

HYDROGEN STRATEGY OF THE CZECH REPUBLIC

Petr Mervart

Plenipotentiary of the Minister of Industry
and Trade for Hydrogen Technologies

8.4.2021



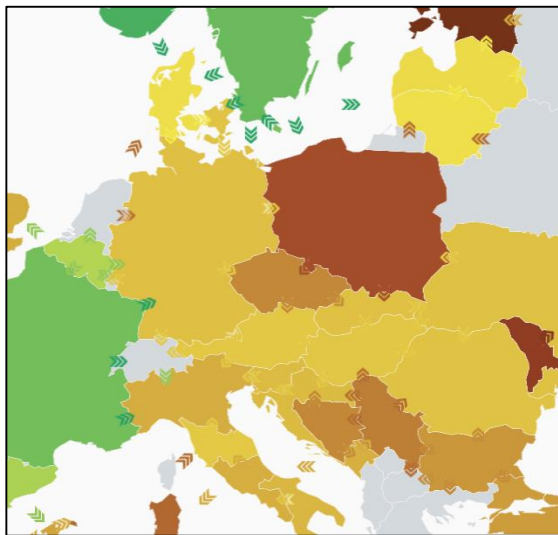
MINISTERSTVO
PRŮMYSLU A OBCHODU

Výbor pro udržitelnou energetiku a dopravu

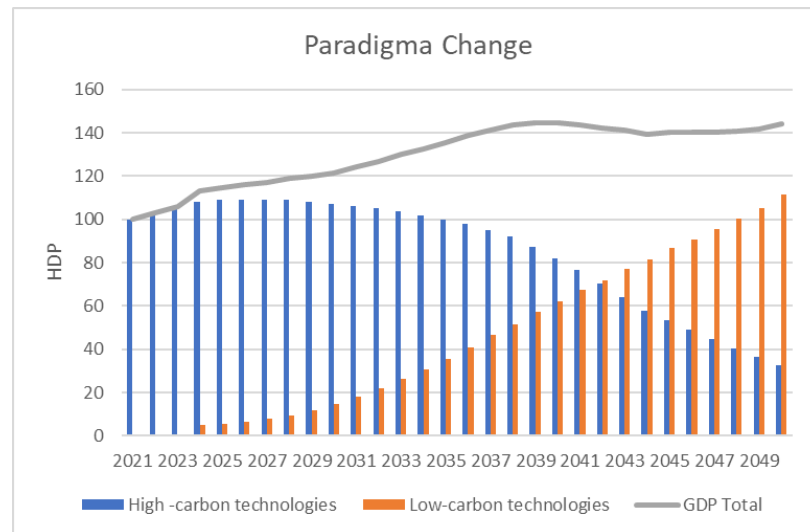


WHY DO WE NEED A HYDROGEN STRATEGY?

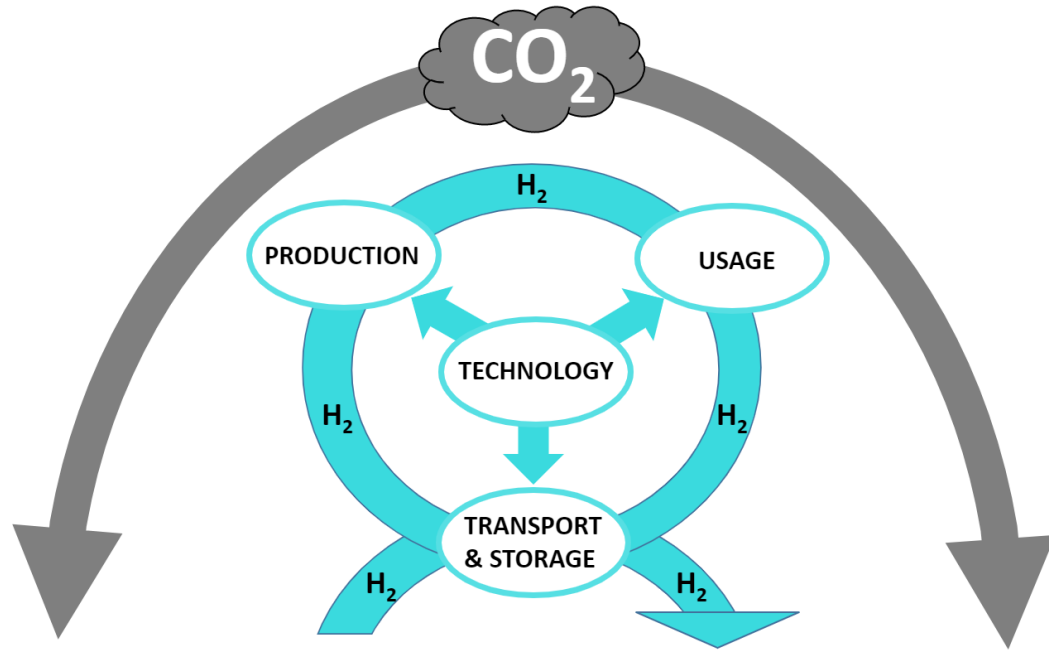
Goal 1: Reduce emissions of greenhouse gases



