

Ministry of Climate and Environment Republic of Poland

Undersecretary of State Chief National Geologist Government Plenipotentiary for National Raw Materials Policy Piotr Dziadzio

CCUS activities in Poland

Carbon Capture and Storage potential in Poland

Estimated CO2 storage capacity		
onshore	depleted hydrocarbon deposits	1 250 mln t CO2
	saline aquifers	12 000 mln t CO2
offshore	deposits in the Polish economic zone	860 mln t CO2



Legenda/Legend

I_Jura&T/I_Jurassic&T II_Skoczów-Czechowice Miocen (inne)/Miocene (other) Kreda/Cretaceous Jura/Jurassic Karbon/Carboniferous Kambr perspekt/Cambrian good gaz i ropa/HC fields Trias/Triassic obszary MPH/CBM fields Czerwony spągowiec/Rotliegend Karpaty mezopaleozoik/Carpathians Mezopaleozoic NATURA2000 EEA GZMP/potable aquifers • 20 < EMISJA_CO2 < 100 100 < EMISJA_C02 < 500</p> 🔵 500 < EMISJA_CO2 < 2500 2500 < EMISJA_CO2 < 12500 12500 < EMISJA_CO2 < 32000 🔲 obszary zurbanizowane/urban areas 🖊 większe rzeki/major rivers ✓ granice(wybrzeża)/boundaries(coastlines) strefa ekonomiczna Bałtyku/PL Baltic zone



Changes in the legal framework for the geological storage of carbon dioxide

The most essential changes provided for in the Draft Amendment to the Geological and Mining Law are:

- Allowing geological storage of CO2 in offshore and onshore areas and in hydrocarbon deposit structures. This applies to projects of a commercial nature (so far only demonstration projects were allowed).
- Introducing the possibility of combining intensification of hydrocarbon extraction from reservoirs (EOR) with CCS activities taking advantage of synergies and reducing the cost intensity of CCS technology.



CCUS Working Group

In 2021 the Minister of Climate and Environment established an advisory body to facilitate and coordinate the development of Carbon Capture, Storage and Utilization technologies (CCUS Working Group).

The group serves as a platform for information exchange and coordinating activities regarding opportunities and barriers to CCUS development in Poland. -

The Working Group's tasks include:

- analysis and update of previously taken actions in the field of CCS technologies
- analysis of CO2 transport modes and the ways to develop the necessary infrastructure
- verification and analysis of potential CO2 storage locations
- recommendations regarding communication, raising awareness and public acceptance of CCS technologies.



CCUS Working Group

The Working Group is involved in several workstreams, analysing the potential for CCUS in various sectors:

- Feasibility study for CCS facilities in the energy sector (5 gas and coal power and CHP plants were selected for analysis)
- A CCS strategy for the cement sector was also prepared by the AGH University of Kraków
- Discussions on the needs and challenges of particular sectors (e.g. **cement, steel, energy, chemicals, refinery**, etc.) and possible clusters open to various types of emitters.





Support for CCUS projects

The Ministry of Climate and Environment has supported and issued recommendation letters for a number of CCS projects and initiatives:

- Poland EU CCS Interconnector (September 2021) PKN Orlen, Lafarge Cement, Air Liquide
- Go4ECOPlanet (March 2022) Lafarge Cement
- ECO2CEE (March 2023) PKN ORLEN, ORLEN Lietuva, Lafarge Cement, Air Liquide
- CO2 Routes Across Europe (April 2023) Oil and Gas Institute, Lotos Petrobaltic





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Thank you for your attention