation in relation to climate change and food security; food security in the European Union's development policy; the European Union's common agricultural policy; migration; stemming the brain drain; remittances; security; biodiversity; responses to conflict; and failing or fragile states.

[686] Indicator 22.2.2

The key advisory, initiating, and coordinating government body for sustainable development is the Government Council for Sustainable Development (GCSD), which includes all key stakeholders at a high level. For communication, coordination, and reporting on the implementation of conceptual documents in sustainable development, focal points were established at all ministries by Government Resolution 670 of 17 October 2018. Through these contact points, reports were collected from responsible ministries on the implementation of both the *2030 Agenda* and the *CR 2030 Strategic Framework*. Coordination between the GCSD and the EDC Council is provided by the secretariats of both advisory bodies and representatives attending the meetings. To make headway with the objective, it would be beneficial to establish cooperation with other relevant government advisory bodies. This cooperation currently takes place only on an occasional and ad hoc basis.

In the Czech Republic, awareness of policy coherence for sustainable development and the need to reduce the negative impacts of domestic policies beyond the country's borders is improving through long-term broad inter-ministerial cooperation in sustainable development. The creation of the focal points network has facilitated the reporting process on the implementation of *CR 2030* and the *2030 Agenda* and improved information flows between ministries and the Ministry of the Environment. Despite these partial improvements, PCSD in the Czech Republic has not yet been methodologically developed. There has also been no increase in analytical capacity or pursuit of measures related to the analysis and monitoring of key PCSD topics.

22.3 The Czech Republic actively advocates for policy coherence to be monitored and pursued at EU level, in the EU's external policies, and globally

Policy coherence for sustainable development is also relevant at international and global level. Due to the interconnectedness of the global economy and the strong position of transnational stakeholders, international organisations also play a key role here. They should primarily monitor and implement PCSD principles within their competence and ensure appropriate coordination and support for their implementation in countries within their region.

The Czech Republic regularly participates in meetings of the *2030 Agenda* Working Group within The Council of the EU, where it has long been striving for a proactive and comprehensive approach to the pursuit of SDGs at EU level. During the Czech presidency The Council of the EU, the presidency team drew up a reflection paper on the implementation of the *2030 Agenda* in the European Union (see Specific Objective 21.1).

The promotion of PCSD is also addressed by OECD and European Commission working groups directly focused on this issue, which involve national coordinators, including Czech representatives. The *European Sustainable Development Network*, the *Global Partnership for Effective Development Cooperation*, and the *EU Copernicus Programme* also address this issue to some extent.

The Czech Republic's active role in promoting sustainable development during its Council of the EU presidency had a positive impact on the objective. Through its reflection paper on the pursuit of SDGs in the EU, it contributed to better coordination and monitoring of sustainable development at the EU level. Although progress was made, the active promotion of PCSD in international organisations is limited by the low activity in this area at national level (see Objective 22.2).

6. Good Governance

The Czech Republic has decided to achieve a better way of policy-making process. This intention has been divided into individual components (knowledge and skills, policy coherence, data and information, innovation, inclusivity in policy-making process) and is covered by targets. As none of these goals has been achieved yet, it would be premature to suggest that the entire intention has been completed. In some cases, since 2017 there has been noticeable progress in the desired direction, most notably in data collection and sharing. However, in most goals, actual progress has been minimal. This also applies to key goals concerning policy coherence and innovation support. Although public administration has undoubtedly made more effort in the last three years than in the previous period, tangible results have yet to materialise (these are not expected until 2025) or cannot be properly assessed.

23 Policy-makers have the knowledge and skills to participate fully in public debate.

Public administration is not just an anonymous structure of rules, nor is the public merely an abstract concept. Public policies are made by concrete people, both from public administration and outside of it. It is not enough to focus only on how policies are made and overlook who is behind their creation. Those who participate in policy-making process – whether they come from public administration or civil society – must have the necessary capabilities and skills, especially the ability to engage in meaningful discussion. Public administration, as a driver and organiser of policy-making process, must also have an understanding of diverse values and the capability to work with them. Employees in public administration must possess the necessary broad knowledge, often extending beyond Czech borders. None of this can be left to personal initiative alone, because even the best individual efforts will ultimately fail if they continue to encounter systemic obstacles and lack support. At the same time, these skills, knowledge, and expertise will come to nothing if they are not demanded of public administration by the political representation.

A training system for public administration employees exists, but the creation of CR 2030 has not influenced its form, and in many respects it is difficult to assess whether the system is effectively developing the required elements. To the extent that it can be assessed, it appears to be a peripheral issue. Ministries at least partially understand the long-term research needs for policy-making in their area and are trying to implement them. A system of expert support for policy-making formally exists, but its effects are unknown in several aspects. Public educational institutions support the development of participatory and deliberative skills necessary for meaningful engagement in policy-making, but only to a limited extent and only for children and young people, not for adults.

23.1 The system of employee training in public administration will tangibly develop conceptual thinking and pass on the latest scientific findings, contact with experiences from other countries, and insight into how to critically work with these findings

If we want policy to be made of adequate knowledge and skills, public administration employees must not only be motivated, but must also be effectively supported in this. They must also have the opportunity to apply the knowledge and skills they have acquired.

Formally, the training of public administration employees is in place. Since 2015, there have been framework rules for the training of staff at public service and administrative authorities. These are general rules deployed by individual authorities to provide training independently according to their own capabilities and educational needs. Regions and municipalities train their staff on the basis of the Local Government Officials Act of 2002 and related regulations.

Reports from 2016–2021 for civil service offices (including all ministries) indicate that in-house training prevails. The increase in qualifications or education (e.g. through university studies or internships) has long been used only to a minimum extent and, considering the number of state employees, remains marginal. Leave of absence for individual study purposes

is used, but in practice it is primarily to prepare for the civil service examination, i.e. to meet the minimum legal requirements for the position the employees hold, and to study the legal and service regulations, i.e. to update their knowledge of formal rules.[687] To assess the objective, it is essential to know how educational needs are identified in practice, what effect training has on job performance, or how training is aligned with the principles outlined in this or other related objectives (e.g. behavioural approaches, deliberative skills, strategic work orientation, foresight methods). Research on employees' individual experiences with the education system, conducted by the Ministry of the Interior in 2023, does not provide answers to these questions, as it was designed for a different purpose.[688] There are some individual training activities that correspond to the objective (*STRATeduka*, *Training Programme for Analysts*), but they depend on time-limited EU funds, and given the number of participants,[689] they cannot be said to be a breakthrough in the training system.

Training at civil service offices is generally fragmented and does not pursue a common vision of universal competencies.[690] The civil service section aims to play a more active role in this area in the future, and changes can likely be expected from the planned amendment to the Civil Service Act, but for now, these are only plans.

Just like civil service offices, regions and, to a lesser extent, municipalities organise a fair share of training on their own, through their own accredited courses, while a large number of other accredited educational institutions also exist. The Ministry of the Interior ensures that training meets the requirements of administrative tasks by granting or renewing accreditations for educational institutions and individual courses, and by conducting spot checks.[691] The forthcoming concept to train employees of local government bodies introduces certain changes desirable in terms of the objective (e.g. it links the study programmes of universities and higher vocational schools with the needs of municipalities and regions in administrative tasks or the possibility for professional competence exams to be sat by "non-officials" who need to carry out these tasks in practice). However, these changes are still in the pipeline.

It is not known how many employees who have acquired specific knowledge or skills, particularly by engaging in continuing education, then work permanently or long term in public administration. Information is lacking both for public administration as a whole and for state administration in the narrower sense.

There is still no functional system to facilitate the selection of quality training for public administration employees and encourage them to participate (e.g. training opportunities both within public administration and in the academic sphere, "suggested" automatically based on the position they hold, are not kept up to date). Employees at all levels still have to rely mainly on their own knowledge and initiative in this regard. Public administration regulates training opportunities on a more general level (e.g. legal requirements for job performance, the accreditation process for educational institutions and courses focused on administrative tasks within local government, including updates, etc.), but it does not help much in practical selection and only encourages suitable choices to a limited extent.

A formal education system existed before the establishing of *CR 2030* and still exists. However, it is difficult to assess whether the system is actually developing conceptual thinking, imparting the latest scientific knowledge, continuously sharing foreign experiences, or teaching how to work with value diversity. Where it can be assessed, its effects related to this objective appear to be a peripheral issue.

Public policies, however, are not and should not be made solely by public administration; the involvement of the public – in the form of structured non-electoral political participation – is also

[687] MoI (2017, 18, 19, 20, 21, 22) *Report on the Training of Employees at Administrative Offices and Civil Servants at Civil Service Offices for 2016, 2017, 2018, 2019, 2020, 2021.*

[688] MoI (2023) *Findings from an Online Survey on the Training of Civil Servants*. In the interpretation of the findings, the relatively low overall return rate (13%) and sample bias are limiting factors.

[689] Indicator 23.1.1

[690] OECD (2023) *Public Governance Reviews: Czech Republic*, pp. 295–296.

[691] MoI (2022) *2021 Annual Report on the Training of Officials in Local Government Units in the Czech Republic.*

23.2 The education system provided by public educational institutions is a guarantee of the development of participatory and deliberative skills of citizens

expected. Just as with public administration staff, conditions must exist to allow citizens to participate in policy creation in an informed, active, and responsible manner. Above all, they must acquire and develop participatory and deliberative skills. These skills are not something a person learns once and for all. Like most skills, they improve mainly through use, and often they are best learned through practical deployment. These skills can be acquired through formal education, but they can also be gained and renewed in various other areas and at later stages of life. When we talk about education, whether school-based or lifelong – which is the most significant tool public administration uses in relation to this objective – we refer to it as civic education.

In the field of preschool and school education, civic education is embedded in the *Strategy for the Education Policy of the Czech Republic up to 2030+*, but an evaluation is not yet available. Therefore, the effect of this effort remains unknown.

In the context of lifelong learning, civic education has been problematic for a long time. Public administration generally knows very little about the overall situation in this area – beyond school education – because it does not consistently monitor it. At national level, there is still a lack of a consensual idea of civic education, which would not be limited to formal education and individuals under the age of 18. The attempt at a coherent brief, which first appeared as a government intention in 2016 and was supposed to be concluded in 2018,[692] did not result in any outcome. Agreement could not be reached on the first draft of the *Civic Education Concept* from 2017, and thus it was never presented to the government. Nor was the 2018 work plan[693] discussed by the government.

The direct effect of civic education is difficult to measure, and no one has yet attempted to evaluate it using an experimental method with a control group. We can only proceed indirectly, through activities in which participatory and deliberative skills play a supportive role.

Looking at the development of non-electoral political participation, the situation has remained largely unchanged over the last ten years. Based on the most recent available data from 2020, people inform themselves or discuss politics with friends, but at least half of people engage in "addressing public problems" only occasionally, with fewer doing so regularly, and only 2% participate "often".[694] The weakest aspect is perceived to be the ability to influence political events at national level; however, belief that they can be influenced has doubled over the last decade and now stands at about 18%.[695] The possibility of wielding influence on the form of laws through involvement in their preparation via the participatory activities offered by ministries has not been tracked in any sociological research for a long time. The closest to this might be the strength of the belief that the legislative process can be effectively influenced through work in civic associations – 39% of citizens and citizens believe this[696] – but since demonstrations or petitions are considered more effective, the question arises as to whether most citizens even know about the opportunities to influence proposals directly during their preparation.

At local level, the expected combination of participation in preparation and decision-making, which the desired skills aim to support, could be reflected in participatory budgeting – requiring first a discussion and proposal-generation phase, and only secondarily voting/decision-making – rather than statistics on participation in local referenda. From the perspective of this objective, what matters most is whether participatory budgeting is conducted repeatedly and whether the number

[692] *Government Resolution No 1122 of 14 December 2016 on the Plan of Non-Legislative Tasks of the Government of the Czech Republic for the First Half of 2017 and on the Outline of Themes for the Plan of Non-Legislative Tasks of the Government for the Second Half of 2017*

[693] Basic document underpinning the *Concept of Civic Education in the Czech Republic*, uploaded to eKLEP in July 2018.

[694] Indicator 23.2.1

[695] CVVM (2020) *Politicians' interest in citizens' opinions, citizens' ability to influence the public sphere, and their view on respect for human rights – February 2020*.

[696] CVVM (2020) *Citizens' Opinions on Opportunities to Influence the Legislative Process – February 2020*.

of municipalities engaging in it is growing, or whether the number of participants is increasing. This could indicate that people are increasingly acquiring the desired skills. Data for 2014–2022 confirms the trend of repetition.[697] However, the number of municipalities adopting participatory budgeting is still small in relation to their total number, so no major change in the expansion of the desired skills can yet be inferred from it.

Public educational institutions support the development of participatory and deliberative skills among young people. The exact effect is unknown, but it is certainly not large-scale at this point. Forms of civic education beyond preschool and school education are not systemically addressed by public administration. Non-electoral political participation in relation to policy-making, which these skills aim to facilitate, has not changed significantly in the long term.

23.3 The state system of support for oriented and applied research will ensure a steady flow of knowledge and innovation for democratic government and long-term efficiency

The third channel through which data, information, knowledge, and skills should flow into the public policy-making process is state-supported research. Experience to date in achieving this goal will enable to consider this topic in the context of systemic conditions for the data and information collection (goal 25.1) rather than individual knowledge, skills or motivation. However, in this report we are still evaluating it separately.

Although the topic should not be limited to research directly commissioned and managed by public administration, it is true that research commissioned by ministries – whether through research organizations in governmental departments or via the Technology Agency of the Czech Republic – will always be a key component.

Most ministries have medium-term concepts for expert support and related research and development. These concepts were mostly created before or in 2017, with few updates thereafter, and new concepts are rare. Some ministries do not have such concepts, citing that they themselves are not funders, although the purpose of these concepts is not solely to allocate resources within the R&D&I system. Similarly, some ministries have research concepts only for certain areas. We are unable to track the use of research organizations in governmental departments in line with the pursuit of the objective. Generally, most ministries use their research organisations in some way, and after 2017, they were supposed to evaluate them according to the part of the *Methodology for Evaluating Research Organisations and Research, Development and Innovation Purpose-tied Aid Programmes* that is relevant to these organisations. Reports are available from some ministries, but no overall evaluation of ministerial research organisations on a common basis is conducted in practice.

Other forms of research support for policy-making mainly involve the Technology Agency programmes. Some of these programmes are universal (either for specific research needs (BETA 2) or for public competitions in applied research generally (SIGMA)), while others are assigned to particular ministries (e.g. Environment for Life (EfLP), a research programme for the Ministry of the Environment. In the case of BETA 2, the 2020 ongoing evaluation pointed out weaknesses in the implementation of results, especially the near-total absence of tools to assess whether the programme is being implemented and to what extent.[698] SIGMA began supporting research in 2023, and therefore it lacks the ongoing evaluation available for BETA 2. In the case of EfLP, special attention should be paid to sub-programme 3, which in 2021 paved the way for the creation of seven longer-term research consortia made up of various expert organisations, allowing significant advances to be made in relation to existing and upcoming strategic documents. These consortia cover various areas, e.g. the socio-economic impacts of environmental policies, water management, and air quality assessment.

Another attempt to link research and the needs of ministries in addressing major societal challenges is the concept of mission-oriented innovation, coordinated by the Ministry of Industry

[697] Indicator 18.3.3

[698] Technology Agency (2021) *Final Report – Interim Evaluation of BETA 2*

and Trade within the development of RIS3[699] and support for the "science-to-policy" ecosystem, which several ministries have undertaken under the organisational umbrella of the Office of the Government.[700] However, in these cases, the activities are still in their infancy, and their effect has yet to materialise.

Most ministries at least partially understand their long-term research needs and are trying to address them. A system of expert support for policy-making formally exists, but its effects are unknown in several aspects.

[699] MoIT information; REID, A.; STEWARD, F.; MIEDZINSKI, M. (2023) *Design and Implementation of Challenge-oriented Smart Specialisation for SDGs* (JRC Science for Policy Report)

[700] Under the TSI project *Building Capacity for evidence-informed policy-making in governance and public administrations in post-pandemic Europe* (2022–2024, multi-country project).

24 Public policies are coherent with the goals of the Strategic Framework Czech Republic 2030.

In order to achieve the goals of CR 2030 with limited resources, the policies that are implemented must be coherent. However, this is such an extensive and complex process that coherence from a single point is not possible. Coordination from the centre is important, but it is not sufficient. The process must largely run by itself, based on an initial impulse and as a result of the existence of systemic rules and relationships that encourage all participants to act in a certain way. This process requires capacities that enable responses to these incentives.

The institutional capacity of public administration to make coherent policies has not improved since the establishment of CR 2030, although (especially recently), initiatives in mapping, networking, and supporting analytical capacities have increased. Weaknesses in strategic work have remained the same for years. Public policies are undoubtedly assessed to some extent in advance, and public administration is capable of meeting the basic formal requirements it sets for itself. In practice, however, assessments are far from systematic, the quality of assessment fluctuates, and it cannot be said that it is consistently based on available knowledge. Tangible progress in policy evaluations has been minimal.

24.1 Public administration at all levels will have sufficient institutional capacity to create cohesive policies (competence, staff, financial resources, communication channels. etc.)

The policy coherence primarily depends on the capacity of public administration to engage in certain types of action. In a narrower sense, this concerns the capacity for analytical[701] and strategic work,[702] and, in a broader sense, the capacity of public administration organisations to serve their purposes on a general basis.

The capacity for analytical work, particularly for more sophisticated analytics, has been a long-term weakness in the policy-making process, although in 2022 some important steps were taken to address it. The Government Analytical Unit has been established at the Office of the Government to assist ministries in the preparation of regulatory impact assessment (RIA), thus ad hoc expanding their analytical capacity for particularly important proposals. This has been followed by the plan to expand the number of independent analytical units, with a view to their permanent integration into ministry structures. A network of analytical coordinators has also been established. They should have an overview of the data within their institutions and be able to quickly retrieve and share it with other institutions when necessary. This initiative is spearheaded by the Ministry of the Interior, which has also launched several runs of a training programme for public administration analysts for the years 2022–2023.[703] The Ministry of Finance has established a unit that will review links between strategic plans, expenditure, and results (spending reviews) in selected cases. The output will be draft measures for official and/or political decision-making.[704] This approach should be more methodologically refined than the current audit activities of the Supreme Audit Office (SAO).

