



 **VSB TECHNICAL
UNIVERSITY
OF OSTRAVA**

**CENTRE FOR ENERGY
AND ENVIRONMENTAL
TECHNOLOGIES**

WE ARE CREATING THE ENERGY FUTURE



CEET was established on 1 January 2021 through the merger of four university institutes: the Nanotechnology Centre, the Energy Research Centre, the ENET Centre and the Institute of Environmental Technology.

CEET is a research university institute at VSB - Technical University of Ostrava (VSB-TUO) focused on research and development in the field of low-carbon and sustainable energy and environmental technologies in line with the principles of the circular economy.

Thanks to the tradition and cooperation with the public and industrial sector, domestic and foreign universities and research organizations, we deliver practical innovations and solutions in many fields at the national and international level.

RESULTS OF THE UPDATED STUDY BY ČEPS, A.S. – MAF CZ 2023

RESULTS OF THE RESPONDENT SCENARIO

Import is a Positive Value

		2025	2030	2035	2040	
 LOLE		0 h	0 h	10,3 h	7 h	
 EENS		0 GWh	0 GWh	27,2 GWh	10,6 GWh	
 Saldo		-2 073 GWh	11 217 GWh	14 018 GWh	7 009 GWh	



RESULTS OF THE PROGRESSIVE SCENARIO

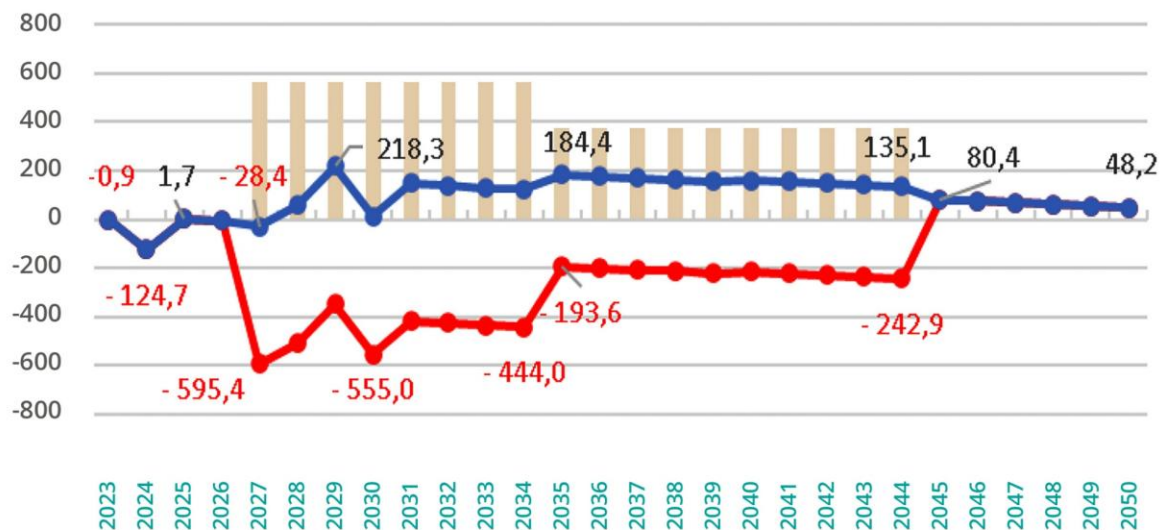
Import is a Positive Value

		2025	2030	2035	2040	
 LOLE		0 h	2 h	8,7 h	13,7 h	
 EENS		0 GWh	1 GWh	16,3 GWh	25 GWh	
 Saldo		-440 GWh	14 992 GWh	18 721 GWh	15 177 GWh	