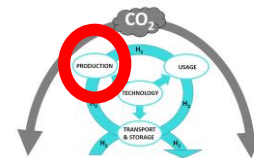
Goal 2: Stimulate the economic growth



FOUR PILLARS OF HYDROGEN STRATEGY



HYDROGEN PRODUCTION



RENEVABLES



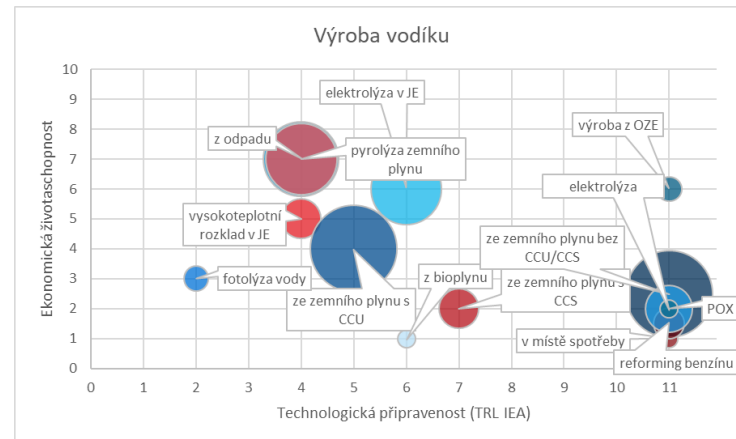
NUCLEAR POWERPLANTS



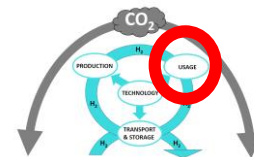
NATURAL GAS WITH CCU



WASTE PYROLYSIS



HYDROGEN USAGE



MOBILITY



**INDUSTRY - GREY HYDROGEN
REPLACEMENT**



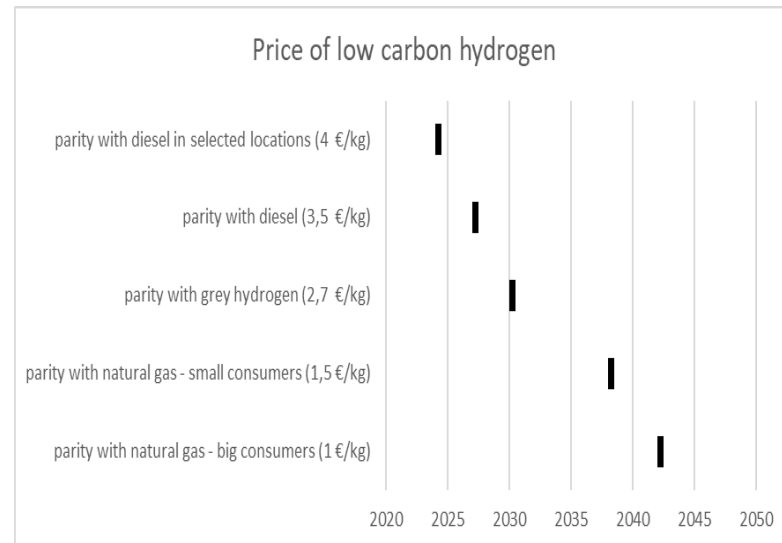
**INDUSTRY - NATURAL GAS
REPLACEMENT**



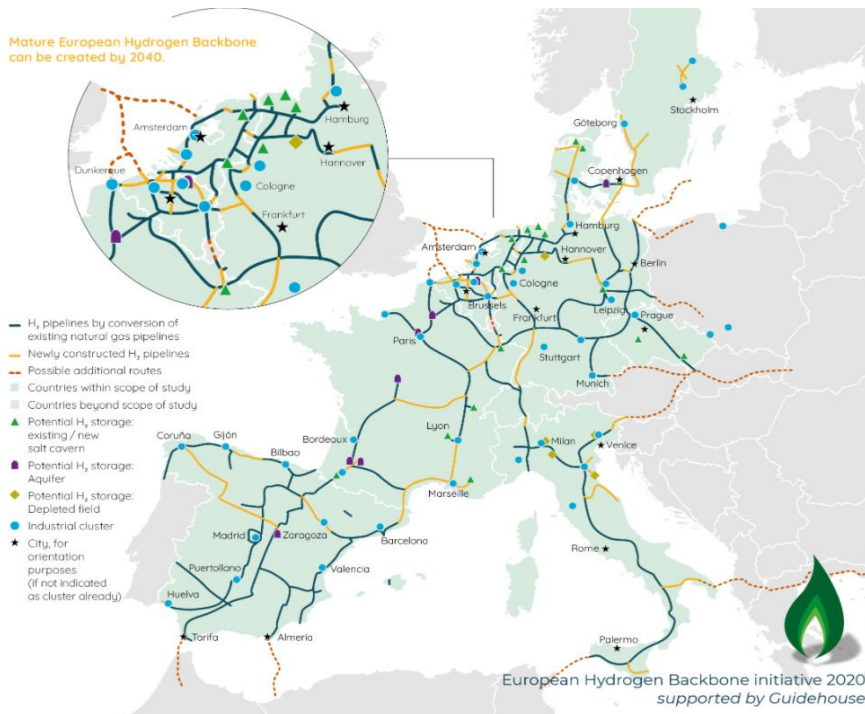
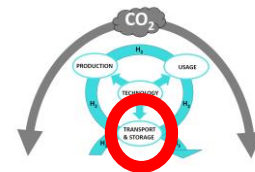
**INDUSTRY - COAL
REPLACEMENT**



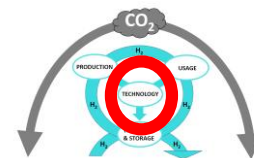