[701] Information on the nature and status of analytical work in Objective 24 and Objective 25.1 is based on discussions within the ASCWG and the special workshop on the status of analytical work (MoEnv, 1 June 2023), in the case of written analyses on MoEnv (2020) *Client-oriented Public Administration 2030 – Annex 1 Analytical Part;* Government Office (2020*) Report on the 2019 Regulatory Impact Assessment Practices Survey*; České priority (2022) *Mapping of analytical work – output of the Technology Agency project "Supporting Analytical Work in Public Administration 2021–23";* and OECD (2023) *Public Governance Reviews: Czech Republic*.

[702] Information on the status of strategic work in Objective 24 is based on information from the MoRD and written analyses from the outputs of the *Strategic Work Mapping* project (outputs/analyses of the quantitative survey under Key Activity KAO1 – questionnaire survey, and outputs/analyses of the qualitative survey under Key Activity KA02 – interviews; March 2019) and OECD (2023) *Public Governance Reviews: Czech Republic.*

[703] MoI (2023) *Training Programme for Analysts in Public Administration.* Available here.

[704] It will be based on the TSI project *Supporting the Czech Republic to implement spending reviews and build a performance budgeting framework* (2023-25, multi-country project)

For several years, a loose Analytical Units Cooperation Network (AUCN) has also been operating in public administration. It has formally been overseen by one of the GCSD committees since 2019, and informally coordinates and develops analytical skills on a self-help principle. All the activities mentioned, except for the AUCN, are still in the early stages, and the results in terms of long-term institutional capacity for evidence-informed analytical work are not yet known.

The capacity problem is also evident in the extent to which ministries, for example, are able to meet their analytical needs on their own. There is nothing wrong with drawing expertise from external sources – partly from the academic environment, partly from consultancy agencies – and in some areas, it is even desirable. While some ministries only use this for highly specialised tasks and are able, thanks to their own capacities, to monitor the transfer of knowledge into policy-making process, others rely on external sources even for day-to-day analytical activities (e.g. preparing RIAs). This limits the legitimacy of policies, and, in situations where the ministry is dependent on such expertise, it can also be relatively costly.

The capacity for strategic work remains insufficient. According to a 2019 analysis by the Ministry of Regional Development, strategic units – if they exist at all – focus mainly on operational activities, lack sufficient staff, experience frequent changes in political briefs, and encounter major discontinuity due to the electoral cycle. The Ministry of Regional Development, which has been providing methodological support for strategic work, reduced the importance of the topic in its activities in 2019 through internal organisational changes. The latest OECD evaluation indicates that the situation remains just as problematic.

Institutional capacity in the broader sense can be linked to quality management systems, as they are tools for repeatedly determining the tasks of an institution, its current state, and what and how changes should be made to best carry out those tasks. In 2017-2018, methodological guidelines[705] were approved, and quality management became mandatory for civil service offices. In 2021, nine civil service offices, less than 4% of the total number, had rolled out quality management systems. None of them were ministries.[706] The Ministry of the Interior clearly described the risks posed to the completion of the whole process. These included underestimating the time frame, staff turnover, insufficient activation towards changes, or adopting a purely formal approach to implementing necessary changes, as well as ongoing insufficient support for the process from the leadership of some civil service offices.[707] In 2022, the deadline set by the *Methodological Guidelines for Quality Management in Civil service offices*, civil service offices intensified their efforts, and 84 out of a total of 230 such offices, including all ministries, introduced quality management to varying degrees. According to reviews, most offices were eventually grouped in the categories of “excellent”, “very good”, and “good”, equivalent to school grades 1, 2, and 3. The MoI rates this result positively. At the same time, however, it notes that most offices still have a lot of work to do if they are not to remain stuck at the halfway point. Without further continuation, the rules and standards set thus far will sooner or later be lost, and the efforts made will be wasted. Reviews also showed that, contrary to expectations, ministries performed much worse than other civil service offices in implementation. Most offices chose the minimum quality level, with implementation carried out on the basis of “quick results” rather than by following the procedure recommended under the *Methodological Guidelines*. As a result, the requirements and outputs of the improvement criteria (although well-established) were often set without logical connections, and thus only partial measures were established – there was no comprehensive functioning management system. Although public administration has recently taken important steps towards achieving goals in analytical work, the capacity to make coherent policies remains insufficient.[708]

[705] MoI (2017) *Methodology for Implementing Quality Management in Public Service Offices;* MoI (2018) *Methodological Guideline for Quality Management in Public Service Offices.*

[706] Indicator 24.1.1.

[707] MoI (2022) *Information on the Status of Quality Management Implementation in Public Service Offices for 2021.*

[708] MoI (2023*) Final Information on the Status of Quality Management Implementation in Public Service Offices.*

Although public administration has recently taken some important steps towards meeting the objective of analytical work, capacity for coherent policy-making remains insufficient.

24.2 Public policies will take into account long-term impacts, and public administration institutions will monitor these impacts within their strategic documents

For the coherence of policies with respect to *CR 2030*, long-term thinking is important, particularly strategic work in general, with appropriate making and implementation of strategic documents. Analyses of strategic work from recent years[709] confirm long-term weaknesses identified during the preparation of CR 2030. These include weak links between strategic planning and financial resource management, low public engagement, inconsistent connections between analysis and strategy goals, the insufficient interlinking of strategies, and the underestimating of monitoring and evaluations. There are currently nearly 1,900 strategic documents, of which about 300 are at national and international level; the rest are at regional and local levels.[710] This puts extraordinary demands on how to work with them, particularly in terms of how they are organised hierarchically and how they are interlinked. The Public Strategy Preparation Methodology, updated in 2019, provides simple guidelines for this purpose, but the Ministry of Regional Development lacks the capacity for continuous monitoring or reminders of their existence. Although the Ministry of Regional Development has engaged in some activities in the last three years in an effort to improve strategic work, especially at regional and local levels,[711] the effect remains unknown for now.

One specific problem is the hierarchy and interconnections of strategies with the goals of CR 2030 as the overarching strategic framework. Most strategies are probably not in direct contradiction with *CR 2030*, but few of them take CR 2030 into account, and if they do, it is usually only formally. This situation has only been assessed selectively (e.g. based on information from agenda contact persons, experience from the preparation of the *CR 2030* implementation plan, etc.). The coordination of cross-cutting agendas and alignment of long-term goals does not have an institutional vehicle with a strong mandate to transcend sector-specific approaches. The sustainable development agenda, as a strategic unit of the Prime minister, was moved from the Office of the Government to the Ministry of the Environment in 2018. This is part of a broader problem, the absence of a functioning centre of the government.

In the years 2023–2025, a one-time forward shift can be expected, linked to the approved update of the National Recovery Plan.[712] This will be driven by the planned revision of national strategies in relation to CR 2030, anticipated recommendations for existing strategies, and, above all, the calculation of long-term costs and benefits of achieving key goals. The fiscal consolidation vision should work with this to ensure that it does not jeopardise the achievement of long-term goals. However, the results will only become apparent after 2025 and will be heavily dependent on political will.

Strategic documents are many, but their quality varies, and the work involving them exhibits long-term weaknesses. The main issue is the interlinking of strategies, their inadequate implementation - which is partly due to the relatively loose connection between strategies and the allocation of financial resources – and the weak focus on outcomes and their evaluation, compared to the emphasis on outputs.

Monitoring the impacts of public policies, or their forecasting prior to decisions, while taking into account the goals of *CR 2030*, cannot be limited to good strategic work alone. The impacts should also be monitored as part of the daily activities of public administration. In the Czech Republic, there are, formally, numerous tools for this, but most are focused only on specific activities or topics. The only universal system comprises regulatory impact assessment (RIA), which have been in place in the Czech Republic since 2005, or more precisely 2007. The RIA Advisory

[709] See references in the evaluation of Objective 24.1.

[710] *Strategy Database* (2023) Available here.

[711] Operational Programme Employment project: *Strategic Management and Planning Support in Public Administration (2020-23)*

[712] *Government Resolution No 437 of 14 June 2023 on the update of the National Recovery Plan.* This activity is an extension of Component 4.4.

24.3 Public policies will be based on available knowledge and will be systematically assessed in advance, with consideration for possible impacts on recipients and on areas beyond the area of primary interest

Commission, which provides feedback to drafters on the quality of RIA final reports, has been in existence since 2011. The general principles for RIA were last updated in 2023.[713] The method for evaluating proposals is stabilised.

The RIA system, in principle, has good potential to take into account the perspective of sustainable development, provided there are certain refinements and assessment is carried out well.[714] As to refinements, a simple guide for integrating sustainable development perspectives for RIA authors was prepared in 2023, covering principles, tools, and content. However, the guide still needs to be tested at several ministries before it is finalised.[715] Therefore, the first effects cannot be expected before 2025. The quality of RIA processing, i.e. a second aspect, has increased since 2017, with 64% of proposals meeting the required quality standards in 2021.[716] However, RIA only apply to government legislative proposals, not those originating from parliament. In the case of government proposals, exceptions can be granted, or failure to process RIA can be approved as part of the government's legislative work plan. With government proposals, exceptions would have not necessarily been a deficiency, if they had included proposals with significant impacts. Exceptions are granted by political decisions. To summarise, only some of the proposals in the legislative process undergo RIA – in recent years, this proportion has been around 30% of proposals – and even these are not always of high quality.[717]

Impact assessments – whether ex ante or ex post decisions – are inherently linked to analytical work. The capacities for this have already been mentioned in the evaluation of Objective 24.1, and access to data will be evaluated in Objective 25.1. Here, attention can be directed to the nature of this activity.

Interest in analytical work has gradually increased over time, at least according to those who carry out analytical work in public administration. This is positive, but in terms of the objective, it is only a prerequisite for progress, not progress itself. The fact that political representatives or stakeholders outside of public administration increasingly request analytical support for decisions is generally good news. However, this may also have some undesirable side effects for analytical work. The demand for analyses is divided into several types: in simplified terms, into work that is carried out regularly or at least predictably, often based on a formal rule (e.g. RIAs, EU fund evaluations), and ad hoc analyses that arise from immediate demand. In addition, state administration also acts proactively, creating demand itself and either anticipating or directly trying to provoke interest in the analytical basis of future policies. However, with limited capacities, it is difficult to meet all types of demand, or to meet them all equally well, and ad hoc demand is susceptible to sudden changes in direction or a complete loss of interest in the results. From the perspective of fulfilling the objective, it is therefore desirable not only to increase the demand for analytical work in general, but also to ensure that the dominant part comprises regular and predictable activities, with demand increasing in this area (e.g. emphasising that every strategic document should be evaluated, not just monitored, or that impact assessments will apply not only to regulations, but also to policies as a whole, including their distributive and redistributive tools).

[713] In terms of evaluation perspectives, the update has mainly expanded the category of impacts to families and local government units, with an emphasis on the compliance of the proposals with the principles of digitally friendly legislation

[714] MoEnv (2020) *Opportunities to Include the Perspective of Sustainable Development in the Impact Assessment System in the Czech Republic;* MoEnv (2023) *Guide to the Integration of Sustainable Development in Regulatory Impact Assessments (RIAs).*

[715] *Second Implementation Plan for the Strategic Framework Czech Republic 2030 (for 2023–25)*, Measure 24.3.b; TSI project: *Supporting evidence-based regulatory practice and policy coherence for implementing the 2030 Agenda for Sustainable Development in Czechia* (2023-25, multi-country project).

[716] Indicator 24.3.1. By quality, we mean the proportion of proposals that the RIA Commission recommended without reservation or after its recommendatory comments had been incorporated. This percentage does not include materials that had a final RIA report but were not discussed by the RIA Commission.

[717] Indicator 24.3.1.

The ideal scenario is for the impacts of decisions to be automatically evaluated to such an extent that ad hoc demand can focus only on special details.

While demand for analytical work shows a positive trend, this positivity cannot be applied to the work itself. The problems remain the same: significant time constraints, pressure to legitimise the chosen solution rather than to evaluate alternatives, and the fragmentation of work both within ministries and across ministries.

Public policies are, to some extent, assessed in advance, and public administration is able to meet the basic formal requirements it sets for itself, albeit with varying quality of outputs. Demand for analytical work, for an analytical basis for decisions, has gradually increased over time, but in practice, systematic assessment is still far from being achieved, and there is no consistent evidence-informed decision-making. Even in areas where evaluation is most systematic (e.g. RIA), long-term problems persist.

24.4 Public policies will be systematically evaluated retrospectively (*ex-post*)

Policy coherence cannot be achieved solely by evaluating potential impacts in advance. Evaluation, i.e. the ongoing and retrospective assessment of results, is a tool that helps us to learn from previous experience and avoid repeating the same mistakes. It is expedient not only to evaluate specific legislation, programmes, or strategies but also to assess the cumulative impact of various policies on a particular area, i.e. the coherence of the policies themselves.

The idea of the value of evaluations has slowly spread across public administration in recent years, as evidenced by participation in evaluation conferences organised annually since 2015 by the Ministry of Regional Development. This ministry, in its role in evaluating EU funds – both as an author of evaluations and as a coordinator of 11 evaluation units from different ministries – is one of the main drivers of the development of evaluation culture within domestic public administration. As mentioned in connection with Objective 24.1, the Ministry of Finance established a new unit in 2023 to focus on spending reviews, although the work is still in its early stages. The proposal for a framework law on public financial management and the planned government resolution, which will approve the introduction of spending reviews in the Czech Republic, does not, however, establish evaluation requirements across public administration activities. It still holds, as in 2017, that evaluations are only mandatory for the ESIF and EDC. The long-term weakness in evaluating strategies has already been mentioned. In 2019, the Ministry of Regional Development attempted to facilitate the evaluation of strategies by creating a corresponding module in the Strategy Database, but this module has not yet been utilised. The Ministry of Regional Development's plan to evaluate existing strategy evaluations has not yet been effected. According to the experience gained by the Ministry of the Environment in its preparation of the *Second Report on Quality of Life and Its Sustainability* – which included an attempt to base the evaluation of results on previously conducted evaluations of strategic documents from individual ministries – no significant headway has been made in this field. A more systematic assessment, however, will only be part of the planned revision of strategies in relation to CR 2030, which will take place in 2024–2025, as outlined in the section on *Policy Coherence for Sustainable Development*.

The most concrete proposal to make evaluations systematic at this point takes the form of the formalisation of evaluations within the regulatory impact assessment process (ex-post RIA). Although the incentive for conducting reviews has existed in earlier versions of the General Principles for Regulatory Impact Assessments, this has not been systematically implemented in practice, and the outputs are predominantly internal. This practice also poses a challenge during personnel changes, when key experts often take with them complex know-how and "institutional memory". After five years of discussions on a practical solution to the problem, the government approved a revision of the *General Principles for Regulatory Impact Assessment* in June 2023, effective as of January 2025.[718] The new rules include the preparation of a review report, a discussion by the RIA Commission, and online publication. This mechanism allows for and will methodologically support not only the evaluation of a single specific regulation, but also joint

[718] *Government Resolution No 435 of 14 June 2023 on the review of the effectiveness of regulation (ex-post RIAs) and an amendment to the General Principles for Regulatory Impact Assessments (RIAs) and the Statutes of the Government Legislative Council.*

reviews of multiple regulations. However, it is not intended for assessments of the cumulative effect of policies, i.e. the combined impact of regulatory, distributive, and redistributive policies. The newly approved review process enhances the integrity of the RIA process and should provide a true picture of the quality of a regulation and its success in implementing government policies and measures. The benefits and effectiveness of this process will not become evident until some time has passed, with results not expected before 2025.

Although the idea of assessments is not entirely foreign to public administration and efforts have recently intensified, tangible progress remains small compared to 2017, and it cannot be said that public policies are being evaluated systematically.

25 Policy-makers have high-quality and readily accessible data and information for decision-making.

Public policies can be made randomly or based on impressions, of course. However, their effects may not be positive and could turn out completely differently from what was intended. Good intentions are not enough. In order for our decisions to be well-considered, public administration must have sufficient relevant information and must be able to work with it effectively. On the other hand, public access to data and information from public administration must also be ensured – both for experts and members of the general public if they are to be a fully-fledged partner in policy-making.

A system for data collection and sharing within public administration exists and is developing, but this primarily covers the collection and sharing of data from basic registers or in line with information requirements established before the establishing of CR 2030. Many barriers remain, especially in the collection and use of data for analytical work. A system of secondment as a tool for gaining and exchanging experience exists, and interest in its use has increased in recent years, particularly in relation to the Czech Republic and the EU, or OECD. In contrast, experiences with foreign public administration or within domestic public administration are exchanged only in the form of ad hoc meetings, at most through the work of advisory bodies to the government. Public administration data and information are available to citizens. However, it is online accessible only partly.

25.1 A system for data collection and information sharing will be further developed within public administration, facilitating problem analysis, the creation of alternatives, and

Public administration acquires a large amount of data and information, partly as a result of the legal obligations of other stakeholders (e.g. citizens, companies, etc.), and partly as a product of the administrative processes it manages. Quasi-autonomous organisations, such as the Czech Statistical Office, CENIA, and the Institute of Health Information and Statistics, also play an important role in this.

The issue can be divided into two parts: first, whether public administration acquires all the information it needs and in the form it requires, and secondly, whether it manages to make good use of the information it collects.

In terms of data collection itself, a long-standing issue is that, for various reasons, not all the data needed by public administration to evaluate the effectiveness of public policies and their impact on the quality of life of citizens is being collected. As for central public administration, the processes of data collection and processing are carried out by people other than those who then analytically work with the data. Therefore, in the absence of informal coordination, analytical work must rely on available data rather than the data that is needed. Structural problems include limited access to microdata, which is often the only way to assess the effectiveness of an intervention/policy, and the use of qualitative data, which can only be obtained using time-consuming methods. Technical issues include the incompatibility of formats in which data is often provided, followed by difficulties with the export and use of data.

