TECHNICAL UNIVERSITY OF LODZ

Poland

ul. Skorupki 6/8
90-924 Lodz, Poland

http://www.p.lodz.pl
FACTS & FUNDAMENTAL INFORMATION

POLAND

REGION of Lodz

Population: 2,67 mln, 146 people/km²
Area: 18 219 km², 5,85% of Poland area

Region of Lodz is probably the most critical region in European scale for solving low carbon energy problems:

- one of the largest CO₂ emitting regions in EU (50 million tonnes of CO₂/y) and the largest European power plant (4.3 GW in Belchatow)
- critical Polish region in terms of shortage of water, droughts and drying of land with direct impact of climate change and global warming,
- one of largest Polish geothermal resources (exploited in Uniejow, Poddebice, Mszczonow)
- rich lignite deposits and potentially rich shale gas and tight gas resources,
- largest European on-shore saline aquifers suitable for CCS (estimated 90 billion tones CO₂ storage capacity) in geological formations. The preparation of injection CO₂ is in progress.

All these areas require wide research activities.
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CITY OF LODZ

Population: 0.78 mln:
- Large industry centre (chemical, pharmaceutical, textile)
- Large academic centre: 8 Universities (technical, humanistic and social sciences, medicine, arts, etc.)
Technical University of Lodz

**Today**

- 21,000 students
- 1,580 academic staff
- 123 specializations
- 70 departments
- 33 fields of study
- 9 faculties
Technical University of Lodz
9 faculties:

- Mechanical Engineering
- Electrical, Electronic and Computer Science
- Chemistry
- Textile Engineering and Marketing
- Biotechnology and Food Sciences
- Civil Engineering, Architecture and Environmental Engineering
- Technical Physics and Applied Mathematics
- Process and Environmental Engineering
- Organization and Management
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Chosen research areas and activities:

- Renewable energy resources – solar and geothermal energy production techniques,
- Waste treatment and *Waste to Energy* technologies, emission control technologies
- Food biochemistry and applied biocatalysis,
- Molecular and environmental biotechnology,
- Optimisation of building envelope
- Advanced solution for passive solar system
- Healthy and comfortable neighbourhood
- Protection of existing estates
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Contact persons:

Izabella Kwaśniewska-Karolak: biotechnology, food sciences, ecology (izabella.kwasniewska-karolak@p.lodz.pl)

Mirosław Imbierowicz: chemistry, environmental engineering, waste and wastewater treatment technology, (miroslaw.imbierowicz@p.lodz.pl),

Dariusz Heim: physics, civil engineering, architecture, environmental engineering (dariusz.heim@p.lodz.pl)

Thank you for your attention!