



CTU

CZECH TECHNICAL  
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IN PRAGUE

# CCUV4 - Green Deal strategies for V4 countries: The needs and challenges to reach low-carbon industry.

The Workshop No.2

31.5.2023, Lodz, Poland

- Visegrad Fund

The project is supported by The International Visegrad Fund,  
project ID22120032.





## THE CHARACTERISTIC OF THE PROJECT

- strengthening links, developing deeper cooperation, and sharing research and development knowledge in CCU technologies among the consortium partners

### Project Applicant:



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### Project Partner No.1



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### Project Partner No.2

Lodz University of Technology  
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**Focus area:** (Strategic) Returning to the roots of Visegrad cooperation

**Implementation period:** 1.1.2022-31.12.2023

**Coordinator:** Assoc. Prof. Ing. Lukas Kratky, Ph.D.; Czech Technical University in Prague, Faculty of Mechanical Engineering, Department of Process Engineering

### Project partner No.3

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Department of Chemical Machinery  
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## THE PROJECT EVENTS

THE TERM	EVENTS AND DELIVERABLES	Place
01/2022	The Online Kick-off Meeting	
05/2022	The Working Meeting No.1	Bratislava, SK
09/2022	The Workshop No.1	Prague, CZ
01/2023	The Working Meeting No.2	Miskolc, HU
05/2023	The Workshop No.2	Lodz, PL
09/2023	The Online Working Meeting	
11/2023	The Open Access Article	
12/2023	The Online Closure Meeting	





## THE THEME

### ADVANCES IN TECHNOLOGY AND EQUIPMENT DESIGN FOR INDUSTRIAL DECARBONIZATION OF V4 COUNTRIES.

- **Green Deal Strategy – ambition of zero pollution.**
- **Process optimization, energy demand, reduction of carbon footprint.**
  - Cryogenic separation of CO<sub>2</sub> from flue gas.
  - Hydrothermal carbonization of kitchen waste.
  - Harvesting and dewatering of microalgae.
  - Advances in extrusion process.
  - Introduction to non-conventional reinforced EPS.
- **LCA, feasibility studies for V4.**
  - High-concentrated photovoltaic panels with optical micro-tracking.
  - Grinding process and new emission factors.



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## LET'S GO AHEAD!



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