Data collection itself is just one aspect of the problem. As mentioned, public administration as a whole acquires, or creates, a considerable amount of information, but it is necessary that, once acquired, the information should be usable to the fullest by all public administration organisations. This would prevent the need to acquire data again separately, a process that places additional demands on providers and costs. The framework for this solution already exists in the form of the *interlinked data pool*, which mainly consists of the information system of basic registers (basic registers and agenda information systems) and interfaces for data sharing via the e-Government *Online Service Bus*. Basic conceptual documents have also been made to guide further development.[719] The umbrella for this approach is the *Information Concept*, or *Digital Czechia*. Since 2023, the newly established supra-ministerial Digital and Information Agency has played a coordinating role.

[719] *National Architectural Framework, National Architectural Plan, Methods of ICT Management in Public Administration in the Czech Republic*. Available here.

This is not only the data collected by public administration based on legal obligations or permissions, but also data and information obtained, for example, in analyses that public administration organisations prepare or commission in connection with their own agenda, gathered through consultations with the public and relevant stakeholders (e.g. in the RIA process), or through systems for measuring and evaluating public administration, policy evaluations, etc. While analyses of this type are made public to some extent, they are mostly accessible only sporadically. This mainly happens informally, through networks. Public administration does not yet have a library of knowledge of this kind. This should be part of the system currently being developed by the Ministry of the Interior, which will also include a survey vehicle and a tool that can clean and visualise data obtained from these surveys, but it will not be available until 2025.

A system for data collection and sharing within public administration exists and is developing, but this primarily covers the collection and sharing of data from basic registers or in line with information requirements established before the establishing of *CR 2030*. Many barriers remain, especially in the collection and use of data for analytical work.

25.2 Public administration data and information will be available via the means most convenient for citizens

The public is more than a subject of interest to public administration or a source of information. It is, and should be, a partner in the policy-making process, participating – as the general public as interest groups /stakeholders – through various participatory and deliberative mechanisms. Therefore, the public must have access to information that will enable to be a real partner. Transparency is a key element of public administration accountability and helps building trust in public institutions. This concerns not only established disclosure mechanisms based on the right to information, either general or about the environment.[720] The ready accessibility of data and information is primarily associated with the ability to download public administration data and information easily and quickly via the internet without the need for personal engagement from public administration employees. Digital sharing may not yet be the most convenient or user-friendly form of access for everyone, but it is for large groups of people. Interest in it is growing, and, in the future, it is likely to become the most convenient form for nearly everyone. Between 2010 and 2021, the number of people using the internet to communicate with public administration increased across all categories. Overall, it rose by more than 25 percentage points, and now stands at 46.4 percentage points. The highest levels have long been observed among economically active people and those with higher education – these groups find it completely natural – but it is also increasing among people over 65 years old.[721]

Here, as with the digitalisation of public administration services, we must, of course, consider people who cannot or do not want to use the internet (the digital gap).[722] If we look at the frequency of electronic communication with public administration by economic activity, unemployed individuals, whom we can simplistically treat as a proxy for socio-economically weaker groups, use the internet to communicate with public administration significantly less than employed people. And, although their numbers are growing, the pace is noticeably slower compared to those who are employed. If this aspect is not continuously taken into account, it may create an additional barrier for those who are already less involved in policy-making for other reasons, making meaningful engagement even more difficult.

Open data holds particular importance in the context of this objective. This means of data and information publication is not dependent on any other data-sharing system within public administration. Therefore, open data, by its very nature, is the most accessible to the widest range of stakeholders. Open data was legally anchored as early as 1999 in connection with free access

[720] *Act No 106/1999 on freedom of information; Act No 123/1998 on the right to environmental information; Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)*

[721] Indicator 25.2.2

[722] Digital gap means a situation in which some people are *de facto* excluded from the possibility of using services that have been provided universally, or for whom the possibility or willingness to use digital technologies did not pose any limitation.

to information. However, the National Open Data Catalogue (NODC) did not start functioning until 2016. The number of institutions publishing open data is increasing. In 2017, 26 public institutions were involved, and by 2021 this had risen to 53 institutions.[723] Whereas, in 2017, only 6 of the 15 ministries (14 ministries + the Government Office) were publishing open data, by 2021 all ministries were doing so to some extent. Similarly, in 2017, only 4 out of 14 regions (13 regions + Prague) published open data, but, by 2021, all of them were doing so to some degree. The development of NODC is also part of the *Information Concept*, one of the three pillars of the strategic framework *Digital Czechia*, adopted in 2018. The volume of information being disclosed in this way varies, as does its significance, but the trend is moving in the right direction.

A similar tack is being pursued by the upcoming law on public sector data management, which should both improve the record-keeping of the data held by the state and facilitate the sharing of all data where possible, including data that does not fall into the category of open data. The law is still being drafted and is expected to be completed by the end of 2023.

Citizens should also have a good overview of the public policies being prepared, the debates taking place within public administration, and, in the case of legislative acts, the process by which proposals move from their inception to approval, as well as authoritative information on how each public policy is currently regulated from the perspectives of both legislation and interpretation. This is facilitated by the public part of the electronic library of pending legislation (eKLEP). However, its significant expansion through the *e-Legislation* and *e-Collection* projects has been delayed, and the launch of these applications has been repeatedly postponed. The pilot phase is currently under way, with e-Collection set to begin on 1 January 2024, with e- Legislation set to be phased in gradually (from 1 July 2024 for "other legal acts", from 1 October 2024 for implementing regulations, and from 1 January 2025 for laws, Senate legislative measures, and Constitutional Court rulings).

Public administration data and information is made available to citizens to some extent. However, it is still very limited in electronic form and sometimes it needs to be requested, although – especially in recent years – public administration has been making more of an effort. The trend is positive, but tangible results are still weak.

25.3 A system for exchanging experiences between higher and lower levels of public administration, between different governance sectors, and between Czech and foreign public administration will be developed

Beyond the knowledge that public administration should acquire and develop with the help of the education system, as well as the data and information that is to be systematically collected, there is another important source that can be tapped. This is direct experience, the principle of "learning by doing", either through involvement in innovations, as discussed in goals 26.1 to 26.3, or through sharing experiences with other people in similar positions. In the future, this approach might not need to be presented as a separate objective and could be incorporated into the public administration education system, but, for now, we are evaluating it separately.

There is a long-established system of domestic public administration placements within EU structures. The longest placements take place under the *Seconded National Experts* (SNE) programme; these range from six months to four years, so their effects may not become apparent until a longer period has passed. As of 2023, there are a few dozen employees in the European Commission, and if we include civil EU missions and the European External Action Service, the number rises to over a hundred. Compared to the past, this is an increase, but it remains to be seen – this applies to placements of all durations – whether this is just a temporary rise related to the Czech presidency of The Council of the European Union.

From the perspective of ongoing experience-sharing, medium- and short-term placements under the NEPT (National Experts in Professional Training, 9 allocated positions, 3–5 months) and Erasmus for Public Administration (4 allocated positions, 8.5 days) programmes may be of more interest. These placements are within European Commission structures. Several years ago, changes were made to the domestic rules and level of state support for NEPT that significantly increased interest in these placements: in 2017, only seven applications were received for NEPT, and only three positions were filled; in 2020, 45 applications were submitted. Demand for

[723] Indicator 25.2.1

placements by far exceeded the number of places allocated to the Czech Republic, even after the European Commission temporarily increased capacity in connection with preparations for the Czech presidency of The Council of the European Union. As of 2022, all 18 places allocated to the Czech Republic were filled.[724] Contact with former NEPT participants indicates that most remain in public service after returning, so the effects of their placement can theoretically be felt, although the rate of turnover among participants is not consistently monitored.

The Erasmus for Public Administration programme, which also includes a "job-shadowing" process during work performance, used to attract considerable interest. However, due to the COVID-19 pandemic, interest dropped, and after 2020, the number of people using Erasmus has decreased considerably.[725]

A slight increase is noticeable in support for more systematic expert education abroad, such as studies at the College of Europe. This is a very demanding and long-term form of education, so interest has never been particularly high. In 2022, only two people were studying there.[726]

Interest in another form of systematic expert work, specifically longer placements at the OECD (the "staff on loan programme"), has also increased slightly compared to the period before 2017. Overall, however, it is not high. In recent years, three people have participated annually in placements lasting 3–5 months. The vast majority of people who have undertaken placements since they were introduced have remained in public administration. Under the current conditions, however, no significant increase in interest can be expected, although some ministries have been willing to cover costs that were not strictly mandatory for participants. Moreover, unlike shorter secondments in the EU, places are not permanently allocated to the Czech Republic; it depends on the OECD's willingness, which varies.

There are no similar placements in the public administration structures of other countries. Some of the EU's project tools might partially align with the desired approach, as they usually involve experience sharing between multiple EU member states. In 2022, the European Commission offered the Public Administration Cooperation Exchange (PACE) project under the TSI instrument, which provided study visits abroad for public administration employees to learn about best practices and working procedures in other EU member states. This project allows study visits to another member state for 1–5 public administration employees for a duration of 5 days to 3 months. Transport and accommodation are provided to participants at the European Commission's expense through TAIEX (Technical Assistance and Information Exchange). The Czech Republic proposed two projects, both of which were preselected for support in 2023.

Within domestic public administration, no centrally coordinated placements are offered (e.g. at another ministry, at a different level of the same ministry, in thematically related positions in local government). The only exception is that some offices send their employees on placements to the Czech permanent representation in Brussels, which is technically still within domestic public administration, but the effect in relation to the objective may be similar to placements in EU structures.

Similarly, foreign experience of a suitable type is not automatically a guarantee of a higher salary. It may play a role in selection for a particular position, but it is not itself rewarded in the pay scale, meaning it depends on the ministry's discretion whether to take it into account or not. Although ministries are supported in making foreign placements available, with some compensation under other items in the state budget, employees themselves are not incentivised by career prospects or material means.

There are also other forms of systemic experience sharing within public administration. For example, this could involve collaboration between public service offices and the European Institute of Public Administration (EIPA), the Czech Republic's participation in OECD committees, the Modern Public Administration conference organised annually by the Ministry of the Interior since 2016, or the activities of government advisory bodies, which serve this function. However,

[724] Indicator 25.3.1.

[725] Indicator 25.3.1.

[726] Indicator 25.3.1.

we do not have any more detailed information on the effects of these other forms of experience sharing.

The system of experience exchange exists in the form of study stay or secondment. Particularly in the case of the EU, there was a noticeable increase in interest in the previous period, which was likely closely related to preparations for the presidency of the Council. It remains to be seen whether this will be a permanent trend. On the other hand, exchanges of experience with foreign public administration or within domestic public administration exist only in the form of ad hoc meetings, at most via government advisory bodies.

26 Innovations in policy-making process are progressive solutions that enhance the democratic nature and/or long-term effectiveness of public policies; such innovations are a permanent part of the public administration performance at all levels.

It is not enough to "do things right"; it is necessary to "do the right things". At the same time, no solution can be prescribed as a permanent, all-encompassing solution. Forms can and must change, but the key is to pursue the purpose. Public administration must be able to learn from experience, change itself accordingly, and, most importantly, redirect public policies. In other words, it must be able to innovate its actions in relation to the long-term goals of CR 2030. Therefore, it is not only small improvements, optimisations (enhancement-oriented innovation), and focused efforts towards a long-term objective (mission-oriented innovation) that are desirable. Other factors include the ability to adapt flexibly to ongoing change (adaptive innovation), and especially the ability to work with various future development scenarios and different types of relationships and the ability to switch between them (anticipatory innovation).

A system of support for innovation in policy-making that would turn the organisational culture of public administration into an innovative culture does not yet exist. Instead, there are isolated areas of positive development. It is not yet possible to argue that public administration has changed in this sense. The system allows for and to some extent supports optimisation, but it is not conducive to more fundamental innovations. Experimental approaches are not a regular part of public policy-making; policies are seldom genuinely tested, and any such testing is not initiated by political representatives. Piloting is more common, but not the rule. Nor is deliberation on public policies a regular practice everywhere it would be appropriate; in a thorough form, it is practically non-existent. There are some systemic opportunities for engagement, but generally, participation is made possible rather than actively encouraged.

26.1 A system to support innovations in the policy-making process will be developed

Even the best innovative solutions – changes to policy or certain aspects of its preparation or implementation that increase the effectiveness of the policy, or its fairness, cost-effectiveness, etc. – will have only limited practical significance if they end up as one-off experiments. Public administration in the Czech Republic must be an environment that encourages innovation, easily facilitates it, and uses successful innovations to transform policies and its own functioning.

Today's public administration is not such an environment, and this has not changed since 2017. It is certainly not so in the European context. Since 2007, the European Public Sector Award (EPSA) competition has been held every two years with the aim of promoting innovative trends and success in this area. There has usually been only one application from the Czech Republic, compared to a total number of applications in the competition ranging from 150 to 250. No Czech project has ever won in any category, nor has any been nominated, and only rarely has a project been included among the 30–60 projects labelled as best practice. The last project the Czech Republic submitted to the competition was the eRecept application, which certainly shows progress in the Czech context but focuses more on the digitalisation of an existing form, and this approach is more of a standard in the European context.[727] In the OECD Observatory of Public Sector Innovation database, no Czech project was listed until 2018, and the one that appeared there in 2020, NODC, is certainly a commendable effort, but again, it does not constitute a particularly innovative approach.[728] While, of course, it is not about winning, the information provided shows that the Czech field of innovation is still far apart from the European environment. It also shows that there is not enough innovation pressure in the Czech Republic to create the possibility of, or even generate interest in, comparing innovations with those in other countries.

At first glance, a different picture is painted by the Ministry of the Interior's monitoring, which since 2020 has shown the proportion of central state administration bodies that have implemented

[727] Indicator 26.1.2
[728] Indicator 26.1.1

innovative solutions. In 2021, more than half of the organisations had done so,[729] which looks very promising. A closer look, provided by a parallel analysis conducted by the Ministry of the Interior – covering public administration as a whole, not only central public administration – generally confirms this information, and at local government level it captures an even greater degree of innovativeness. However, it also shows that most innovations involve taking a solution that already works elsewhere and tweaking a certain element. The second largest group is adaptation to a change of setting, typically associated with digitalisation. Common denominators are reactivity, relative certainty, and a process of improvement that essentially maintains the status quo. In contrast, innovations that would focus on the future, change the logic of how the system or its part works, or deal with the uncertainty of complex situations – innovations requiring vision, time, resources, and experimentation, i.e. what the OECD terms mission-oriented and anticipatory innovations – are rare in Czech public administration.[730] This underscores how Czech public administration currently favours optimisation – although the newer OECD typology also calls them innovations of their kind and there is no doubt that they can also be positive – rather than more fundamental innovations.

Where there was already systemic support for innovations before 2017, this support continues, especially within the framework of the social innovation calls under the Operational Programme Employment, managed by the Ministry of Labour and Social Affairs. Today, few people will be unfamiliar with the concept of housing first as a solution to the accumulated social problems of homeless people, but fewer still will know that it was experimentally tested in Brno as part of social innovation project. Support for its deployment in many other Czech towns is still part of the activities under Priority 2 of the Operational Programme Employment+ (2021–2027). However, one issue is that the support relies on EU funds, which means it is time-limited and will likely decrease rather than increase in the long term. Public administration institutions themselves do not create any special budget items dedicated to policy innovations and their experimental testing.

Efforts have been plain to see in recent years. The current public administration development strategy from 2021[731] has "an innovation-friendly environment" as one of its goals. In 2022, the Ministry of the Interior reinstated the Innovation Working Group and is trying to make it a catalyst for innovative activities, although the plan to create an innovation laboratory (policy lab)[732] has not come to fruition. In 2019, the Czech Republic endorsed the OECD Declaration on Innovation,[733] in 2020, it supported the EU Council's conclusions on the use of experiments in regulation making,[734] and in 2021, it supported the OECD declaration encouraging, among other things, the use of behavioural approaches and more complex forms of innovation.[735] Since 2021, the Ministry of Industry and Trade, in its pursuit of the RIS3 strategy and in cooperation with the European Commission, or more specifically the JRC, has been working to launch the Czech version of *mission-oriented innovations*, i.e. coordinating and reorienting research funded from public sector sources towards several specific societal challenges. Public administration is also turning its attention to artificial intelligence and its potential use in policy-making or service provision. *The National Artificial Intelligence Strategy of the Czech Republic 2019–2035* set short-term goals, including proposals for pilot projects using AI in public administration and health care. However projects (in health care) have yet to be launched.[736] A recent analysis by the Ministry of the Interior on the use of AI in public administration mentions a few early cases – such as the Ministry of Health's chatbot, the Karel robot in the Moravian-Silesian Region, the Prague 8

[729] Indicator 26.1.3

[730] MoI (2022) *Analytical Evaluation of the Public Policy Innovation System.*

[731] MoI (2020) *Client-Oriented Public Administration 2030*, Objective 2.5.

[732] MoEYS, Research, Development and Innovation Council (2020) *National Research, Development, and Innovation Policy of the Czech Republic 2021+,* Measure 26.

[733] OECD (2019) *OECD Declaration on Public Sector Innovation*.

[734] EU (2020) *Council conclusions on Regulatory sandboxes and experimentation clauses as tools for an innovation-friendly, future-proof and resilient regulatory framework that masters disruptive challenges in the digital age.*

[735] OECD (2022) *Declaration on Building Trust and Reinforcing Democracy*

[736] MoIT (2023) *Information on the Implementation and Update of the National Artificial Intelligence Strategy of the Czech Republic,* p. 25.

building authority chatbot – but the overall conclusion is that the Czech Republic is still taking its first steps, even when it comes to "weak" AI or robotic process automation, let alone "deep" AI.[737]

Although innovations are taking place and in recent years there has been both greater interest and real steps in the desired direction, it cannot yet be said that the system of innovation support has advanced or that the environment has changed. Public administration is a setting that is geared more towards optimisation than fundamental innovations.

26.2 Piloting will become integrated into the policy-making wherever suitable – depending on the nature of the policy

However, this is not just about a system that will support innovations, although that is the most significant aspect. Another factor is the expansion of certain specific procedures. One of these is testing the effects of proposed policies in real-life settings with real stakeholders – this procedure should be the rule, not the exception. While it is true that neither experimental design nor modern behavioural approaches (such as nudge theory) will simply tell us if this works, they can help us to avoid overestimating the effect of a certain solution and can pre-emptively identify problems that the solution under consideration might have. They are useful for checking certain assumptions and finding dead ends. Testing solutions on smaller samples – whether in experimental design or even simple case studies – is certainly a better approach than implementing a certain solution across the board, however well-intentioned, and then waiting to see what happens. Testing on smaller samples helps to prevent damage and should be viewed as a tool for the economic use of public funds.