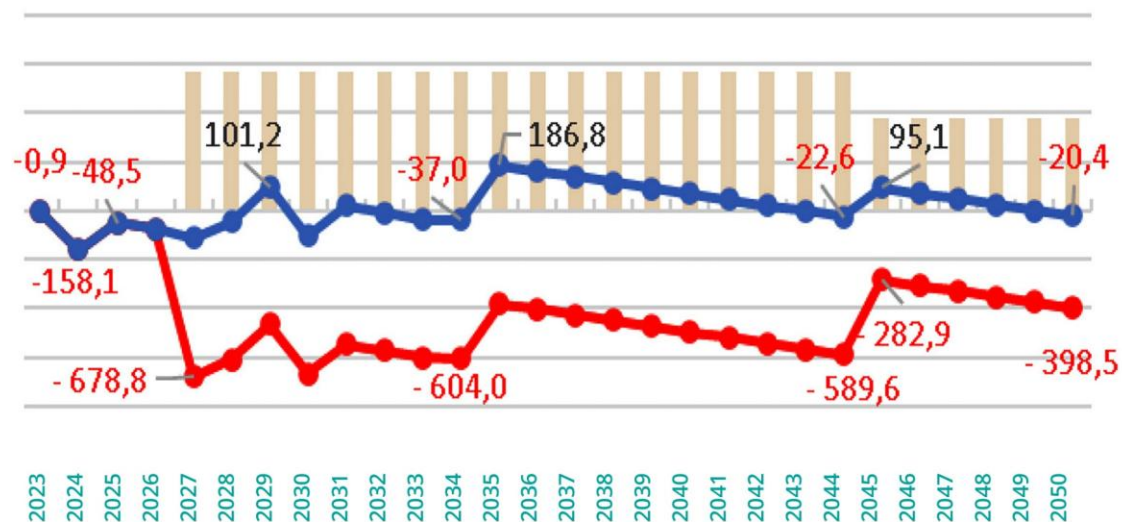
IMPACT OF THE CAPACITY RESERVE OF THE DĚTMAROVICE POWER PLANT ON THE POWER BALANCE OF THE MORAVIAN-SILESIA REGION 2023–2050



EXPECTED SCENARIO



EXTREME SCENARIO



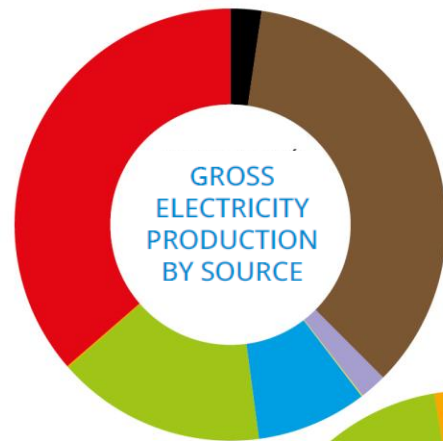
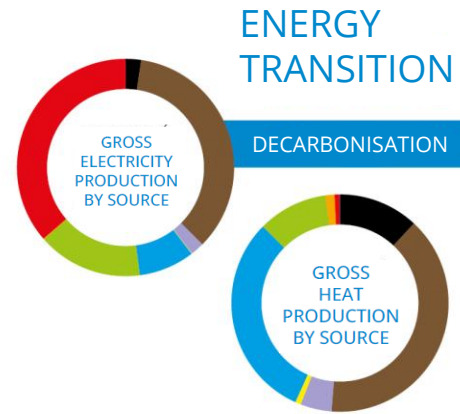
BACKUP CAPACITY OF
THE DĚTMAROVICE
POWER PLANT (EDĚ)

POWER BALANCE
WITHOUT THE
DĚTMAROVICE CAPACITY
RESERVE (EDĚ)