ENERGY STORAGE

















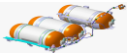
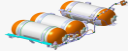
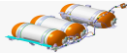
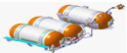
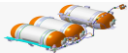
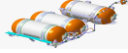










HYDROGEN TRANSPORT AND STORAGE

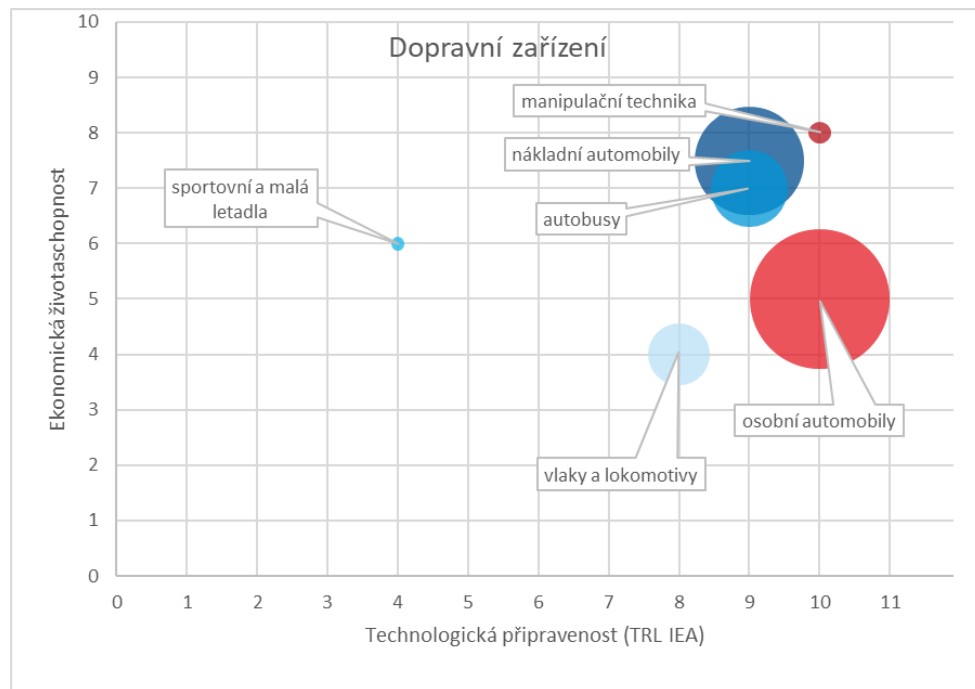


HYDROGEN TECHNOLOGY



	Trucks	Buses	Cars	Filling stations	Production	Transporters
						
Electromotors		 				
Fuel Cells						
Baterie						
Hydrogen Tanks						 
Electrolysers, pyrolysisers					 	
Pumps, fittings, compressors						