In this context, it is worth highlighting behavioural approaches. With their focus on small changes with potentially large effects – large in comparison to the smallness of the change – they can fit well into the existing approach to innovation, which only allows for small, low-cost changes. However, it is important to avoid the belief that these approaches can largely replace conventional policy instruments such as regulation or resource allocation as a form of solution. Their focus on existing interests, viewing existing preferences as a given, and only steering them, is a limitation wherever systemic change is needed, accompanied by a change in thinking. Even in these cases, however, behavioural approaches can be beneficial, as they may not bring about change per se, but allow us to "experience" a new perspective and encourage a shift in thinking.

Experimental testing, especially randomized control trial, is not carried out at ministries at all.[738] Away from ministries, examples can be found (e.g. a Prison Service project from 2019-23 that uses the *Good Lives Model* app to reduce the risk of violent behaviour and reoffending among those convicted of violent crimes), but these are exceptional. The *regulatory sandbox* is a tool which the Czech Republic has declared that it is open to,[739] but has not yet used. The only steps that go at least partly in this direction and are embedded in Component 1.4 of the *National Recovery Plan (NRP)* will be taken in 2024-25. Piloting as a gradual launching of policy with a space for small modifications is occasionally carried out – one example is *e-Legislation* – but it is not a true experiment, as it is accepted that the solution will eventually be implemented in more or less its original form. Such procedures are certainly better than implementing without any preparatory phase, but they do not make full use of the potential that testing offers. Therefore, piloting itself no longer seems like a sufficiently ambitious objective, and efforts should be directed instead towards genuine experimental testing. Piloting will probably continue to expand spontaneously and does not require its own specific objective.

Experimental approaches are not a regular part of public policy-making; policies are seldom genuinely tested, and any such testing is not initiated by political representatives. Piloting is more common, but not the rule.

[737] MoI (2023) *Analysis and Utilisation of the Potential of Automation and Artificial Intelligence in Public Administration Agendas (Draft).*

[738] Indicator 26.2.1

[739] EU (2020) Council conclusions on Regulatory sandboxes and experimentation clauses as tools for an innovation-friendly, future-proof and resilient regulatory framework that masters disruptive challenges in the digital age.

26.3 Deliberation of public policies will become the norm wherever appropriate, depending on the nature of the policy

The second major group of approaches that should be widespread rather than the exception in policy-making is deliberative approaches. More than at present, genuine deliberation should be cultivated, i.e. a form of discussion in which the participating parties try to justify their positions by presenting arguments. The main functions of deliberation in public policy are to describe a certain topic from different perspectives, agree on whether the topic is a problem to be solved, consider various solutions, and find the broadest support for the final form of the solution. For public administration, this is one of the few ways to get an idea of the perspective of policy beneficiaries with the highest level of specificity (human-centred design). Deliberation is a two-way process – we explain our position and try to understand the position of others, and as a result, the original opinion may be changed. Deliberation is neither just information nor tokenism, but a real dialogue and form of real common policy-making.

Public participation in general is also important for policy-making, and it should be encouraged even in its simpler forms. However, the Czech Republic has not yet worked with any unified definition of public participation and does not coordinate public participation support at the level of public administration as a whole. Public participation – when it happens – is mostly confined to the activities of individual organisations, and there are no common, centrally functioning tools, such as consultation portals or competence centres.[740]

Certain opportunities for participation in the policy-making process are already enshrined government resolutions, which may explain the seemingly very positive picture suggesting that over 70% of central government authorities, according to their own claims, use a tool of public participation.[741]

Public consultations are a mandatory part of legislative making, i.e. the regulatory impact assessment (RIA) process. However, these really are consultations, not co-decision-making, and they mostly involve consultations with the "usual suspects" from existing working groups and networks, i.e. those who have long had the greatest capacity to influence the process. These tend to be stronger interest groups, rarely individuals. Tools that could facilitate consultation mechanisms within RIA and thus open them up more in practice, such as the development of a consultation portal for the entire public administration[742] – a solution corresponding to the EU portal and recommended by the OECD[743] – are still just an idea that has not even begun to materialise, let alone deliver results.

The second formally enshrined mechanism – interministerial comment procedures – are similar in character and offer even more limited representation, i.e. they are open to a smaller circle of non-state stakeholders. Although there is now an experimental attempt to include a new stakeholder,[744] an umbrella non-governmental organisation from the environmental sector, efforts to open up the comment procedure beyond those stakeholders traditionally included met with very strong resistance when the implementation plan was approved. From a deliberative perspective, another problem is that this is a mechanism for the later stages of policy preparation, and although it can serve well for minor changes or a certain form of vetoing, it is difficult to use for co-creation.

Certain forms of policy-making allow public engagement and codify this by law. However, this only concerns the specific environmental dimension of certain plans (EIA) and concepts (SEA), and participation relates only to a certain group of the public – no one is actively invited to participate, and there is no opportunity for discussion. Overall, EIAs and SEAs can hardly be considered deliberation.

---

[740] OECD (2023) *Public Governance Reviews: Czech Republic.*

[741] MoI (2022) *Public Administration in the Czech Republic – Annual Report on the Status of Public Administration*, Annex 1 Evaluation and Measurement of Public Administration for 2021, p. 15.

[742] *Second Implementation Plan for the Strategic Framework Czech Republic 2030 (for 2023–25)*, Measure 27.1.a.

[743] OECD (2023) *Public Governance Reviews: Czech Republic*, recommendations, p. 189.

[744] *Second Implementation Plan for the Strategic Framework Czech Republic 2030 (for 2023–25)*, Measure 27.1.b.

Public participation is also recommended in the making of strategic documents, and here it could take the form of deliberation; however, collaboration with the public is one of the greatest weaknesses in the preparation of strategies. Past efforts – such as the creation of *CR 2030* in 2016–17 and the creation of the *Strategy for the Education Policy of the Czech Republic up to 2030+* in 2019–20 – are few and far between.

Public participation is not yet systematically coordinated in the Czech Republic. The Czech Republic does not yet have a unified definition of citizen participation and has not created a body or authority at national level to systematically deal with and coordinate it. A central participation portal and expert centre for civic participation, which would provide technical tools and methodological guidance, could help to improve engagement mechanisms.[745]

Regarding the goal 26.3, the "mini-public" discussion format - discussion forums based on random selection, usually according to demographic criteria and typically for symbolic compensation, with experts also participating, organised or facilitated by skilled staff - is particularly desirable. However, such forms of deliberation are not found in domestic public administration. The only case in recent years was an activity in which domestic public administration was involved, but was not the main organiser. This was the Conference on the Future of Europe in 2021–22.[746] Panel and plenary sessions were organised by the three main EU institutions (the European Commission, the European Parliament, and the Council of the EU). In the national part, which was intended to serve as preparation for the pan-European part, the Czech Republic opted for simple round tables which, while regional, showed no interest in the structure or number of participants.

Under certain conditions, permanent advisory bodies to the government, usually called government councils, can also play a deliberative role. The methodology prepared in 2022 for NGO engagement[747] shifts thinking about the role of these councils in the right direction. However, while there are relatively many such advisory bodies, their functioning and relevance to policy-making vary.[748] Until these advisory bodies are evaluated from this perspective, little can be said about their deliberative function.

In general, public administration doesn´t know how to deal with public participation and, more importantly, how to make the most effective use of it. While a consultation manual for public participation has existed since 2010, it has not been utilised, nor has the Ministry of the Interior ever actively promoted it. Furthermore, the document is generally focused on participation, with only limited space for more complex deliberative processes. In 2023, the MoI prepared a methodological document for the implementation of more complex methods, such as hackathons or world cafés,[749] but the effectiveness of this will only be assessable in the future. Efforts to set up a competence centre for participation[750] – which could resemble a similar organisation within the European Commission, as recommended by the OECD[751] – are recent, and it is not yet clear whether they will gain support.

Within the policy-making system, there are opportunities for participation, but these are enabled rather than actively encouraged, and most commonly take the form of consultations using simple methods. The deliberation of public policies is not widespread and, to all intents and purposes, is inconsistent.

[745] OECD (2023) *Public Governance Reviews: Czech Republic.*

[746] *EU Conference on the Future of Europe*. Available here.

[747] Government Office (2022) *Methodology for the Participation of Non-Governmental Organisations in Advisory and Working Bodies and in the Creation of Public Administration Documents.*

[748] OECD (2023) *Public Governance Reviews: Czech Republic*, chapter: Centre-of-government-led Coordination Capacity in the Czech Republic.

[749] MoI (2020) *Client-Oriented Public Administration 2030*, Objective 5.5.2; MoI (2023) *Methodological Application of Less Traditional Instruments of Participation in Public Administration.*

[750] Government Office proposal in the framework of the ICP on the NRP, May 2023.

[751] OECD (2023) *Public Governance Reviews: Czech Republic*, recommendations, p. 93.

27 The quality of governance has improved from the perspective of public policy beneficiaries.

Public policies take shape in various forms – through regulations, the allocation of financial resources, public administration activities, interpretations, and the framing of all the above. While goals 23 to 26 focus primarily on the manner in which policies are made and rolled out, Objective 27 was intended to embody the core principle that should guide the content of these policies – not in a general sense (this purpose is served by the goals of other focal areas) – but in topics directly related to the form of governance.

However, the objective was clearly not understandable enough, and its scope proved to be too abstract and overly broad. From the perspective of public administration, it was not clear what was specifically or primarily being asked for within this goal. This resulted, to some degree, in complete passivity, and gave rise to activities that did not reflect the pursuit of the objective, but were retrospectively assigned to it. There was no concentrated effort in any particular direction, which also caused issues during the evaluation process. Therefore, Objective 27 has not been evaluated this time. Its specific goals first need to be clarified as part of the update. Even so, it should still aim to strengthen the democratic nature and long-term effectiveness of governance.

Additional information relevant to the update of Good Governance

Public Governance Review Czech Republic

In 2022–2023, the OECD prepared an extensive review of the state of public administration for the Czech Republic (*Public Governance Review*).[752] For FA6, the chapters dedicated to supporting citizen and stakeholder engagement, centre-of-government coordination capacities, and evidence-informed decision-making are particularly relevant. From a basic perspective, this review does not differ from CR 2030, but it does lead to more specific examples and recommendations in some areas, such as a central interactive portal for consultations, a competence centre to support participation, the systematic interlinking of strategies and financial resources, the establishment of central analytical and strategic units at the Office of the Government (ÚV), and the strengthening of analytical capacities at ministries. Specifically in relation to CR 2030, it is recommended that strategies be regularly reviewed to ensure alignment with CR 2030, that advisory councils for horizontal priorities (the GCSD) be moved to the Office of the Government, and that RIA processes be adapted to reflect long-term societal challenges (e.g. sustainable development, climate change, innovation, and just digital transformation).

Foresight activities

In the period just gone, three foresight activities relevant to the topic of good governance were carried out.

In 2020–2021, the Office of the Government commissioned the creation and testing of a methodology to identify megatrends and major societal challenges.[753] This resulted in the pilot use of a set of maps covering currently identified megatrends and challenges. Two of the five areas of greatest importance were relevant to FA6: *Democracy and Governance*, and *Digitalisation, AI, and Automation*.

For the first mentioned topic, the current form of *CR 2030* already addresses most of the recommendations – specifically the potential solutions based on anticipated impacts (increasing participatory elements in liberal democracy, the strengthening of experiences with democratic processes, including education, deliberative forms of discussion with the public, closer cooperation with the academic/scientific community, transparency in decision-making). Digitalisation, AI, and automation are also already included in *CR 2030*, but not in their entirety or

[752] OECD (2023) *Public Governance Reviews: Czech Republic - Towards a More Modern and Effective Public Administration*.

[753] Government Office (2021) *FUTURE-PRO: Megatrends and major societal challenges relevant to the Czech Republic*, Output 2; Maps of megatrends and major societal challenges, separate annex to Output 2.

in depth. The issues of AI, cybersecurity, and the regulatory framework for societal challenges of digitalisation are not explicitly addressed, but their inclusion would be beneficial.

For the purposes of updating CR 2030, a foresight study[754] was conducted to uncover potential gaps in the current strategic framework. For FA6, four groups of challenges and expected impacts, threats, and opportunities were identified: Digitalisation and e-Government Development, Informed Governance and Consultation Processes, Militarisation of the State, Society and Economy, and Radicalisation and Political Violence.

The first two groups are already present in the current form of *CR 2030* in the manner recommended by the study, although digitalisation expectations might be better transferred to a specific objective. The group associated with the potential militarisation of the state, society, and economy is not yet explicitly mentioned in FA6; it could be integrated into the broader concept of security. The issue of radicalisation and political violence is not currently addressed in *CR 2030* using the terms populism and radicalisation, but factors weakening the legitimacy of governance were taken into account in the preparation of the current version of *CR 2030*. For certain aspects, *CR 2030* could undoubtedly be more specific (e.g. the adaptation of public debate to new risks associated with technology, such as the use of algorithms, bots, echo chambers, disinformation; consideration could also be given to creating a separate specific objective concerning public debate – whether generally or in relation to public service media).

Finally, the Ministry of the Interior prepared a final evaluation of the *Strategic Framework for Public Administration Development*, which was in place from 2014 to 2020. One part of the evaluation – intended primarily to verify whether this strategic framework, i.e. the subsequent strategy for public administration development up to 2030, adequately addresses problem areas – was a cluster analysis to identify the difference between its focus and contemporary scientific discussion.[755] This gave rise to recommendations to place a greater emphasis on topics such as the effectiveness of public administration (effectiveness, efficiency, economy), combating corruption, knowledge/innovation management, and evidence-based decision-making. None of these topics is overlooked in *CR 2030*.

Security Strategy; the relationship between security and sustainability

In 2023, the *Czech Security Strategy* was updated. It reflects both the current developments related to Russia's aggression against Ukraine and shifts in security thinking within the EU[756] and NATO.[757] Security is given a dimension that includes not only military, but also social, economic, and environmental aspects. The strategy also promises to remain aligned with *CR 2030*.

For the purposes of updating *CR 2030*, a study was carried out on the relationship between sustainable development and security, based primarily on contemporary expert discussions.[758] For the update of FA6, the concept of transformative resilience is particularly relevant – that is, the idea that overcoming a crisis does not just mean returning to the starting point, but primarily involves the ability to learn and move to a qualitatively higher level in approaching the issue – and a warning against the securitisation of issues, which should always be prevented by the search for deeper substantive causes of problems, and by attention to the democratic control of processes.

[754] *MoEnv, MoRD, České priority* (2023) *Climate and Societal Scenarios for the Development of the Czech Republic: Foresight Study for the Update of CR 2030*. Specific results for FA6, pp. 29–32.

[755] MoI (2023) *Final Evaluation Report of the Strategic Framework for Public Administration Development for 2014–2020*, Annex 2 Cluster Analysis of Bibliometric Data on Modern Public Administration Themes, Version 2.

[756] EU (2022) *A Strategic Compass for Security and Defence*.

[757] NATO (2022) *Strategic Concept.*

[758] MoEnv, Association for International Affairs (Baroň, M., Kolínský O., Jungwirth Březovská R.) (2023) *Security and Sustainability in the Czech Republic: Threats, Challenges, Dilemmas.*

Policy coherence for sustainable development

The *2030 Agenda* not only sets substantive goals (SDGs), but also presents the Czech Republic with the practical challenge of how to achieve these goals process-wise – by removing or mitigating contradictory tendencies/policies – or, more generally, how to ensure that the perspective of sustainable development permeates the very process of policy-making. The Czech Republic draws its basic inspiration from the EU's efforts centred around the *Better Regulation* programme and policy coherence for development (PCD), as well as the OECD's practical development of the concept of policy coherence for sustainable development (PCSD).

In order for *CR 2030* to be approved, individual aspects of policy coherence for sustainable development had to be grasped. Therefore, from 2020 to 2023, the Ministry of the Environment focused on three areas.

The first was coordination directly related to the *CR 2030* as defined by a government resolution.[759] At the turn of 2019, ministries established focal points responsible for the internal and interministerial coordination of the agenda. The network is functional, although its stability has been repeatedly disrupted by personnel changes, adjustments to systematisation, and the associated shifting of agendas or reductions in capacities. The existence of the network helped to expand awareness of the role of *CR 2030* across public administration, and in some cases, simply to raise awareness of this framework at all. It proved efficient to coordinate the making of implementation plans and the evaluation of *CR 2030* through this network. It is also a way to wield a certain degree of influence over the strategic work of ministries. However, experience has shown the limitations of this approach when it comes to monitoring policy coherence. Focal points usually lack capacity and functional tools, and, in some cases, approach the role in a purely formal manner. Therefore, effective coordination of the day-to-day process of policy-making and implementation within ministries cannot be ensured in this way, not to mention coordination among ministries.[760] In the period ahead, the Ministry of the Environment plans to intensify the activities of the focal points network, or at least offer a "multi-speed" model of cooperation, in which more frequent communication, meetings, and longer-term planning of coordination can take place for those interested.

However, this does not address the fundamental problem of coherence, i.e. the fact that true coherence cannot be effectively ensured from a single location (within a ministry or across public administration). This is more than a capacity problem; it is also a conceptual issue. Given the number of issues being addressed by public administration simultaneously and continuously, any such assessment of coherence would become severely outdated even during its preparation, and actions based on it would be taken in a situation very different from the one that led to their proposal. A one-off assessment is meaningful if it concerns long-term procedural processes, or if long-term trends are evaluated for content, and we are operating at a higher level of generality, for example, in terms of strategies. On the other hand, it is very limited if it concerns the details of substantive issues. For this purpose, it is necessary for the perspective of sustainable development to become part of public administration's daily activities, mechanisms designed to assess the impact of public policies that function automatically and autonomously, without the need for repeated prompts from the Ministry of the Environment, and independently of the aforementioned focal points network.