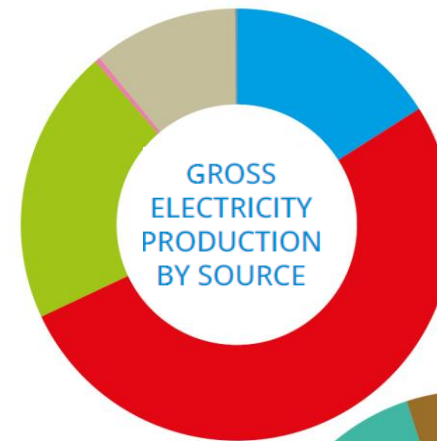
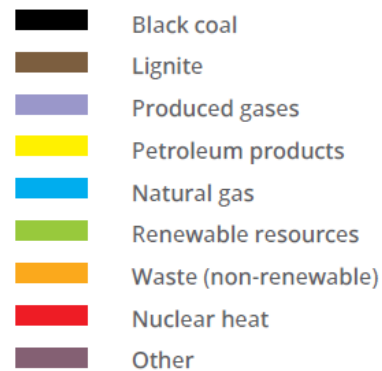
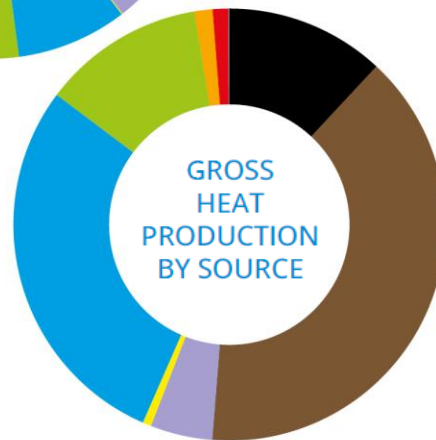
POWER BALANCE WITH
THE DĚTMAROVICE
CAPACITY RESERVE (EDĚ)



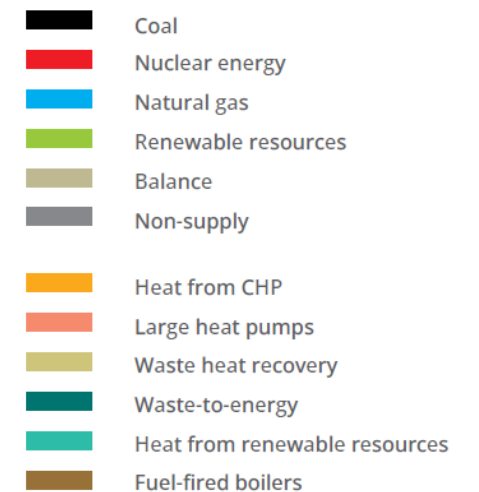
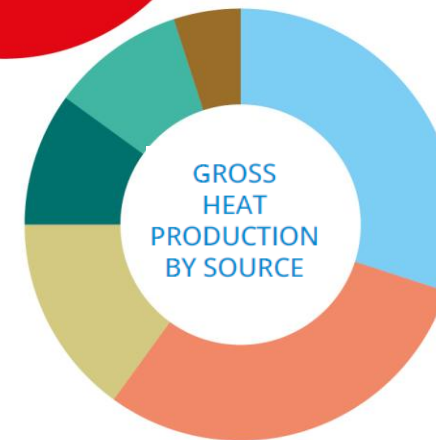
SHORT-TERM SCENARIO



MEDIUM-TERM SCENARIO 2030



LONG-TERM SCENARIO 2050



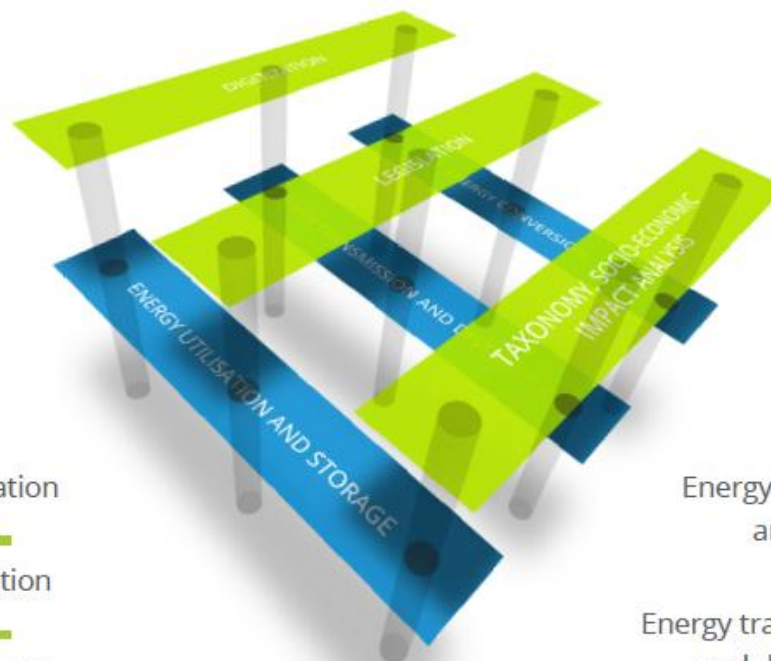
NATIONAL CENTRE FOR ENERGY

We connect excellent research with leading industrial players in the sustainable energy sector.