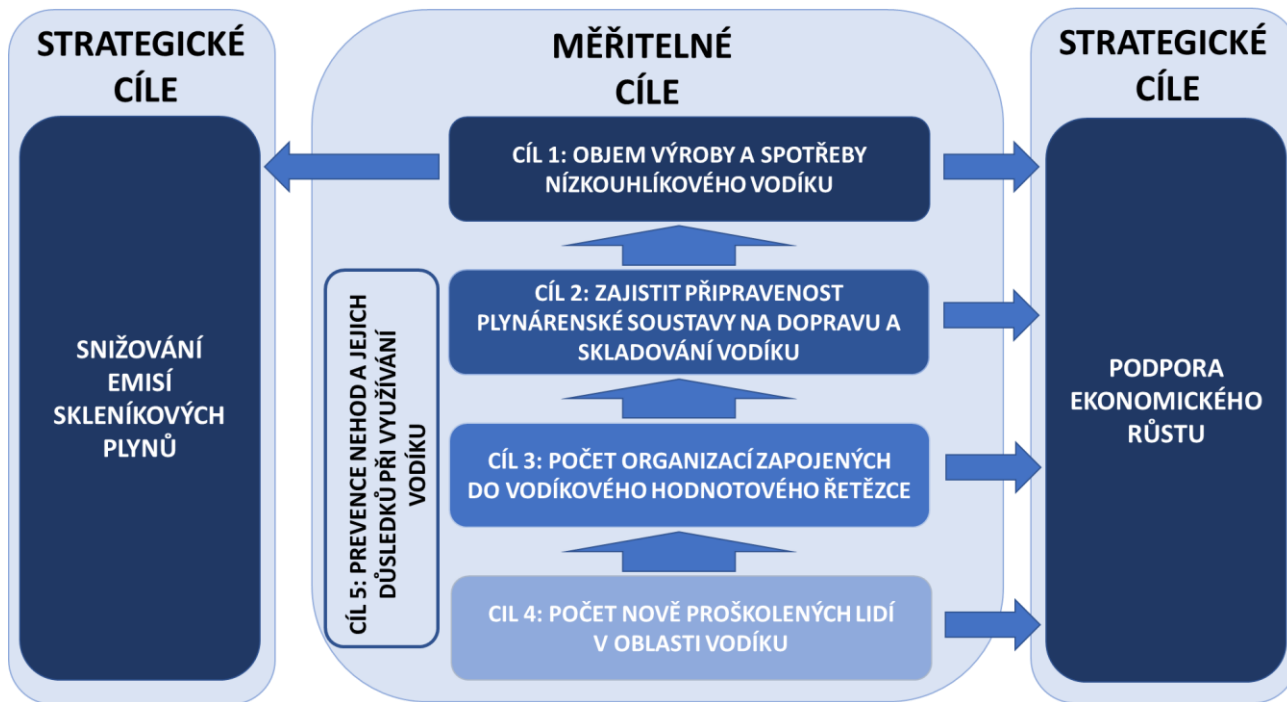
TECHNOLOGY EVALUATION



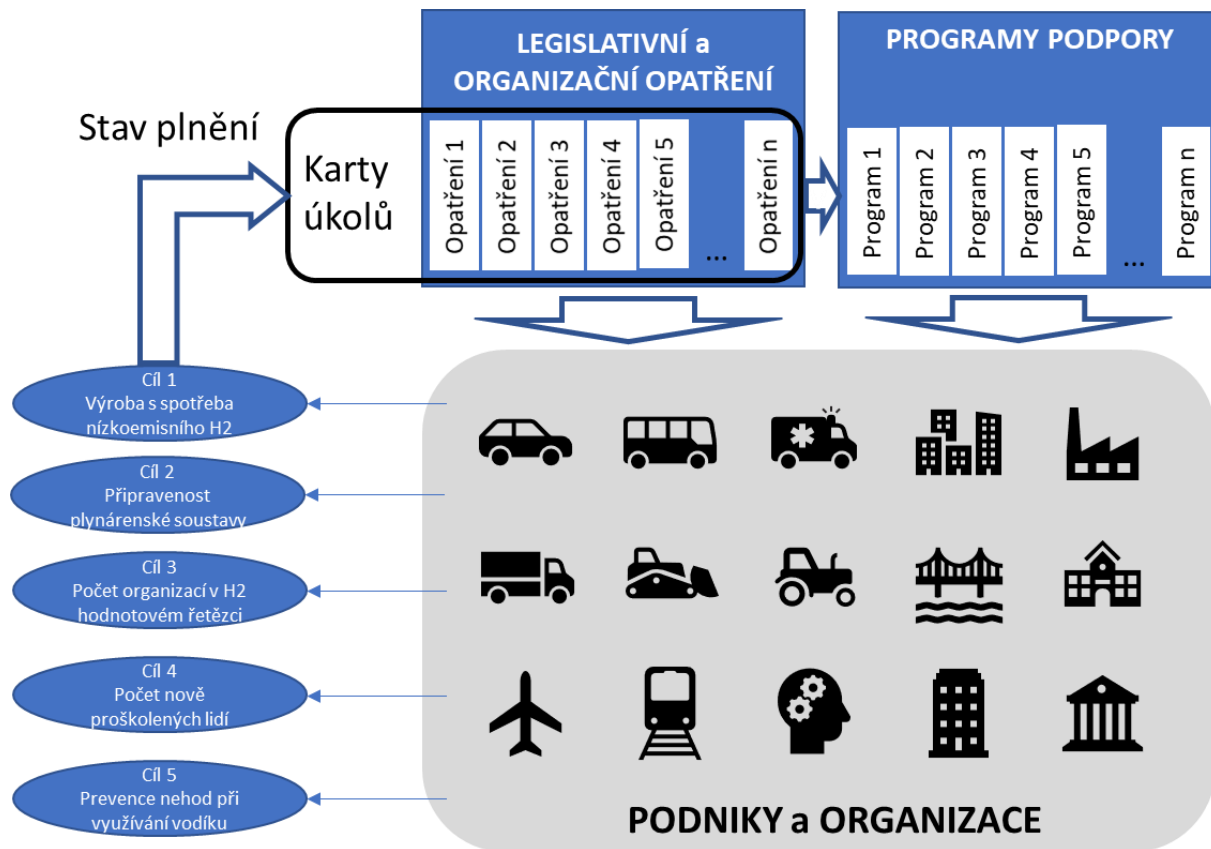
Technology Readiness Level (IEA TRL)

1. Initial idea
2. Application formulated
3. Concept needs validation
4. Early prototype
5. Large prototype
6. Full prototype at scale
7. Pre-commercial demonstration
8. First-of-a-kind commercial
9. Commercial operation in relevant environment
10. Integration at scale
11. Proof of stability