This is the second area of focus. Here, Ministry of Environment prepared a guide for regulatory impact assessment (RIA) authors,[761] showing how to appropriately and feasibly work with the perspective of sustainable development in terms of content, principles, and tools. Referencing that guide, authors should always consider what principles and tools can be used for a specific assessment, whether the proposed solution conflicts with any of the SDGs (and if so, efforts

[759] *Government Resolution No 669 of 17 October 2018 on the Implementation Plan for the Strategic Framework Czech Republic 2030.*

[760] MoEnv (2023) *Questionnaire Survey on the Use of CR 2030 at Ministries*; information shared by ministries during online information sessions in spring 2023.

[761] MoEnv (2023) *Guide to the Integration of Sustainable Development in Regulatory Impact Assessments (RIAs)*. See here.

should be made to bring the solution into alignment); if negative impacts on any of the SDGs persist, they should explicitly point this out and leave the matter to political decision-making.

In 2023, the guide was tested on a smaller sample, and the plan was discussed with RIA authors from individual ministries. Further testing is planned as part of the TSI project, and some details may be modified following the update to *CR 2030*. The final version of the guide is expected to be completed by 2025, when it should also be formally incorporated into all official processes.

The ex-post evaluation of policy coherence in relation to the goals of *CR 2030* was also experimentally tested. A new type of "bottom-up" information was expected. This would supplement the data obtained from ministries, as well as statistical and administrative data. Several life situations were defined, determined by combinations of several *CR 2030* goals – so that coherence and not just sectoral impacts could be assessed – and structured from the perspective of beneficiaries. The core of the process was qualitative sociological research, i.e. research based on direct contact with people. However, it turned out that most respondents were not only unable to mentally grasp certain topics in their entirety – which was expected – but were often unable to recall information that would have allowed the researchers themselves to arrive at such an understanding. Therefore, the research did not yield any fundamentally new or different findings than could have been reached through traditional evaluation methods. The research also showed that many insights could only be obtained through longer-term work, or at least by repeating the research after a longer time gap. Although there had originally been plans for the research to be repeated, the COVID-19 pandemic delayed the process to such an extent that repetition was no longer feasible.

A test was also run on the demands that such an approach would place on public administration if it were to become a permanent part of the evaluation process. It turned out that this is a demanding procedure that state administration, in the current situation, would not be able to perform alone, i.e. by drawing solely on its own resources, especially given that this would have to be a long-term activity if it were to yield the desired effect. Therefore, current efforts to consolidate public finances mean that, unfortunately, this is not a tool that could be permanently used for evaluations of *CR 2030*.

The third area of coherence is coherence in the sense of a clear link between sectoral/thematic strategies and *CR 2030*, and the subsequent related financing. An initial simple review – covering strategies that are crucial for *CR 2030 goals*, and that manage or should manage the development of key topics – was conducted in connection with the preparation of the second implementation plan for 2023–2025. Following the approval of the *CR 2030* update, strategic documents at national level will be analysed within Component 4.4 of the *NRP* in 2024–2025, and adjustments will be proposed to ensure alignment with *CR 2030* and contribute to achieving its goals; this should at least remove those documents or their parts that would contradict *CR 2030*. A by-product of this consolidation should be a reduction in the number of strategic documents and the streamlining of their structure. At the same time, the costs of achieving the goals of *CR 2030* will be analysed. That output will serve as input for a meaningful fiscal consolidation plan that does not jeopardise the achievement of long-term goals. The government is expected to make a decision on these changes no later than 2026.

Subjective evaluation of quality of life

Under in CR 2030, the pursuit of sustainable development principles is viewed through the lens of improving the quality of life for all people, without compromising the needs of future generations. The success of this intention is continuously assessed through a set of indicators and evaluations of progress made towards the goals. Another important perspective is the subjective perception of quality of life, based on survey data in several thematic areas relevant to CR 2030. The entire set of quality-of-life indicators (39 indicators) is publicly available on the sdg-data.cz platform.

Although the public believes that positive changes are occurring in several areas and subjective satisfaction with life is slightly increasing, the challenges faced by citizens of the Czech Republic are not negligible in terms of quality of life. According to a survey, one in five respondents has experienced serious financial distress over the past year, and a significant proportion of Czech households (45%) struggle to make ends meet. More than half of the respondents (55%) feel financially undervalued in the work they do. However, the majority (88%) rate their material situation positively or neutrally, and the proportion of respondents satisfied with their material conditions has slightly but steadily increased since 2015. Positive societal changes are also reflected in the fact that more citizens now rate their health positively, and trust in interpersonal relationships is on the rise. Almost all citizens (97.9%) recognise the importance of family, and an increasing number of people also value relationships beyond family ties.

The public places significant importance on addressing environmental issues, as evidenced by the number of people who consider some of the Czech Republic's ecological problems to be very serious. Nearly a quarter are dissatisfied with the state of the environment in the place where they live. However, survey data also shows that sympathy for environmental protection has its limits: only a minority are willing to pay higher prices or taxes in the interest of environmental protection. Most Czechs also reject the notion of paying extra for energy from green sources, and they are reluctant to support measures that come at an economic cost, such as higher taxes on solid fuels or increased prices for fuels, electricity, and gas. Similarly, most agree with measures to reduce air pollution, but only if they personally do not incur any financial costs.[762] Similarly, 35% of Czech respondents feel personal responsibility for climate change on Earth, while the majority (61%) do not feel personally responsible.[763]

Czechs identify waste accumulation and the pollution of the oceans and drinking water as the most significant global problems, while the operation of nuclear power plants, for example, seems to be of little concern to them. The Czech public is neutral on the country's preparedness for security threats; they do not regard the country as either well-prepared or definitely unprepared. The majority of citizens feel safe both in the Czech Republic and in their place of residence

[762] STEM, INSTITUTE 2050 (2022) *Czech (non-)transformation 2022*

The Czech public's attitude towards nature and the environment, representative study by Masaryk University 2018, available here.

[763] CVVM (2023) *Attitudes of the Czech public towards climate change on Earth – September to November 2022.* Available here.

Youth perspective

Young people make up about a third of the population. It is crucial for the long-term success of sustainable development for today's youth to engage in dialogue about current and, more importantly, future public policy issues. This applies beyond the Czech Republic, with similar efforts being made at UN and EU levels.

In cooperation with the Czech Council of Children and Youth (CCCY), the Ministry of the Environment organised four moderated focus group sessions in the spring of 2023. The aim was to select the most representative sample possible, taking into account the factors of region, field of education, and area of interest.

The first session took place physically at the Ministry of Environment on 29 March with 10 grammar school students from Prague, Brno, Havlíčkův Brod, and Uherské Hradiště.

The second session took place online on 30 March with six representatives from LAGs.

The third session was held physically at a secondary technical school in Prague on 11 April with 10 students of technical fields.

The fourth session, also on 11 April, took place online with three representatives from youth organisations (Říčany, Ostrava, Mikulov).

Each focus group session lasted for about two hours, during which participants discussed selected topics from CR 2030: inequalities, digitalisation, engagement, regions, media, climate, mental health, and work-life balance. The questions focused mainly on young people's views on future prospects, with an emphasis on the time horizon of the Strategic Framework. All participants in all groups responded very willingly, had a good understanding of the current situation surrounding some, if not all, of the mentioned topics, and the vast majority demonstrated that the current situation and how they perceive it was already influencing their medium-term decision-making. Authentic quotes that appeared during the focus group sessions are italicised below.

Inequalities (People and Society, Municipalities and Regions)

All groups mentioned various types of inequalities (gender, income, financial, and generational). However, inequalities in education, in terms of how a particular type of education influences various aspects of life, were most frequently highlighted. Other types mentioned were gender inequalities and regional inequalities.

- *Older people don't want to listen to the young, they don't give them a chance to speak or space because they don't have enough experience.*
- *School-leavers can't find work; if they have a high school diploma, but no experience, they have no chance. So, most people end up either on unemployment or use family connections.*
- *A maths teacher once told me that, as a girl, I shouldn't have an opinion on how to solve a problem, so I had to hold back from throwing a chair at him.*
- *When it comes to gender, by 2040 I hope it won't matter what gender we are, and there won't be a need to define or disadvantage anyone, it will be more important to focus on intersexual equality.*

Digitalisation (People and Society, Economic Model, Good Governance)

No group questioned the significant impact of and need to prepare for changes due to digitalisation, robotics, or artificial intelligence. Respondents view IT as an opportunity and highlight how they have noticed that these developments are often a barrier for older people around them. Digitalisation was most frequently discussed in relation to the job market, education, media, and security, both in terms of external dimensions and at an individual level. Respondents also frequently mentioned the financial cost of digitalisation (or IT in general), though they believe that digitalisation is essential.

- *Clearly, in the future, IT will be a core point for security and for the protection of citizens' rights. As everything digitalises, data will be the most valuable thing.*

- *In 20 years, shovels will be replaced by machines, no one will work with their hands. On the other hand, these machines will break down, and will be fixed by people. School taught me about 10% of what I know now. Things here stopped progressing in the 80s, even with cars. Only new or private schools are trying to keep up with technology.*
- *The state should invest in digital protection as much as it does in physical protection because wars are also moving into the digital space. Even now, Russians use disinformation and media manipulation. If 2% of GDP were channelled into state protection like this, it wouldn't be a bad idea.*

Participation (Good Governance)

In terms of participation, attitudes reflected the respondents' interests. The groups composed of representatives from LAGs or student organisations had clear anchored ideas and discussed specific problems, while students spoke about participation mainly from the perspective of their civic life. Students from vocational schools had never discussed participation, for example, in school and knew about it either from their own research or from the media or family. In general, however, all the groups pointed to the problematic functioning of public services and access to elections.

- *I would like to know more about how state administration works; a minister might talk about things, but I'm more interested in how it works behind the scenes.*
- *Office hours are awful, we had to deal with a lot of paperwork just because of a well. Ideally, communication should be online.*
- *Online voting would be great because it's often affected by things like the weather, and that's quite unfortunate. People go away for nice weather and don't vote, and instead, elderly people vote in their place.*
- *Seniors are a large voting group that political parties target, while we (young people) aren't, so nothing is promised to us, and we're not the focus.*

Regions (Municipalities and Regions)

Young people primarily view regional issues in terms of where they will live after school, where they will commute to work, and where they will start a family. Whether young people will live in the countryside or in the city depends not only on their personal values (whether they prefer nature or the city) but also on housing prices and infrastructure. At the same time, people (especially outside Prague and Brno) face problems such as uncoordinated tourism, a lack of job opportunities, or a lack of cultural identity and quality of life in the area.

- *To work somewhere in the countryside with my family, I need services, customers, schools, so the kids don't have to travel far. Good accessibility. The infrastructure is starting to be inadequate.*
- *I would like to improve this region, I don't want to stay here in the current situation, especially because of the air quality and the impact of mining, it's not for me, and there aren't enough job and educational opportunities.*
- *I wouldn't want to stay here, we're now on a par with Český Krumlov, prices are worse than in Prague, there are too many tourists, and for locals there aren't many ways to live a normal life. Culturally, it doesn't make sense, because most of the original inhabitants were displaced by Germans.*
- *The only way to bring young people back to the village is to let them work from home. (…) Only when young people return to their hometown (…), especially if they have a university degree.*
- *In the borderlands, it's not a given that we all understand each other – not just linguistically, but also mentally and culturally.*

Media (Good Governance)

Young people are aware of the risks of disinformation and think about where they get their information from. Some of them know they should verify information, but some admit they don't know which sources are reliable and when and how to verify information. As young people, they

mainly get information from social media or other internet sources; they almost never get information from television or printed sources. All respondents across groups, when asked what they think about the licence fee, agreed that public service media is necessary and that it is better to pay for it with public money rather than private money. Another important milestone is access to social media, which, while everyone uses it, respondents think children should not use it too early.

- *I need information about where to get media from, where to verify it.*
- *We get our information from Seznam, Novinky, maybe Facebook, but I don't watch Czech Television at all.*
- *Young people get social media way too early; they should have it later, maybe in high school.*
- *For me, licence fees are not a problem, and if they weren't paid, they would have to take money from somewhere else, like from wealthy owners, which isn't good.*
- *Even if the fees went up, I wouldn't mind, it's Czech Television, everyone watches it occasionally, it's one of the main sources of information and news, and I think we can easily pay extra for quality.*

Climate (Resilient Ecosystems, Economic Model)

Climate issues were one of the main topics for grammar school students and representatives of youth organisations. This is an issue they take personally and feel it is not getting enough attention. Vocational school students also perceive it, but do not really know what to think about it. They are not averse to the issue, but they lack information, and their school does not prepare them for it in any way.

- *I'd rather not think about the climate; I'm quite scared of it, I don't know, it feels sad that we're rushing towards disaster and doing too little about it.*
- *I'm afraid that we'll be restricted, like with the Green Deal, we're banning combustion engines, but then there's India, China, and they nullify that. There will be blackouts, and that will be a problem. Meanwhile, we mostly have the automative industry here.*
- *I study mechatronics and know nothing about electricity in cars. We haven't been to Škoda in Mladá Boleslav, and we will never go there.*
- *We support strategic documents (on climate), but we don't support the people who would then implement them or the experts who would help us with it. But we support a lot of strategies, and then there's no one to implement them or those who would bring them to life, and that's a big minus.*

Mental health (People and Society)

The overwhelming majority of respondents immediately connected mental health to the COVID-19 pandemic. Each experienced that period differently, but it had a big impact on all of them. They feel that mental health is a very important issue, but also one that is pushed aside nowadays, whether in schools or in the public space, and they would all like to give it more attention in the future.

- *For me, basic psychology and behaviour should be taught in every school. We had a supply teacher who motivated us from his life experience, telling us what to do. He said these are hard times, and once we're done, we'll be able to do whatever we want, but some teachers, on the other hand, demotivate us and say how dumb we are and that we won't finish school.*
- *For me, this is related to the school reform; for young people, stress and depression are caused by the poorly set-up school system.*
- *Our PE teacher is also the school psychologist, and I can't imagine going to him with any issues, even if I had any.*
- *Our form teacher called the students during COVID, asked how we were coping, and took care of us. It was nice to see that she wasn't just there as a symbol, but that she cared.*

- *Mental health should be discussed everywhere, openly, and normally.*

Work-life balance (People and Society)

Most respondents linked the work-life balance mainly to the amount of work and family care. Some mentioned that they are planning the number of children based on their financial possibilities and support systems. Women and men alike thought about the possibilities of child care in relation to work.

- *I plan to have just one child at most, and even then, I'll need two or three jobs to support them.*
- *I'm afraid that when I want to go on maternity leave, I won't know how to return to work and keep my job.*
- *I'm 19, and I can't imagine how I'll buy a home. I'll be lucky if I can rent a studio for twenty thousand.*
- *No one wants a child who won't have anything to eat.*
- *I don't know how to be with a child and not lose my rhythm, and not send them straight to daycare. What would have to happen for me not to be afraid of these problems?*

Conclusion

Focus groups with young people were used to verify the relevance of certain topics for *CR 2030*. According to the focus group respondents, all the selected topics (inequality, digitalisation, participation, regions, media, climate, mental health, and work-life balance) are relevant. This exercise also showed that young people are interested in participating in social, economic, and political life, but they sometimes feel that the public or political representatives are not interested in their opinions. Related to this is the prioritisation of topics. Young people see the importance and urgency of addressing issues somewhat differently than the political representatives or how they are dealt with in public debate. First, they are more interested in topics that can affect society in the medium- to long-term horizon, which is logical given their outlook, but this is precisely what the political representatives struggle to communicate and advocate. Secondly, similar to the perspective of young people on a European level, in the Czech Republic, climate change and sustainability in general are much more prominent topics for young people. They are also concerned about rising housing costs and the underestimation of IT security at national and international levels.

Overview of work on the current implementation plan for 2023–2025

A separate table (Annex 1) contains information on tangible progress in measures under the implementation plan over the first year of implementation (September 2022 – September 2023). The assessment therefore only has two basic forms: specific tangible progress (green shading) and no specific tangible progress or marginal progress (red shading).

The assessment monitors the implementation of measures, i.e. the work done, efforts made, and outputs, not the results. The results will be evaluated in the next evaluation report (Third Report on Quality of Life and Its Sustainability).

For approximately half of the measures – especially those that are particularly important – there was hardly any progress during the first year of the plan.

The fact that measures are not yet fully implemented at this stage should not be seen as a problem. Attention should, however, focus on cases where implementation is still in its early stages after a year. There may be good reasons for this (e.g. interlinking with other activities for better results), but it could also be due to factors that could jeopardise the future fulfilment of the measures (e.g. capacity problems, interministerial coordination issues, etc.). Failure by political representatives to heed these factors could ultimately lead to the measures not being implemented at all, even though the government approved them.

