

## **POLAND | CCUS in the updated National Energy and Climate Plan (NECP)**

In October 2024, the Ministry of Climate and Environment (MCE) submitted a draft update of the NECP (uNECP) for 2021-2030 for consultation. The document is being developed on the basis of Regulation (EU) 2018/1999 of the European Parliament and of the Council of December 11, 2018, regarding the Governance of the Energy Union and Climate Action. EU member states are required to submit an update of the NECP every 5 years (Article 3) and to develop a new NECP every 10 years (Article 14). Further legal basis is set forth by the Act of April 10, 1997 - Energy Law (Article 15ab), according to which the minister in charge of energy, in cooperation with the minister in charge of climate affairs, shall develop an integrated national energy and climate plan, as referred to in Regulation (EU) 2018/1999. The NECP covers a very wide range of issues - from raw material and energy consumption and greenhouse gas emissions in individual market sectors, to macroeconomic impacts.

It is noteworthy that this is the first update of the NECP prepared by Poland after the entry into force of Regulation (EU) 2024/1735 of June 13, 2024, on establishing a framework of measures to strengthen the European ecosystem for the production of carbon-neutral technologies (the Net Zero Industry Act). The said regulation defines CCS and CO<sub>2</sub> transport and utilization technologies as carbon-neutral technologies and establishes, among other things, EU-level targets for the annual amount of injected CO<sub>2</sub>. In addition, in February 2024, the Commission's communication "Towards ambitious industrial carbon management in the EU" was published, according to which Member States should include an assessment of needs for CO<sub>2</sub> capture and storage capacity in their updated NECPs, and identify measures to support the implementation of the CCS value chain.

The NECP update emphasizes the role which CCS (CO<sub>2</sub> capture, storage) and CCU (CO<sub>2</sub> capture and utilization) technologies can play in the decarbonization of the energy sector - in addition to the development of nuclear sources and RES. It was noted especially with respect to gas-fired power plants (especially new units) or biomass and biogas units (bio-CCS or BECCS). The uNECP does not identify coal-fired plants in this context, but their continued operation may nevertheless be necessary, especially if other decarbonization directions are delayed. Substantive reservations may be raised with respect to the part of uNECP where the technologies for direct CO<sub>2</sub> capture from the air (DACCS) were mentioned, since they neither have anything to do with the energy sector nor, given their technical sophistication, should be considered as an alternative to CO<sub>2</sub> capture from generation sources.

Furthermore, the draft uNECP assumes that it is likely that CCS/CCUS solutions will find faster application in the industrial sector than in the power sector. The sectors in question are those generating so-called hard-to-avoid CO<sub>2</sub> emissions, which traditionally include the cement, steel or chemical industries (although the list could be supplemented e.g. with the lime sector). In this context, under objective 1.2.4. "Reducing GHG emissions in industry" the NECP update indicates that the pursuit of GHG emission reductions in the industrial sector should be facilitated by additional targets for, among other things, providing conditions for the development of CCS and CCU technologies. However, these targets are not formulated in concrete terms, as is the lack of an emission forecast by industry subsectors in the uNECP. In discussing the potential for the development of CCS and CCU in industry, the NECP update instead rightly points to a number of determinants of investment decisions in CCS/CCU projects, which include the opportunity cost of ETS allowances, fuel and electricity prices, and the availability of other emission reduction mechanisms. It stressed that the challenges to the development of CCS projects are the high cost of infrastructure construction, the potential and feasibility of CO<sub>2</sub> storage and transportation infrastructure, and the need for coordination across the whole value chain. Finally, it is also impossible to ignore the criterion of public acceptance, especially when locating CO<sub>2</sub> storage sites on land.

Undoubtedly, a positive element of the uNECP is the announcement of the formulation of a national development strategy for the management of CO<sub>2</sub> sequestration and its use in the economy, the development of a legal framework to facilitate the deployment of the technology in Poland, and the

identification of support mechanisms. These are undoubtedly three basic problems that need to be solved as soon as possible to enable CCS/CCU implementation in Poland on a wider scale. In particular, it is desirable to adopt a decarbonization strategy as soon as possible, e.g. as a public policy within the meaning of the law of the Act of December 6, 2006 on the Principles of Development Policy. Furthermore, the legislative work on the localization regulation for CO<sub>2</sub> injection sites and removal of other already identified legal barriers for the sector should also be completed as soon as possible.

It is also noteworthy that the uNECP specifically identifies "Contracts for Difference for CO<sub>2</sub> reduction and other activities to support commercial CCS and CCU projects" as Measure no. 79. This activity includes the preparation of a financial support instrument (carbon contracts for difference) for installations which reduce CO<sub>2</sub> emissions. In addition, the measure also includes other activities to support CO<sub>2</sub> capture and utilization (CCU) technology, as well as the construction and operation of carbon capture and storage (CCS) facilities, including research, education projects.

The text originally appeared: Chambers and Partners, 30.11.2024