Digitisation

Legislation

Taxonomy and socio-economic impact analysis



Energy utilisation and storage

Energy transmission and distribution

Energy conversion

NCE T A
Č R

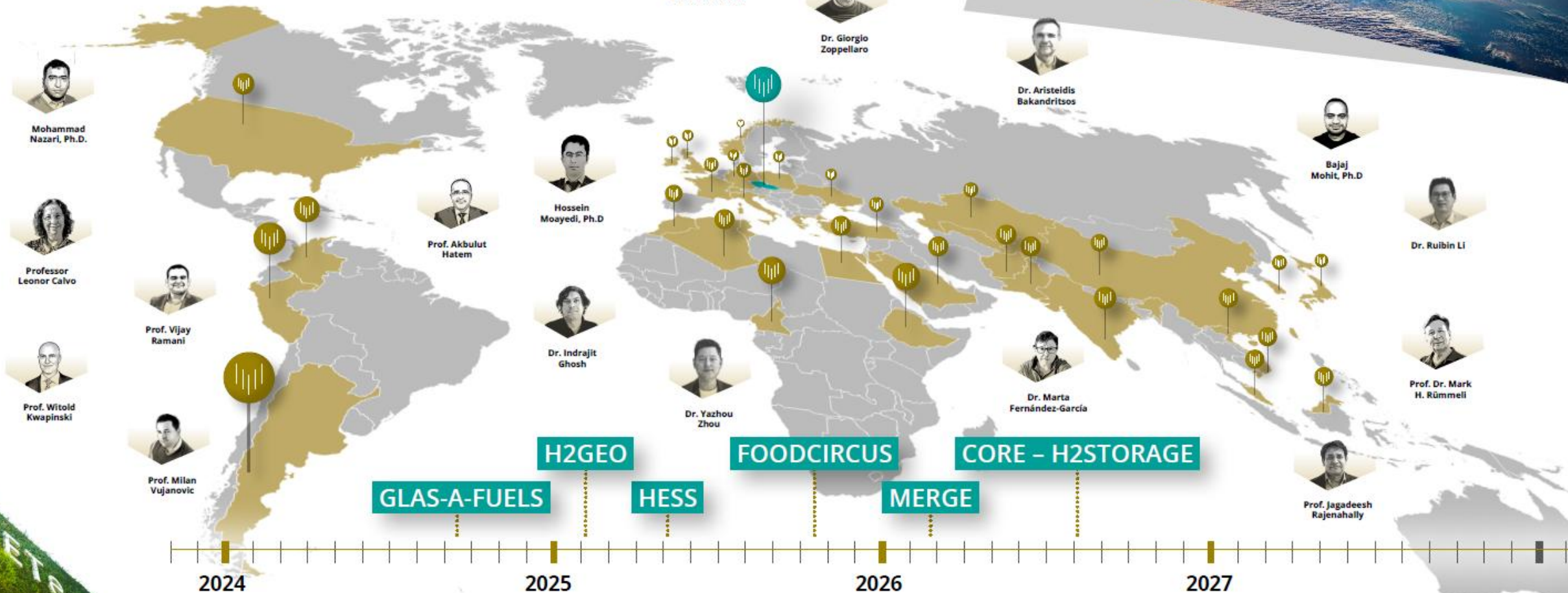


PROJECTS AND SCIENTISTS

APPLIED RESEARCH PROJECTS

2014 – 2018 Approximately **EUR 18.88** million

2019 – 2023 Approximately **EUR 36.87** million



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CEET

prof. Ing. **Mišák Stanislav**, Ph.D.

<http://>