List of abbreviations

AAAA	Addis Ababa Action Agenda
AI	Artificial intelligence
AK ČR	Association of Regions of the Czech Republic
AMO	Association for International Affairs
AMSP ČR	Association of Small and Medium-sized Enterprises and Crafts of the Czech Republic
AOPK	Nature Conservation Agency
AP	Action plan
APK	Crime Prevention Assistant
APZ	Active employment policy
CAS	Academy of Sciences of the Czech Republic
BEPS	Base erosion and profit shifting
BETA	Programme of the Technology Agency of the Czech Republic
BEF	Battery electric fuels
CAF 2020	Common Assessment Framework
CDV	Transport Research Centre
CENIA	Czech Environmental Information Agency
CERGE	A joint workplace of the Centre for Economic Research and Graduate Education of Charles University and the Economics Institute of the Czech Academy of Sciences
CLLD	Community-led local development
CNG/LNG	Compressed and liquefied natural gas
CO_2	Carbon dioxide
COVAX	Covid-19 Vaccines Global Access
CSR	Corporate social responsibility
CSRD	Non-financial Reporting Directive
CVVM	Public Opinion Research Centre
ČEPS	Česká elektroenergetická přenosová soustava (Czech electricity transmission system)
ČKAIT	Czech Chamber of Authorised Engineers and Technicians Active in Construction
ČMZRB	Českomoravská záruční a rozvojová banka (National Development Bank)
CNB	Czech National Bank
WWTP	Wastewater treatment plant
CR	Czech Republic
CR 2030	Strategic Framework Czech Republic 2030
ČSO	Czech Society for Ornithology
CZSO	Czech Statistical Office
ČŠI	Czech School Inspectorate
DAC	Development Assistance Committee
DAO	Decentralised autonomous organisation
DAP	EU Policy Database

Datlab	Company specialising in data acquisition, processing, and analysis
DDoS	Distributed denial of service
DIA	Digital and Information Agency
DNSH	Do No Significant Harm
VAT	Value added tax
DSO	Voluntary association of municipalities
GAEC	Good agricultural and environmental condition of the soil
ECOSOC	United Nations Economic and Social Council
EENS	Expected energy not supplied
EET	Electronic sales registration
EFEKT	Programme of the Ministry of Industry and Trade
EEA	European Economic Area
EIA	Environmental impact assessment
Commission	European Commission
eKLEP	Electronic Library of the Legislative Process
EKO-KOM	Company collecting and recycling packaging waste
ENS	Energy not supplied
EPSA	European Public Sector Award
EPSO	European Personnel Selection Office
EC	European Council
ERC	European Research Council
ERO	Energy Regulatory Office
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESPON	European Spatial Planning Observation Network, a research programme that supports spatial planning and regional development
EU	European Union
EU ETS	EU Emissions Trading System
PS	Photovoltaic system
GBARD	Government budget allocations for research and development
GERD	Gross domestic expenditure on research and development
GIS	Geographic information system
GPG	Gender pay gap
EGD	Education for global development
GDP	Gross domestic product
HLPF	High-level political forum
HLY	Healthy life years
GNI	Gross national income
ESVA	Economically and socially vulnerable area
CHKO	Protected landscape area

ICBP	Food Safety Information Centre
ICT	Information and communication technology
IDEA	Institute for Democracy and Economic Analysis
ILO	International Labour Organisation
ITDP	Integrated territorial development plan
IPSOS	Research agency
IROP	Integrated Regional Operational Programme
EOZPF IS	Agricultural Land Removals Register Information System
ISA+	Information System on School Leavers' Career Outcomes
ITI	Integrated territorial investment
JRC	Joint Research Centre
CI	Critical infrastructure
CCI	Cultural and creative industry
FA	Focal area
KOVES	Client-oriented Public Administration 2030
LGBTI+	Minority movement with non-majority sexual orientation
LIFE	The EU's funding instrument for the environment and climate action
LLD	Loss of load duration
LNG	Liquefied natural gas
LOLE	Loss of load expectation
LPIS	Public Land Register
LULC	Land use and land cover
LULUCF	Land use, land-use change and forestry
LAG	Local action group
Mbit/s	Megabits per second
MoT	Ministry of Transport of the Czech Republic
IO	International organisation
MoF	Ministry of Finance
UPT	Urban public transport
MHMP	Prague City Hall
MoC	Ministry of Culture
MoRD	Ministry of Regional Development
MoIT	Ministry of Industry and Trade
ICP	Interministerial comment procedure
MoLSA	Ministry of Labour and Social Affairs
SMEs	Small and medium-sized enterprises
MoEYS	Ministry of Education, Youth and Sports
UHI	Urban heat island
MUNI-ECON	Faculty of Economics and Administration, Masaryk University

MoI	Ministry of the Interior
MoH	Ministry of Health
MoA	Ministry of Agriculture
MoEnv	Ministry of the Environment
NAP CM	National Action Plan for Clean Mobility
NAP	National Architectural Plan
NAP CC	National Action Plan for Adaptation to Climate Change
NAP CM	National Action Plan for Clean Mobility
NAP SG	National Action Plan for Smart Grids
NATO	North Atlantic Organisation
NCP	Noise Control Programme
NBD	National Brownfields Database
NDICI-Global Europe	Neighbourhood, Development and International Cooperation Instrument (NDICI) – Global Europe
NEPT	National Experts in Professional Training
NGA	New generation access network
NODC	National Open Data Catalogue
SAO	Supreme Audit Office
NGO	Non-governmental organisations
NPI	National Pedagogy Institute
NPI CR	National Pedagogy Institute of the Czech Republic
NRP	National Recovery Plan
NNRP	National Nature Recovery Plan
NEP	National Environment Programme
NRQ	National Register of Qualifications
HCCZ	Healthy Cities, Towns and Regions of the Czech Republic
NUTS	Nomenclature of Territorial Units for Statistics
ODA	Official development assistance
OECD	Organisation for Economic Cooperation and Development
WGM	Waste generation and management
OPT	Operational Programme Transport
OPEI	Operational Programme Enterprise and Innovation
OPTAC	Operational Programme Technologies and Applications for Competitiveness
OPDRE	Operational Programme Development, Research and Education
OPEmp	Operational Programme Employment
OPEnv	Operational Programme Environment
MEP	Municipality with extended powers
UN	United Nations
OTE	Electricity market operator

RES	Renewable energy sources
PwD	Persons with disabilities
PAQ Research	Non-profit research organisation
PAYT	Pay-as-you-throw
PCD	Policy coherence for development
PCSD	Policy coherence for sustainable development
PCR	Parliament of the Czech Republic
PHEV	Plug-in hybrid electric vehicle
PISA	Programme for International Student Assessment
NFA	Natural forest area
SOM	Soil organic matter
WMP CR	Waste Management Plan of the Czech Republic
CP	Climate policy
PPP	Plant protection product
EfLP	Environment for Life Programme
RDP	Rural Development Programme
ASCWG	Analytical Services Cooperation Working Group
RE:START	Strategy for Economic Restructuring of the Ústí, Moravian-Silesian and Karlovy Vary Regions
RIA	Regulatory impact assessment
RIS3	Research and Innovation Strategy for Smart Specialisation
RRF	Recovery and Resilience Facility
FEP	Framework educational programme
GCSD	Government Council for Sustainable Development
RDIC	Research, Development and Innovation Council
RMD CR	Road and Motorway Directorate of the Czech Republic
SDG	Sustainable Development Goal
SDGs	Sustainable Development Goals (SDGs)
SEA	Strategic environmental assessment
SFTI	State Fund for Transport Infrastructure
SEF	State Environmental Fund
SEF CR	State Environmental Fund of the Czech Republic
SIA	Sustainability impact assessment
SIGMA	Programme of the Technology Agency of the Czech Republic
MMW	Mixed municipal waste
SMART cities	Smart cities
SNEs	Seconded national experts
AD MEP	Administrative district of a municipality with extended powers
BPS	Biodiversity Protection Strategy of the Czech Republic 2016–2025

SPPNL	State Programme for the Protection of Nature and the Landscape of the Czech Republic 2020–2025
SLO	State Land Office
SR	Slovak Republic
RDS	Regional development strategy
STEM	Institute of Empirical Research
STRATeduka	Training programme for analysts
SLIA	State Labour Inspection Office
SYPO	System for the Support of the Professional Development of Teachers and Headteachers
SAIF	State Agricultural Intervention Fund
CAP	Common agricultural policy
NIPH	National Institute of Public Health
TA CR	Technology Agency of the Czech Republic
TAIEX	Technical Assistance and Information Exchange
TEN-T	Trans-European transport networks
TRANS	Transition Promotion Programme
TRIO	Grant scheme
TSI	Technical support instrument
SAD	Spatial analysis data
ÚHUL	Forest Management Institute
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNOPS	United Nations Economic and Social Council
ONBC	Office of the National Budget Council
UNWTO	World Tourism Organisation
LOCR	Labour Office of the Czech Republic
USD	US Dollar
LPS	Landscape planning study
ISD	Institute for Spatial Development
GovOff	Government Office
IHIS	Institute of Health Information and Statistics
R&D	Research and development
R&D&I	Research, development and innovation
VIP II	Project for Ongoing Evaluation of School Counselling Centres
FGMRI	Forestry and Game Management Research Institute
University	Higher-education institution
RISWC	Research Institute for Soil and Water Conservation
SR&I	Science, research and innovation
WHO	World Health Organisation

WiFi	Wireless internet
WTO	World Trade Organisation
ZP	Disability
ALS	Agricultural land stock
EDC	External development cooperation
PS	Primary school
ZTP	Particularly severe disability
ZTP/P	Particularly severe disability with a guide

List of sources

Association of Regions of the Czech Republic (2014) *Metodika strategického řízení a plánování krajů ČR* (Methodology for the Strategic Management and Planning of the Regions of the Czech Republic).

Nature Conservation Agency AND T.G. MASARYK WATER RESEARCH INSTITUTE (2020) *Koncepce zprůchodnění říční sítě ČR, aktualizace 2020* (Concept of River Network Accessibility in the Czech Republic, Update 2020).

BAKOŠ, E. *ET AL.* (2021) *The perception of intermunicipal cooperation by local officials and managers*. Central European Journal of Public Policy.

BERNARD *ET AL.* (2020) *Občanská vybavenost v malých obcích* (Civic Amenities in Small Municipalities). Research Report, Institute of Sociology of the Czech Academy of Sciences.

BERNARD, J., ŠIMON, M. (2017) *Vnitřní periferie v Česku: Multidimenzionalita sociálního vyloučení ve venkovských oblastech* (Internal Peripheries in the Czech Republic: The Multidimensionality of Social Exclusion in Rural Areas). *Sociologický časopis* 53(1).

Building capacity for evidence-informed policy-making in governance and public administrations in post-pandemic Europe (2022-24, multi-country project).

CENIA (2021) *Vyhodnocení Politiky ochrany klimatu v ČR* (Evaluation of Climate Policy in the Czech Republic).

CENIA (2022) *Zpráva o životním prostředí České republiky 2021* (Report on the Environment of the Czech Republic 2021).

CENIA, Charles University Environment Centre (2020) *Evaluace Národního akčního plánu adaptace na změnu klimatu* (Evaluation of the National Action Plan for Adaptation to Climate Change).

CENIA, MoEnv (2021) *Vyhodnocení politiky ochrany klimatu v ČR* (Evaluation of Climate Policy in the Czech Republic).

CREDIT SUISSE *(2023) Global Wealth Databook.*

CVVM (2020) *Názory občanů na možnosti ovlivnit legislativní proces – únor 2020* (Citizens' Opinions on Opportunities to Influence the Legislative Process – February 2020).

CVVM (2020) *Zájem politiků o názory občanů, možnosti občanů ovlivnit veřejnou sféru a jejich pohled na respektování lidských práv – únor 2020* (Politicians' interest in citizens' opinions, citizens' ability to influence the public sphere, and their view on respect for human rights – February 2020).

ČEPS (2022) *Hodnocení zdrojové přiměřenosti elektrizační soustavy ČR do roku 2040* (Assessment of the resource adequacy of the Czech electricity grid until 2040).

Czech Society for Inclusive Education (2020).

České priority (2021) *Karty oblastí megatrendů a velkých společenských výzev* (Cards of Megatrend Areas and Major Societal Challenges).

České priority (2022) *Foresight: Metodická příručka* (Foresight: Methodological Guide).

České priority (2022) *Mapování analytické práce – výstup projektu TA ČR Podpora analytické práce ve veřejné správě 2021-23* (Mapping of analytical work – output of the Technology Agency project "Supporting Analytical Work in Public Administration 2021–23").

CZECH HYDROMETEOROLOGICAL INSTITUTE (2022) *Hydrologická ročenka České republiky 2021* (Hydrological Yearbook of the Czech Republic 2021).

Czech Hydrometeorological Institute (2023) *Znečištění ovzduší na území České republiky v roce 2022* (Air Pollution in the Czech Republic in 2022).

Czech Radio (2020) *Čím dál víc lékařů je v důchodovém věku. Potřebujeme dostat absolventy do terénu, říká ministr* (More and more doctors are at retirement age. We need to get graduates into the field, says minister).

Czech Chamber of Authorised Engineers and Technicians Active in Construction (2022) *Bezbariérové užívání staveb – základní principy přístupnosti. Technická pomůcka TP 1.4* (Barrier-Free Use of Buildings – Basic Principles of Accessibility. Technical Tool TP 1.4).

Czech National Bank (2022) *Občané Ukrajiny na českém pracovním trhu* (Ukrainian citizens in the Czech labour market).

Czech National Bank (2023) *Statistika platební bilance* (Balance of payments statistics).

Czech National Bank (2023) *Zpráva o vývoji platební bilance 2022* (Report on the Development of the Balance of Payments 2022).

Czech Statistical Office (2019) *Výběrové šetření osob se zdravotním postižením v roce 2018* (Sample Survey of Persons with Disabilities in 2018).

Czech Statistical Office (2021) *Vývoj obyvatelstva v krajích České republiky* (Population Development in the Regions of the Czech Republic).

Czech Statistical Office (2022) *Inovační aktivity podniků – 2018-2020. Analytická část* (Innovation Activities of Enterprises – 2018-2020. Analytical Section).

Czech Statistical Office (2022) *Licence na předměty průmyslového vlastnictví – 2021* (Licences on Industrial Property Items – 2021).

Czech Statistical Office (2022) *Studenti a absolventi vysokých škol v České republice (2001–2021)* (Students and Graduates of Universities in the Czech Republic 2001–2021).

Czech Statistical Office (2023) *Deficit a dluh vládních institucí – 1. čtvrtletí 2023* (Deficit and Debt of Government Institutions – 1st Quarter 2023).

Czech Statistical Office (2023) *Envirometr: Podíl objemu produkce druhotných surovin na přímém materiálovém vstupu* (Envirometr: Share of Secondary Raw Material Production Volume in Direct Material Input).

Czech Statistical Office (2023) *Informační společnost v číslech 2023* (The Information Society in Numbers 2023).

Czech Statistical Office (2023) *Kriminalita v ČR a EU 2011–2021* (Crime in the Czech Republic and the EU 2011–2021).

Czech Statistical Office (2023) *Minimální mzda* (Minimum Wage).

Czech Statistical Office (2023) *Ročník narozených 2022 je nejslabší za posledních 18 let* (2022 Cohort is the Weakest in the Last 18 Years).

Czech Statistical Office (2023) *Zaměstnanost a nezaměstnanost podle výsledků VŠPS – 4. čtvrtletí 2022* (Employment and Unemployment According to Labour Force Survey Results – 4th Quarter 2022).

Czech School Inspectorate (2023) *Mezinárodní šetření PISA 2022* (International PISA Survey 2022).

European Commission (2021) *RED II Directive*.

European Commission (2021) *Climate change impacts and adaptation in Europe, PESETA IV study,* Joint Research Centre, Seville.

European Commission (2021) *Union of Equality: Strategy for the Rights of Persons with Disabilities 2021–2030.*

European Commission (2022) *Common Agricultural Policy Strategic Plan 2023–2027.*

European Commission (2023) *Cleaner Air.*

European Commission (2023) *ESPR – Ecodesign for Sustainable Products Regulation.*

European Commission (2023) *European Green Deal.*

European Parliament (2022) *MEPs approve new rules to protect essential infrastructure.*

European Council (2022) *Top cyber threats in the EU.*

Energy Regulatory Office (2020) *Zpráva o provozu elektrizační soustavy ČR 2019* (Report on the Operation of the Czech Electricity System 2019).

ESPON (2022) *Entrepreneurial regional governance. Territorial cohesion through open innovation*.

EU (2020) *Council conclusions on Regulatory Sandboxes and Experimentation Clauses as tools for an innovation-friendly, future-proof and resilient regulatory framework that masters disruptive challenges in the digital age.*

EU (2022) *A Strategic Compass for Security and Defence.*

EU Conference on the Future of Europe.

Environmental Implementation Review (2022) Country Report - CZECHIA.

EUROSTAT (2018) Land Use / *Cover Area Frame Survey. Technical reference document* C3.

EUROSTAT (2021) *Healthy life years at age 65 by sex*.

EUROSTAT (2022) *Air emissions intensities by NACE Rev. 2 activity*.

EUROSTAT (2022) *Employment rate of adults by sex, age groups, educational attainment level, number of children and age of youngest child* (%).

EUROSTAT (2022) *EU investment in R&D increased to €328 billion in 2021.*

EUROSTAT (2022) *More men with an ICT education employed than women.*

EUROSTAT (2022) *New Eurostat R&D expenditure.*

EUROSTAT (2023) *Employment rate of adults by sex, age groups, educational attainment level, number of children and age of youngest child* (%).

Fakta o lese (2020) (Forest Facts).

FIALOVÁ, MYSÍKOVÁ (2020) *Jak může pandemie koronaviru ovlivnit chudobu v Česku? Simulace dopadů na míru příjmové chudoby* (How can the coronavirus pandemic affect poverty in the Czech Republic? Simulation of impacts on income poverty levels). In: Institute of Sociology of the Academy of Sciences of the Czech Republic.

European Institute for Gender Equality (2022) *Gender Equality Index*.

GREGORY, A.S. *ET AL.* (2015) *A review of the impacts of degradation threats on soil properties in the UK. Soil Use and Management, 31 (Suppl. 1).*

HLAVÁČ, V.; CHOBOT, K.; PEŠOUT, P.; HAVLÍČEK, J.; JEŘÁBKOVÁ, L. *ET AL.* (2021) *Ochrana biotopu vybraných zvláště chráněných druhů v územním plánování: metodika AOPK ČR* (Protection of the Habitat of Selected Specially Protected Species in Spatial Planning: Methodology of the Nature Conservation Agency of the Czech Republic). Prague: Nature Conservation Agency of the Czech Republic

Food Safety Information Centre (2023) Bezpečnost potravin (Food safety).

IDEA CERGE (2022) *Vliv pandemie na nezaměstnanost téměř odezněl* (The impact of the pandemic on unemployment has nearly subsided).

Integrated LIFE project for the Natura 2000 network in the Czech Republic (2019–2026).

Prague Institute of Planning and Development (2016) *Manuál participace: Jak zapojit veřejnost do plánování města* (Participation Manual: How to Involve the Public in Urban Planning).

IPSOS (2020) *Výzkumy pro AMSP* (Research for AMSP).

IPSOS (2021) *Výzkumy pro AMSP* (Research for AMSP).

IROZHLAS (2023) *ČEPS zaplatí miliony korun náhrad za pondělní vypnutí solárů. Elektřinu už nebylo kam poslat* (ČEPS to pay millions of crowns in compensation for Monday's solar shutdown. The electricity had nowhere to go).