MEASURABLE GOALS

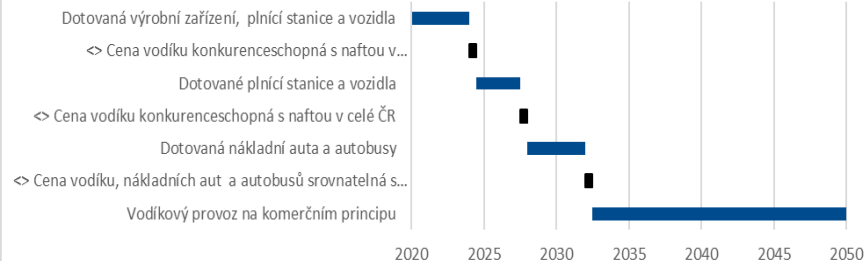


TOOLS

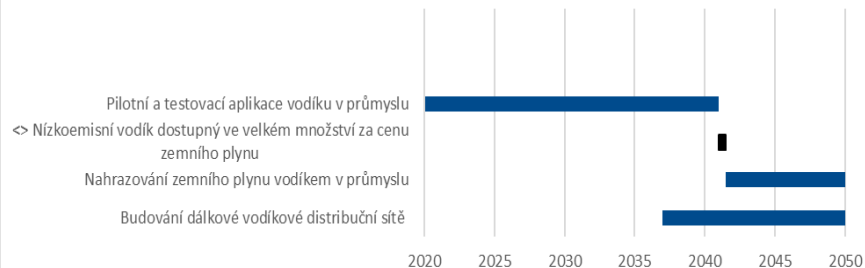


TIMELINES

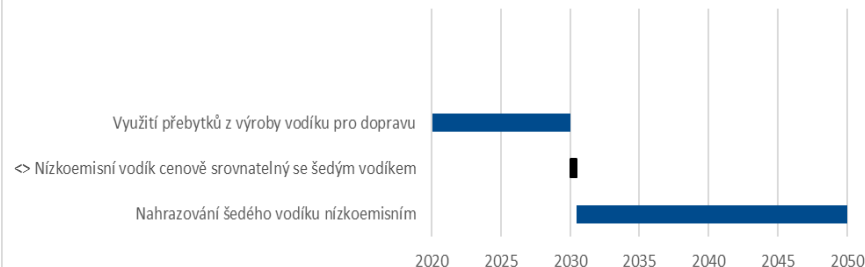
Zavádění vodíku v dopravě



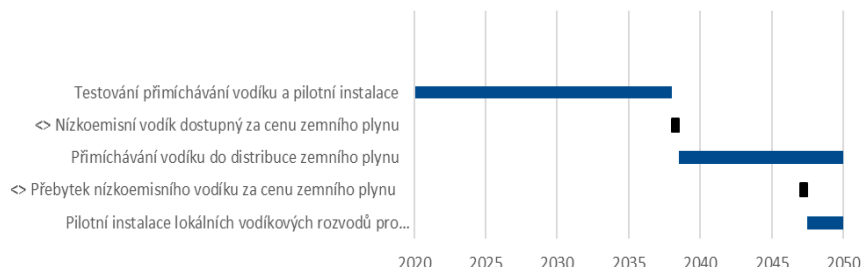
Zavádění vodíku do průmyslu



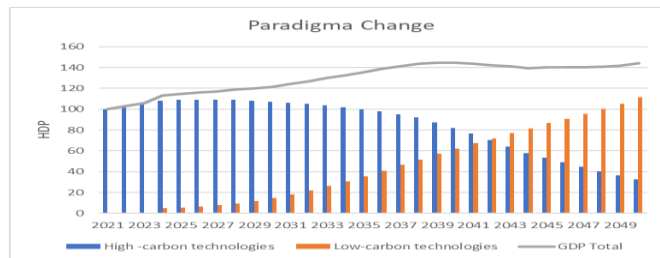
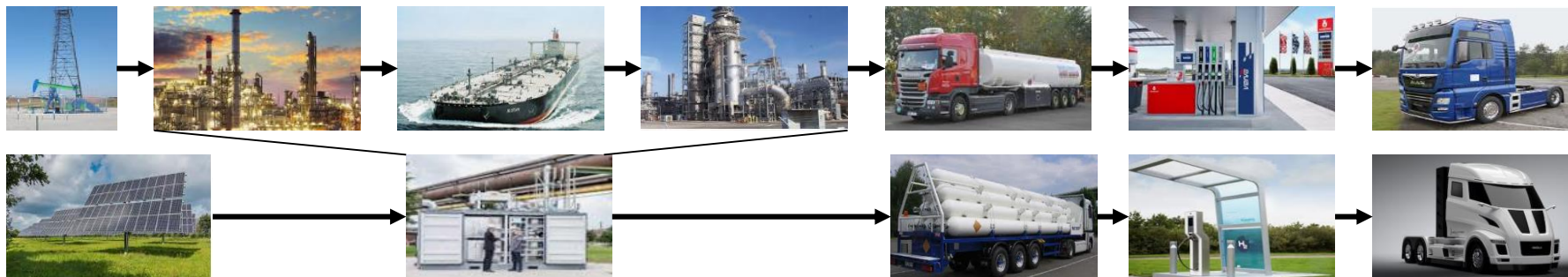
Zavádění vodíku do chemického průmyslu



Zavádění vodíku do domácností



NEXT STEPS



- ▶ **WE NEED TO BEAT THE FOSSIL FUELS ECONOMY OF SCALE**
- ▶ **WE NEED TO START NOW**

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Ministry of Industry and Trade
Czech Republic



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