

Mapping CCS in Romania

Report Summary

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[Attitude / Influence chart of interviewed stakeholders](#)

Energy production and emission breakdown from different fossil fuels

	% of power generation	GWh (electricity)	CO2 emissions (million tonnes) from electricity
Coal	42,50	27 531	28,9
Gas	12,70	8 226	4,2
Oil	1,04	676	0,5
Total	56,24	36 433	33,6

Scenarios for different greenhouse gas reduction trajectories

In Romania there are only few national official scenarios, most of them addressing just parts of the climate change scenarios, while the Energy Strategy and Climate Change and Sustainable Development are both under review. NGOs follow the scenarios made at group's level, not having a specific one for Romania.

Title	Organisation	Years Covered	Brief description
Energy Strategy of Romania Climate Change and Sustainable Development Strategy of Romania	Minister of Economy, Trade and Affaires Environment	2008-2020	<p>Energy Strategy of Romania, adopted in 2007, is currently under review taking into account the legislative package targets and new conditions such as the uncertainty of the situation in the region (like gas crisis was in December 2008).</p> <p>For developing the energy strategy until 2020, the Ministry of Economy has achieved a minimum cost development study of the energy sector, which targets the time horizon 2025, even 2030, which has to be reviewed considering the new Energy-Climate Change package.</p> <p>The forecast on the economic development of Romania in the period 2007-2020 (prepared by the National Commission for Prognosis and presented within the Energy Strategy of Romania) was a fundament for defining the main macroeconomic indicators used in determining the evolution of GHG emissions in Romania. The existing energy Strategy has also to be review based on the actual economic and financial crisis in the entire world.</p> <p>In present there a draft of Climate Change and Sustainable Development Strategy for period 2008-2012. This has to be review by extending the period to 2020 and taking into account the legislative package targets.</p> <p>There is an intention to be made a common Strategy for Energy and Climate Change.</p>
	Minister of Environment and Forest	2008-2012	

Thermal Power Plants

In the near future new projects to built power plants (green/brown field) are planned. In the below table there are listed in the order of how much the project is developed now.

Name	Type	Power MW	Goal year
PETROM OMV	Natural Gases	860 MW	2011
ENEL -Galati	Imported coal	800 MW	2014
CEN Craiova SE Işalniţa – new unit	Local lignite	500 MW	2014
CEN Rovinari – new unit	Local lignite	500 MW	2018
Termoelectrica-EON-ENEL-Brăila	Imported coal	800 MW	2016
Electrocentrale Deva	Local brown coal	450 MW	2016
Termoelectrica – SE Paroseni	Local brown coal		2016
Termoelectrica – SE Doicesti	Local lignite		2016
INTERAGRO Făgăraş	Natural Gases	400 MW	2016

NOTE: Generally country experience for blocks on coal it takes 2 years for the design of the project plus obtaining approvals / building permit and 4 years for the construction. For blocks on natural gases it takes 2 years for the project plus obtaining approvals / building

permit and 2 years for the construction.

State of regulatory process for CCS

Implementation of the CO₂ storage directive started to be implemented. The two Ministries responsible for this are the Minister of Economy, Trade and Affairs Environment and the Minister of Environment and Forest. Details for officers potentially influencing the procedure are provided below;

Name	Position	Contact details
Ministry of Economy, Trade and Affairs Environment		
Mr. Tudor Serban	Secretary of State	Tel: +40-21-2025410
Mrs. Cristiana Ion	Director of Quality Infrastructure & Environment	Tel: +40-21-2025280 cristiana_ion@minind.ro
Minister of Environment and Forest		
Mrs. Florentina Manea	Director of Climate Change and Sustainable Development Direction	Tel: +40-21-3162220 florentina.manea@mmediu.ro
Mrs. Ana Maria Tudose	Counselor	anamaria.ghibu@mmediu.ro
National Agency for Mineral Resources		
Mr. Alexandru Patruti	President	Tel: +40-21-2025370 alexandru_patruti@minind.ro
Mrs. Florina Sora	Superior Counselor	Tel: + 40-723-537001; flsora@namr.ro
Minister of Finance –General Directorate for Treasury and Public Debt		
Mrs. Irina Granzulea	Expert assistant	Tel: +40-21-3199759, int. 2030 irina.granzulea@mfinante.ro
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Department for European Affairs		
Mrs Bogdan Badea	Director of Coordination Positions	Tel: +40-21-3085395 bogdan.badea@dae.gov.ro
Mrs. Daniela Zanescu	Counselor	Tel: +40-21-3085395 daniela.panait@dae.gov.ro

National CCS supporting programs and plans for full-scale CCS

- 1 There is a Memorandum - "Action Plan To Implement A Demonstration Project Regarding Carbon Capture And Storage (Carbon Capture And Storage - CCS) In Romania" signed between the ministers involved and by Prime Minister, which establish the steps that has to be done to achieve the target
- 2 ISPE (Institute for Energetic Studies and Projects) and GeoEcoMar (National Institute for Research and Development in Geology and Geoecology,) have been part of various projects proposals sponsored from national research and development funds and have proposed several research themes

- 3** ISPE and GeoEcoMar are representing Romania in several European networks as ZEP (Zero Emission Platform) - Advisory Council and Governmental Group, ENeRG, CO₂ Net and FENCO ERA, being involved in EU and/or national funded R&D projects like CASTOR, EU GeoCapacity (Assessing European Capacity for Geological Storage of Carbon Dioxide) CO₂ NetEast (CO₂ capture and storage networking extension to new member states), Impact of Communication (Scrutinizing the impact of CCS communication on the general and local public).
- 4** There is a pre-feasibility study for a new unit of 500 MW using local lignite in CEN Craiova – Isalnita designed “capture ready”. It is already a pre-selection proceeding to choose a possible Investor for this project.
- 5** A feasibility study was performed at the end of 2009 for a new unit of 500 MW on local lignite, also “capture ready” in existing power plant, CE Rovinari