KADULA, L., (May 2023) *Prezentace Aktuální stav čisté mobility v ČR a EU* (Presentation: Current Status of Clean Mobility in the Czech Republic and the EU).

KUČERA, Z. *ET AL.* (2023) *Proměny úrovně zdravotní gramotnosti v Česku mezi lety 2015 a 2020* (Changes in Health Literacy in the Czech Republic Between 2015 and 2020). *Časopis Lékařů českých.* 162: 84–92.

LANG (2022) *Sociální vyloučení v Česku: rozsah v roce 2021* (Social Exclusion in the Czech Republic: Scope in 2021).

MAIER, K. *ET AL.* (2020) *Standardy dostupnosti veřejné infrastruktury* (Standards for Public Infrastructure Accessibility). Prague: Czech Technical University.

MoT (2021) *Koncepce městské a aktivní mobility pro období 2021–2030* (Concept of Urban and Active Mobility for 2021–2030).

MoT (2021) *Dopravní politika České republiky pro období 2021–2027 s výhledem do roku 2050* (Transport Policy of the Czech Republic for 2021–2027 and Outlook up to 2050).

MoT (2022) *Dálnice D4 Projekt PPP* (Motorway D4 PPP Project).

MoF (2023) *Státní rozpočet 2023 v kostce* (State Budget 2023 in Brief).

MoC (2023) *Schválený rozpočet na rok 2023* (Approved Budget for 2023).

MoC (2023) *Státní fond kinematografie* (State Cinematography Fund).

MoRD (2020) *Rural Development Concept 2021–2027.*

MoRD (2021) *Možnosti pozitivního ovlivňování vývoje sídelní struktury nástroji územního plánování* (Opportunities for Positive Influence on Settlement Structure Development through Spatial Planning Tools).

MoRD (2021) *Tourism Development Strategy of the Czech Republic 2021–2030*.

MoRD (2022) *Centra osídlení České republiky* (Centres of Settlement in the Czech Republic).

MoRD (2022) *Hodnocení AP SRR 2021–2022 v rámci APP SRR 2023–2024* (Evaluation of the Regional Development Strategy Action Plan 2021–2022 within the scope of the Regional Development Strategy Action Plan 2023–2024).

MoRD (2022) *Zpráva o realizaci opatření Souhrnného akčního plánu RE:START za rok 2021* (Report on the Implementation of Measures under the Comprehensive Action Plan RE:START for 2021).

MoRD (2023) *Hodnocení naplňování 2. implementačního plánu CR 2030* (Evaluation of the Implementation of the Second Implementation Plan for CR 2030).

MoRD (2023) *Implementace IPRÚ z programového období 2014–2020 bude pokračovat minimálně ještě po dobu dvou let* (Implementation of integrated territorial development plans from the 2014–2020 programming period to continue for at least another two years). Source: *Informace odboru strategií a analýz regionální politiky a politiky bydlení k hodnocení ČR 2030 (Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment).*

MoRD (2023*) Informace odboru strategií a analýz regionální politiky a politiky bydlení k hodnocení ČR 2030* (Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment)*.*

MoRD (2023*) Informace odboru strategií a analýz regionální politiky a politiky bydlení k hodnocení ČR 2030* (Information from the Department of Strategies and Analyses of Regional Policy and Housing Policy relating to the CR 2030 assessment)*.*

MoRD (2023*) Informace odboru územního plánování k hodnocení ČR 2030* (Information from the Department of Spatial Planning relating to the evaluation of CR 2030).

MoRD (2023) *Spatial Development Policy of the Czech Republic.*

MoRD (2023) *Závěrečná zpráva RIA k návrhu zákona o podpoře v bydlení* (Final RIA Report on the Housing Support Bill).

MoRD, MoEnv (2016) *Metodický pokyn Zadání územní studie krajiny pro správní obvod obce s rozšířenou působností* (Methodological Guideline for the Assignment of a Landscape Planning Study for an Administrative District of a Municipality with Extended Powers).

MoIT (2022) *Zpráva o pokroku v oblasti plnění vnitrostátních cílů energetické účinnosti v ČR* (Progress Report on National Energy Efficiency Targets in the Czech Republic).

MoIT (2019) *Vnitrostátní plán České republiky v oblasti energetiky a klimatu* (National Energy and Climate Plan of the Czech Republic).

MoIT (2020) *Dlouhodobá strategie renovací na podporu renovací vnitrostátního fondu obytných a jiných než obytných budov, veřejných i soukromých* (Long-Term Renovation Strategy to Support Renovations of the National Fund for Residential and Other Buildings, Both Public and Private).

MoIT (2021) *Strategie podpory malých a středních podniků v České republice pro období 2021–2027* (Strategy for Supporting Small and Medium-sized Enterprises in the Czech Republic 2021–2027).

MoIT (2021) *Zpráva o průběžném vyhodnocení plnění Národního akčního plánu pro chytré sítě (NAP SG 2019–2030)* (Interim Evaluation Report on the Implementation of the National Action Plan for Smart Grids (NAP SG 2019–2030)).

MoIT (2022) *10. zpráva o pokroku dosaženém při plnění vnitrostátních cílů energetické účinnosti* (10th Report on Progress in Meeting National Energy Efficiency Targets).

MoIT (2022) *Evaluace a jiné analýzy* (Evaluations and Other Analyses).

MoIT (2022) *Národní výzkumná a inovační strategie pro inteligentní specializaci České republiky 2021–2027. Příloha 2. Karty Krajských RIS3 strategií* (National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027. Annex 2. Cards of Regional RIS3 Strategies).

MoIT (2022) *Výroční zpráva o kontrole vývozu vojenského materiálu, ručních zbraní pro civilní použití a zboží a technologií dvojího užití v ČR za rok 2021* (Annual Report on the Control of Military Exports, Civilian Handguns, and Dual-Use Goods and Technologies in the Czech Republic for 2021).

MoIT (2022) *Zpráva o vývoji podnikatelského prostředí v České republice v roce 2021* (Report on the Development of the Business Environment in the Czech Republic in 2021).

MoIT (2023) *Analýza vývoje ekonomiky ČR – březen 2023* (Analysis of the Economic Development of the Czech Republic – March 2023).

MoIT (2023) *Do ČR se v prvním čtvrtletí roku 2023 nedovezl žádný plyn z Ruska* (No gas imported from Russia to the Czech Republic in the first quarter of 2023).

MoIT (2023) *Informace o plnění a aktualizaci Národní strategie umělé inteligence České republiky* (Information on the Implementation and Update of the National Artificial Intelligence Strategy of the Czech Republic).

MoIT (2023) *Prověřování zahraničních investic* (Foreign Investment Screening).

MoIT (2023) *Stop byrokracii* (Stop Bureaucracy).

MoIT (2023) *Zpráva o stavu Evidence veřejných dobíjecích stanic v ČR k 31.12.2022* (Report on the Status of the Public Charging Station Register in the Czech Republic as at 31 December 2022).

MoIT, MoEnv, MoT (2019) *Aktualizace Národního akčního plánu čisté mobility* (Update of the National Action Plan for Clean Mobility).

MoLSA (2017) *Akční plán Práce 4.0* (Work 4.0 Action Plan).

MoLSA (2021) *Analýza dostupnosti specializovaných sociálních služeb pro osoby ohrožené domácím a genderově podmíněným násilím v ČR* (Analysis of the Availability of Specialised Social Services for People at Risk of Domestic and Gender-Based Violence in the Czech Republic). Moore Czech Republic s.r.o.

MoLSA (2021) *Prioritou MoLSA je podpora rodiny a ochrana práv dětí* (MoLSA's priority is family support and protection of children's rights).

MoLSA (2020) *Připravované projekty* (Planned Projects).

MoLSA (2022) *Zpráva o plnění Národní strategie rozvoje sociálních služeb na období 2016–2025 za rok 2021* (2021 Report on the Implementation of the National Strategy for Social Service Development 2016–2025).

MoLSA (2022) *Zpráva o plnění Strategie sociálního začleňování 2021–2030 za rok 2021* (2021 Report on the Implementation of the Social Inclusion Strategy 2021–2030)

MoLSA (2023) *Akční plán rovného odměňování žen a mužů na léta 2023–2026* (Action Plan for Equal Pay for Women and Men 2023–2026).

MoLSA (2023) *Důchody v lednu znovu porostou. Navýší se bezmála o 400 korun, průměrný starobní důchod tak dosáhne 20 700 korun* (Pensions will rise again in January and increase by nearly 400 crowns, bringing the average old-age pension to 20,700 crowns).

MoLSA (2023) *Strategie rodinné politiky 2024–2030* (Family Policy Strategy 2024–2030).

MoLSA (2023) *Tisková zpráva: Sleva na pojistném u zkrácených úvazků bude platit už od začátku února* (Press Release: Discount on insurance contributions for part-time workers available as of February).

MoLSA (2023) *Zvýší se rodičovský příspěvek pro nově narozené děti, prodlouží se náhradní výživné. Vláda schválila i zjednodušení administrativy dávek* (Parental benefits for newly born children to increase, substitute maintenance allowance to be extended. Government also approves simplified benefit administration).

MoEYS (2020) *Implementační karta klíčového opatření Strategie vzdělávací politiky ČR do roku 2030+ PRO OBDOBÍ 2021–2023. Zvýšení kvality vzdělávání ve strukturálně postižených regionech* (Implementation Card for Key Measure of the Czech Education Policy Strategy up to 2030+ for the 2021–2023 Period. Improving the Quality of Education in Structurally Disadvantaged Regions).

MoEYS (2020) *Národní politika výzkumu, vývoje a inovací České republiky 2021+* (National Research, Development, and Innovation Policy of the Czech Republic 2021+).

MoEYS, Research, Development and Innovation Council (2020) *Národní politika výzkumu, vývoje a inovací České republiky 2021+* (National Research, Development, and Innovation Policy of the Czech Republic 2021+).

MUŘICKÝ, E., (2023) prezentace *Plnění a aktualizace Národního akčního plánu čisté mobility* (Presentation on the Fulfilment and Update of the National Action Plan for Clean Mobility).

MoI (2016) *Analýza zatížení veřejné správy sběrem dat* (Analysis of the Burden on Public Administration from Data Collection).

MoI (2017) *Metodika zavádění řízení kvality do služebních úřadů* (Methodology for Implementing Quality Management in Public Service Offices),
MoI (2018) *Metodický pokyn pro řízení kvality ve služebních úřadech* (Methodological Guideline for Quality Management in Public Service Offices).

MoI (2017, 18, 19, 20, 21, 22) *Zpráva o vzdělávání zaměstnanců ve správních úřadech a státních zaměstnanců ve služebních úřadech za rok 2016, 2017, 2018, 2019, 2020, 2021* (Report on the Training of Employees at Administrative Offices and Civil Servants at Public Service Offices for 2016, 2017, 2018, 2019, 2020, 2021).

MoI (2020) *Klientsky orientovaná veřejná správa 2030* (Client-Oriented Public Administration 2030).

MoI (2020) *Meziobecní spolupráce v ČR: Příklady dobré praxe a doporučení pro realizaci meziobecní spolupráce* (Intermunicipal Cooperation in the Czech Republic: Best Practice Examples and Recommendations for Implementation).

MoI (2022) *Analytické zhodnocení systému inovací veřejných politik* (Analytical Evaluation of the Public Policy Innovation System).

MoI (2022) *Informace o stavu zavádění řízení kvality ve služebních úřadech za rok 2021* (Information on the Status of Quality Management Implementation in Public Service Offices for 2021).

MoI (2022) *Přívětivý úřad 2022: Příklady dobré praxe obcí s rozšířenou působností* (Friendly Office 2022: Best Practice Examples of Municipalities with Extended Powers).

MoI (2022) *Veřejná správa v České republice – Výroční zpráva o stavu veřejné správy* (Public Administration in the Czech Republic – Annual Report on the Status of Public Administration).

MoI (2022) *Výroční zpráva o vzdělávání úředníků územních samosprávných celků v České republice v roce 2021* (2021 Annual Report on the Training of Officials in Local Government Units in the Czech Republic).

MoI (2023) *Analýza a využití potenciálu automatizace a umělé inteligence v agendách veřejné správy* (draft) (Analysis and Utilisation of the Potential of Automation and Artificial Intelligence in Public Administration Agendas [Draft]).

MoI (2023) *Hodnocení naplňování 2. implementačního plánu ČR 2030* (Evaluation of the Implementation of the Second Implementation Plan for CR 2030).

MoI (2023) *Informace odboru strategického rozvoje a koordinace veřejné správy k hodnocení ČR 2030* (Information from the Department of Strategic Development and Coordination of Public Administration relating to the evaluation of CR 2030).

MoI (2023) *Závěrečná evaluační zpráva Strategického rámce rozvoje veřejné správy pro období 2014-2020* (Final Evaluation Report of the Strategic Framework for Public Administration Development for 2014–2020).

MoI (2023*) Závěrečná informace o stavu zavádění řízení kvality ve služebních úřadech* (Final Information on the Status of Quality Management Implementation in Public Service Offices).

MoI (2023) *Závěry z online dotazníkového šetření ke vzdělávání státní zaměstnanců ve státní službě* (Findings from an Online Survey on the Training of Civil Servants).

MoI, MoRD (2021) *Standardy dostupnosti veřejných služeb a možnosti jejich využití v praxi* (Standards for the Accessibility of Public Services and Opportunities for their Practical Use).

MoH (2020) *Vzdělávání na rezidenčních místech bude pro mladé lékaře finančně zajímavější, zejména tam, kde jich je nedostatek* (Education in residential locations to be more financially attractive for young doctors, especially in areas with a shortage).

MoH (2023) *Vláda schválila novelu zákona o zdravotních službách* (Government approves amendment to the Health Services Act).

MoH (2023) *Změny v platovém ohodnocení nelékařských zdravotnických pracovníků od 1. ledna 2023* (Changes in the remuneration of non-medical health professional from 1 January 2023).

MoH (2020) *Strategický rámec rozvoje péče o zdraví v ČR do roku 2030* (Strategic Framework for Health Care Development in the Czech Republic up to 2030).

MoH (2020) *Strategický rámec rozvoje péče o zdraví v ČR do roku 2030* (Strategic Framework for Health Care Development in the Czech Republic up to 2030).

MoA (2016) *Strategie Ministerstva zemědělství s výhledem do roku 2030* (Ministry of Agriculture Strategy and Outlook up to 2030).

MoA (2019) *Zpráva o stavu lesa a lesního hospodářství České republiky v roce 2018* (Report on the State of Forests and Forest Management in the Czech Republic in 2018).

MoA (2020) *Úbytek zemědělské půdy evidované v LPIS mezi 7/2005 a 10/2019* (Decrease in Agricultural Land Recorded in the LPIS between July 2005 and October 2019).

MoA (2020) *Zpráva o stavu lesa a lesního hospodářství České republiky v roce 2019* (Report on the State of Forests and Forest Management in the Czech Republic in 2019).

MoA (2021) *Akční plán pro rozvoj ekologického zemědělství v letech 2021-2027* (Action Plan for the Development of Organic Farming in 2021–2027).

MoA (2021) *Aplikační dokument ke Koncepci Státní lesnické politiky do roku 2035* (Application Document for the Concept of State Forestry Policy up to 2035).

MoA (2021) *Zpráva o benchmarkingu za rok 2020* (Benchmarking Report for 2020).

MoA (2021) *Zpráva o stavu zemědělství ČR za rok 2022* (Report on the State of Agriculture in the Czech Republic for 2022).

MoA (2022) *Zpráva o stavu vodního hospodářství České republiky v roce 2021* (Report on the State of Water Management in the Czech Republic in 2021).

MoA (2022) *Zpráva o stavu lesa a lesního hospodářství ČR v roce 2021* (Report on the State of Forests and Forest Management in the Czech Republic in 2021).

MoA (2023) *Report Ministerstva zemědělství k hodnocení ČR 2030* (Ministry of Agriculture Report relating to the Evaluation of CR 2030).

MoA (2021) *Zpráva o stavu vodního hospodářství v České republice v roce 2020* (Report on the State of Water Management in the Czech Republic in 2020).

MoA (2021) *Zpráva o stavu vodního hospodářství v České republice v roce 2021* (Report on the State of Water Management in the Czech Republic in 2020).

MoFA (2017) *Strategie zahraniční rozvojové spolupráce České republiky 2018–2030* (External Development Cooperation Strategy of the Czech Republic 2018–2030)

MoEnv (2016) *Strategie ochrany biologické rozmanitosti České republiky 2016-2025* (Biodiversity Protection Strategy of the Czech Republic 2016–2025).

MoEnv (2017) *Národní Akční plán adaptace na změnu klimatu* (National Action Plan for Adaptation to Climate Change).

MoEnv (2017) *Climate Policy.*

MoEnv (2020) *Evaluace Národního akčního plánu adaptace na změnu klimatu (2020)* (Evaluation of the National Action Plan for Adaptation to Climate Change [2020]).

MoEnv (2020) *Možnosti zahrnutí perspektivy udržitelného rozvoje do systému hodnocení dopadů v ČR* (Opportunities to Include the Perspective of Sustainable Development in the Impact Assessment System in the Czech Republic).

MoEnv (2020) *Státní program ochrany přírody a krajiny České republiky pro období 2020–2025* (State Programme for the Protection of Nature and Landscape of the Czech Republic 2020–2025).

MoEnv (2021) *2. Dobrovolný národní přezkum Agendy 2030 v České republice* (Second Voluntary National Review of Agenda 2030 in the Czech Republic).

MoEnv (2021) *Národní Akční plán adaptace na změnu klimatu, 1. aktualizace pro období 2021-2025* (National Action Plan for Adaptation to Climate Change, First Update for 2021–2025).

MoEnv (2021) *Státní politika životního prostředí České republiky 2030 s výhledem do 2050* (State Environmental Policy of the Czech Republic 2030 and Outlook up to 2050).

MoEnv (2021) *Strategický rámec cirkulární ekonomiky České republiky 2040* (Circular Economy Strategic Framework of the Czech Republic 2040).

MoEnv (2021) *Strategie přizpůsobení se změně klimatu v podmínkách ČR, 1. aktualizace pro období 2021-2030* (Climate Change Adaptation Strategy in the Czech Republic, First Update for 2021–2030).

MoEnv (2021) *Zpráva o naplňování Agendy 2030 pro udržitelný rozvoj v České republice* (Report on the Implementation of Agenda 2030 for Sustainable Development in the Czech Republic).

MoEnv (2022) *2. implementační plán Strategického rámce Česká republika 2030 pro roky 2022–2025* (Second Implementation Plan for the Strategic Framework Czech Republic 2030 for 2022–2025).

MoEnv (2022) *Statistická ročenka životního prostředí ČR 2021* (Environmental Statistics Yearbook for the Czech Republic 2021).

MoEnv (2023) *Dotazníkové šetření k využívání ČR 2030 na resortech* (Questionnaire Survey on the Use of CR 2030 at Ministries).

MoEnv (2023) *Lidi i přírodu pomůže ochránit před světelným znečištěním nová norma* (New Standard to Protect People and Nature from Light Pollution).

MoEnv (2023) *Průvodce zohledněním udržitelného rozvoje při hodnocení dopadů regulace (RIA)* (Guide to the Integration of Sustainable Development in Regulatory Impact Assessments [RIAs]).

MoEnv (2023) *Informace z fokusní skupiny s pracovníky MAS* (Information from the Focus Group with LAG Staff).

MoEnv (2023) *Informace MŽP k hodnocení ČR 2030* (Information from the Ministry of the Environment relating to the Evaluation of CR 2030).

MoEnv, Association for International Affairs (BAROŇ, M., KOLÍNSKÝ O., JUNGWIRTH BŘEZOVSKÁ R.) (2023) *Bezpečnost a udržitelnost ČR: Hrozby, výzvy, dilemata* (Security and Sustainability in the Czech Republic: Threats, Challenges, Dilemmas).

MOENV, MORD, ČESKÉ PRIORITY (2023) *Klimaticko-společenské scénáře rozvoje Česka*: *forsightová studie pro aktualizaci ČR 2030* (Climate and Societal Scenarios for the Development of the Czech Republic: Foresight Study for the Update of CR 2030).

NAP (2023) *Metody řízení ICT ve veřejné správě ČR* (Methods of ICT Management in Public Administration in the Czech Republic).

NATIONAL MONITORING CENTRE FOR DRUGS AND ADDICTION (2023) *Výroční zpráva o stavu ve věcech drog v ČR v roce 2022* (Annual Report on the Drug Situation in the Czech Republic in 2022).

NATIONAL OBSERVATORY OF EMPLOYMENT AND EDUCATION (2015) *Konkurenční schopnost České republiky – Kvalita lidských zdrojů* (Competitiveness of the Czech Republic – Quality of Human Resources).

NATIONAL QUALITY SUPPORT CENTRE (2016) *Příručka CSR pro veřejnou správu aneb jak se chovat společensky odpovědně* (CSR Guide for Public Administration: How to Act Responsibly in Society).

Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union (2021).

Government Regulation No 154/2020.

Government Regulation No 462/2000, Sections 17 and 18; for the implementation of Sections 27(8) and 28(5) of Act No 240/2000 on crisis management and amending certain acts (Crisis Act).

Government Regulation No 62/2020.

Government Regulation No 262/2012 on the designation of vulnerable areas and on an action programme.

NATO (2022) *Strategic Concept.*

Bill amending certain acts in connection with the consolidation of public budgets (Parliamentary Document 488).

Supreme Audit Office (2016) *Kontrolní závěr z kontrolní akce 15/11* (Audit Findings from Audit 15/11).

Supreme Audit Office (2020) *Kontrolní závěr z kontrolní akce NKÚ č. 19/15* (Audit Findings from Supreme Audit Office Audit 19/15).

National Pedagogy Institute (2021) *Co nám epidemie říká o významu celoživotního učení* [What the pandemic tells us about the importance of lifelong learning].

Healthy Cities, Towns and Regions of the Czech Republic (2020) *Jak hodnotit udržitelnost bydlení? Metodická příručka pro obce* (How to Evaluate Housing Sustainability? A Methodological Guide for Municipalities).

OECD (2015) *Towards a Framework for the Governance of Infrastructure*.

OECD (2019) *Czech Republic Mid-Term Review.*

OECD (2019) *OECD Declaration on Public Sector Innovation*.

OECD (2021) *Czech Republic: Country Health Profile 2021.*

OECD (2022) *Declaration on Building Trust and Reinforcing Democracy.*

OECD (2022) *Tax Policy Reforms 2022: OECD and Selected Partner Economies*. Paris: OECD Publishing.

OECD (2023) *Gross domestic spending on R&D (indicator).*

OECD (2023) *OECD Economic Surveys: Czech Republic 2023*. Paris: OECD Publishing.

OECD (2023) *OECD Public Governance Reviews: Czech Republic: Towards a More Modern and Effective Public Administration*. Paris: OECD Publishing.

Operational Programme Employment project: *Podpora strategického řízení a plánování ve veřejné správě* (Strategic Management and Planning Support in Public Administration – 2020-23).

United Nations (2015) *Geneva UN Charter on Sustainable Housing.*

United Nations (2022) *The Sustainable Development Goals Report 2022.*

United Nations (2022) *The Sustainable Development Goals Report 2023.*

PÁNEK, J. *ET AL.* (2021) *What is the current state of geoparticipation in Czech municipalities*? *GeoScape*, 15(1).

PAQ RESEARCH (2021) *Majetkové nerovnosti* (Wealth Inequality).

PAQ RESEARCH (2023) *Život k nezaplacení* (A Priceless Life).

POLICE OF THE CZECH REPUBLIC (2022). *Statistické přehledy kriminality za rok 2022* (Statistical Overview of Crime in 2022).

Priority Action Framework for Natura 2000 in 2021–2027.

Programme for the Support of Czech Cultural Heritage Abroad in 2021–2025, approved by Government Resolution No 926 of 14 September 2020.

Statement of the Czech Republic on the Economic Recovery Plan in Response to the COVID-19 Pandemic and the European Green Deal.

22% TO EQUALITY, MoLSA project (2019) *Rovné odměňování žen a mužů ve zkušenostech a názorech české veřejnosti* (Equal Pay for Women and Men: Experiences and Opinions of the Czech Public).

PŮČEK J.M., PÁLENÍKOVÁ. M. (2022) *Hospodárnost, efektivnost, účelnost (jako nástroj pro zlepšení a kontroly veřejných financí)* (Economy, Efficiency, Effectiveness [as a Tool for Improving and Controlling Public Finances]).

COUNCIL OF THE EU (2008) *Council Common Position 2008/944/CFSP of 8 December 2008 defining common rules governing control of exports of military technology and equipment*.

REID, A.; STEWARD, F.; MIEDZINSKI, M. (2023) *Design and Implementation of Challenge-oriented Smart Specialisation for SDGs* (JRC Science for Policy Report).

Report of the Ministry of Transport of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Culture of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Industry and Trade of the Czech Republic on the implementation of CR 2030 (2020).

Report of the Ministry of Industry and Trade of the Czech Republic relating to the evaluation of CR 2030 (2023)

Report of the Ministry of Labour and Social Affairs of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Justice of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Education, Youth and Sports of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of the Interior of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Health of the Czech Republic relating to the evaluation of CR 2030 (2020).

Report of the Ministry of Agriculture of the Czech Republic relating to the evaluation of CR 2030 (2023).

Report of the Ministry of the Environment of the Czech Republic relating to the evaluation of CR 2030 (2020).

RUMPEL, P., SLACH, O. (2022) *Why is Ostrava in Czechia still shrinking?* In: Chung-Tong Wu *et al.* (eds.): Postsocialist Shrinking Cities. Abingdon: Routledge.

SACHS, J.D., LAFORTUNE, G., FULLER, G., DRUMM, E. (2023) *Implementing the SDG Stimulus. Sustainable Development Report 2023*. Paris: SDSN, Dublin: Dublin University Press.

SÁNCHEZ A, JIMÉNEZ-FERNÁNDEZ E (2023). *European Union Cohesion Policy: Socio-Economic Vulnerability of the Regions and the COVID-19 Shock. Appl Res Qual Life.*

State Environmental Fund (2023) *Výzva HEAT č.1/2023* (HEAT Call 1/2023).

SIMI (ASSOCIATION FOR INTEGRATION AND MIGRATION) (2020) *Manuál lokální integrace migrantů v ČR* (Local Integration Manual for Migrants in the Czech Republic).

EU Work-Life Balance Directive.

Directive on the reduction of the impact of certain plastic products on the environment, published in the Official Journal of the EU on 12 June 2019.

STEM, DATLAB (2022) *Website presenting a database on the quality of life in municipalities*. Technology Agency project: Quality of Life in Municipalities: Data and Methodological Resources – TL02000499.

SUCHÁ, L., GELETIČ, J., VAŇO, S., BAŠTA, P., JANČOVIČ, M., DUCHKOVÁ, H. (2022) *Adaptace na změnu klimatu: hodnocení zranitelnosti města vůči teplotním extrémům* (Climate Change Adaptation: Assessing the Vulnerability of Cities to Temperature Extremes).

State Agricultural Intervention Fund (2022) *State Agricultural Intervention Fund Annual Report 2020.*

State Agricultural Intervention Fund (2022) *State Agricultural Intervention Fund Annual Report 2021.*

National Institute of Public Health (2023) *Projekt Efektivní podpora zdraví* (Effective Health Promotion Project).

National Institute of Public Health (2023) *Užívání tabáku a alkoholu v ČR 2022* (Tobacco and Alcohol Use in the Czech Republic 2022).

ŠILHÁNKOVÁ, V. (2015) *Modely koordinace strategického, územního a finančního plánování na úrovni obcí a měst* (Models of Coordination for Strategic, Spatial, and Financial Planning at Municipal and Regional Levels). *In JEŽEK, J. et al. Strategické plánování obcí, měst a regionů. Vybrané problémy, výzvy a možnosti řešení* (Strategic Planning for Municipalities, Towns, and Regions: Selected Problems, Challenges, and Possible Solutions). Prague: Wolters Kluwer ČR.

ŠLACH, O., ŽENKA, J. *ET AL.* (2021) *Výzvy a scénáře rozvoje venkovských oblastí* (Challenges and scenarios for rural development). Ostrava: En Face.

Technology Agency (2021) *Závěrečná zpráva – průběžné hodnocení programu BETA 2* (Final Report – Interim Evaluation of BETA 2).

THE WORLD BANK (2020) *Gini index – Czechia.*

TSI project *Supporting evidence-based regulatory practice and policy coherence for implementing the 2030 Agenda for Sustainable Development in Czechia* (2023-25, multi-country project).

TSI project *Supporting the Czech Republic to implement spending reviews and build a performance budgeting Framework* (2023-25, multi-country project).

Forest Management Institute (2020) *Plocha lesa a lesnatost* (Forest Area and Forest Coverage).

Forest Management Institute (2023) *Obnova lesů* (Forest Restoration)

Forest Management Institute (2020) *Generel obnovy lesních porostů po kalamitě, etapa III* (Post-disaster Forest Regeneration Framework, Stage III)

Forest Management Institute (2022), KAMIL TUREK, *Škody zvěří jako limitující faktor obnovy lesa (nejenom) na kalamitních holinách* (Wildlife Damage as a Limiting Factor in Forest Regeneration (Not Only) in Disaster-response Clearings)

Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (*Aarhus Convention*).

Council of Europe Convention on preventing and combating violence against women and domestic violence (2011).

Office of the National Budget Council (2022) *Rozvolněná fiskální pravidla představují pro vývoj veřejných financí riziko i nadále* (Loosened fiscal rules continue to pose a risk to the development of public finances).

Office of the National Budget Council (2022) *Význam dluhové brzdy pro českou ekonomiku* (Importance of the debt brake for the Czech economy).

Government Resolution No 1122 of 14 December 2016 on the Plan of Non-Legislative Tasks of the Government of the Czech Republic for the First Half of 2017 and on the Outline of Themes for the Plan of Non-Legislative Tasks of the Government for the Second Half of 2017.

Government Resolution No 669 of 17 October 2018 on the Implementation Plan for the Strategic Framework Czech Republic 2030.

Government Resolution No 487 of 8 July 2019, on the Report on the Evaluation of the State's Central Procurement and Ministerial Centralised Procurement Systems for 2018 and on the rules governing joint procurement.

Government Resolution No 435 of 14 June 2023 on the review of the effectiveness of regulation (ex-post RIAs) and an amendment to the General Principles for Regulatory Impact Assessments (RIAs) and the Statutes of the Government Legislative Council.

Forest Management Institute (2022), KAMIL TUREK, *Škody zvěří jako limitující faktor obnovy lesa (nejenom) na kalamitních holinách* (Wildlife Damage as a Limiting Factor in Forest Regeneration (Not Only) in Disaster-response Clearings).

Forest Management Institute (2019*) Národní inventarizace lesů 2011–2015* (National Forest Inventory 2011–2015).

Forest Management Institute (2020) *Generel obnovy lesních porostů po kalamitě, etapa III* (Post-disaster Forest Regeneration Framework, Stage III).

Institute for Spatial Development (2022) *Přehled o aktuálním stavu územně plánovací dokumentace a vybraných územně plánovacích podkladů* (Overview of the Current State of Spatial Planning Documentation and Selected Spatial Planning Data).

Government Office (2016) *Analýza odlivu zisků: Důsledky pro českou ekonomiku a návrhy opatření* (Analysis of Profit Outflows: Consequences for the Czech Economy and Proposed Measures).

Government Office (2020*) Zpráva z dotazníkového šetření k praxi hodnocení dopadů regulace 2019* (Report on the 2019 Regulatory Impact Assessment Practices Survey).

Government Office (2021) FUTURE-PRO: *Megatrends and major societal challenges relevant to the Czech Republic* (FUTURE-PRO: Megatrends and Major Societal Challenges Relevant to the Czech Republic).

Government Office (2021) *Strategie rovnosti žen a mužů na léta 2021-2030* (Gender Equality Strategy 2021–2030).

Government Office (2022). *Akční plán prevence domácího a genderově podmíněného násilí na léta 2023–2026* (Action Plan for the Prevention of Domestic and Gender-Based Violence 2023–2026).

Government Office (2022) *Metodika participace nestátních neziskových organizací v poradních a pracovních orgánech a při tvorbě dokumentů státní správy* (Methodology for the Participation of Non-Governmental Organisations in Advisory and Working Bodies and in the Creation of Public Administration Documents).

VOPRAVIL, J.; PODRÁZSKÝ, V.; HOLUBÍK, O.; VACEK, S.; BEITLEROVÁ, H. *ET AL.* (2017) *Principy zakládání porostů na bývalé zemědělské půdě v rámci ploch vymezených k zalesnění: metodika pro praxi* (Principles of Establishing Forests on Former Agricultural Land in Designated Reforestation Areas: A Practical Methodology)
Forestry and Game Management Research Institute (2019) *Důsledky kůrovcové kalamity na budoucnost lesnictví ve střední Evropě* (Consequences of the Bark Beetle Calamity for the Future of Forestry in Central Europe).

Research Institute for Soil and Water Conservation, Czech Hydrometeorological Institute (2016), *Vliv očekávaných klimatických změn na půdy České republiky a hodnocení jejich produkční funkce* (Impact of Expected Climate Change on Soils in the Czech Republic and Assessment of Their Production Function).

Research Institute for Labour and Social Affairs (2022) *Dávka otcovské poporodní péče jako relativně nový instrument nemocenského pojištění – četnost využívání dávky a posouzení měřitelnosti efektů zavedení* (Postnatal paternity leave benefits as a relatively new tool in sickness insurance – frequency of use and assessment of the measurability of the effects of its introduction).

Decree No 500/2006 on spatial analysis data.

Decree No 357/2013, the Cadastral Decree.

Decree No 298/2018 on the development of regional forest management plans and the delimitation of management units.

RESEARCH INSTITUTE FOR SOIL AND WATER CONSERVATION (2017) *Principy zakládání porostů na bývalé zemědělské půdě v rámci ploch vymezených k zalesnění: metodika pro praxi* (Principles of Establishing Forests on Former Agricultural Land in Designated Reforestation Areas: A Practical Methodology).

Research Institute for Soil and Water Conservation, *Závěrečné zprávy k monitoringu eroze zemědělské půdy* (Final Reports on the Monitoring of Agricultural Soil Erosion).

WIRTH, K. (2022) *Představení pracovní verze aktualizace metodiky ÚSK a související příručky* (Presentation of the Draft Update of Landscape Planning Study Methodology and the Related Handbook).

Act No 334/1992 on the protection of agricultural land stock.

Act No 128/2000 on municipalities.

Act No 254/2001 on water and amending certain acts (Water Act).

Act No 95/2004 on conditions for the acquisition and recognition of professional competence and specialised competence to pursue the medical profession of doctor, dentist, or pharmacist.

Act No 561/2004 on preschool, primary, secondary, post-secondary vocational, and other education.

Act No 179/2006 on the verification and recognition of the outcomes of further education and amending certain Acts (Act on the Recognition of Further Education Outcomes).

Act No 182/2006 on bankruptcy and the management thereof.

Act No 183/2006 on spatial planning and building regulations.

Act No 372/2011 on health services and conditions for the provision thereof (Health Services Act).

Act No 181/2014 on cybersecurity and amending related acts (Cybersecurity Act).

Act No 247/2014 on the provision of childcare services in children's groups and amending related acts.

Act No 257/2016 on consumer credit.

Act No 23/2017 on the rules of budgetary responsibility.

Act No 541/2020 on waste.

Act No 588/2020 on substitute maintenance for a dependent child and amending certain related acts.

Act No 243/2022 on the reduction of the impact of selected plastic products on the environment.

Zdravá generace (Healthy Generation; 2019)

ŽENKA, J., KRTIČKA, L. (2021) *Typologie území Česka na úrovni statistických obvodů obcí s rozšířenou působností* (Typology of Czech Territory at the Level of Statistical Districts of Municipalities with Extended Powers) [map] [online]. Scale 1:1,250,000. In: Atlas rozvoje venkova. First edition. Ostrava: University of Ostrava.