



WiseEuropa

Industrial carbon management strategy

WiseEuropa's response to the call
for evidence and public consultation
launched on industrial carbon management
under European Green Deal

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To whom it might concern,

as WiseEuropa, an independent Polish think-tank, we would like to express our satisfaction with the upcoming publication of the EU CCUS strategy. We believe that the development of CCUS technology is necessary to achieve climate goals, primarily climate neutrality, as well as to achieve negative emissions after 2050. We also believe that achieving these goals is possible only through international cooperation, and therefore we believe in the coordination of activities of the Member States at the community level regarding the development of CCUS technologies. Therefore, we also wanted to submit the following comments to the prepared strategy. At the same time, we would like to point out that these comments are of a general nature pointing a direction where the strategy should go. The presentation of a more detailed consultation note will be possible after the publication of the draft version of the strategy.

❖ *General thoughts*

The overarching goal of the energy and climate policy should be to reduce greenhouse gas emissions. Thus, the CCUS strategy should outline policies and support mechanisms that allow the use of CCUS only in the case of emissions that are impossible or economically unprofitable to avoid, so that the possibility of installing CCUS does not provide an incentive, e.g. to build new generation capacities based on fossil fuels.

The EU CCUS strategy should be developed taking into account the principle of technological neutrality. None of the forms of carbon capture should be specifically promoted or blocked in order to give the market at an early stage of development unhindered development and avoid overregulation.

❖ *Detailed notes*

We believe that it is not necessary to impose carbon capture targets on specific Member States, especially since achieving such a target might be out of remit of national authorities. CCS initiatives will predominantly rely on a willingness of private industrial and energy-related stakeholders, who are already convinced to CO₂ emissions mitigation measures due to high carbon price. What the EU and Member States could do is to facilitate these developments, firstly by providing knowledge of available CO₂ storage sites. The Member States have sufficient capacity in national scientific and administrative bodies to gather such information and make it available to the public. Not until this data is provided will CO₂ emitters make considerate decisions on deploying CCS installations linked to onshore CO₂ storage sites.

Therefore, it seems much more effective to map the possibilities of CO₂ storage in the territory of the European Union. Hence, instead of obliging EU Member States to set binding carbon capture or carbon storage targets, we would like to make EU Member States facilitate the deployment of CCS infrastructure by mapping available geological CO₂ storage potential in particular countries. We imagine that the EU Carbon Management Strategy (or even the EU regulatory framework) could recommend to/require EU

Member States to indicate and make a publicly available list of go-to areas for CO₂ storage sites, as it is proposed in the revision of Renewable Energy Directive for the installation of plants for the production of energy from renewable sources.¹ The Commission could elaborate on recommended criteria for such go-to areas to ensure environmental protection, safety of storage (in accordance with specific Guidance documents to CCS Directive²) and CO₂ injection and transport efficiency.

The need for mapping CO₂ storage potential in the EU is of particular importance as there are reports on a gap between CO₂ to be captured from announced capture projects and capacity of announced or already delivered CO₂ storage facilities: as of today there is more CO₂ to be captured than it can be stored in Europe.³ To avoid a risk of not having enough CO₂ storage capacity we have to already know where and how much CO₂ can be stored.

Access to information, both for investors in CCUS projects and for the general public, is a prerequisite for success. Therefore, the strategy should include the aggregation of knowledge about European geological CO₂ storage sites (European Storage Atlas) and ongoing and planned underground carbon dioxide storage projects. The strategy should also include recommended models of access to information (as broad as possible) and indicate recommended (national) entities responsible for collecting it.

It is extremely important to consider the EU's neighbours in the study of the storage potential, especially Ukraine, the post-war reconstruction of which can be carried out based on the principles of the transition to climate neutrality, as well as Norway. Initial mapping of the CO₂ storage potential in Central and Eastern Europe, including Ukraine, has been already carried out, for example by national geological institutes. We, WiseEuropa, summarised this information in the report accompanying the CCS4CEE project [LINK], to which we would also like to refer. This data could, as well as other data gathered under EU-wide projects aimed at mapping CO₂ storage (EU GeoCapacity⁴, CO₂StoP⁵) be an input to the EU database of available CO₂ storage sites mentioned in the paragraph above. We however imagine that the information to such a database could be ultimately sourced from national lists of CO₂ storage go-to areas.

Although we do not recommend to oblige the EU Member States to set carbon capture and storage targets, they should be encouraged to take actions aimed at CCS deployment in other ways. Therefore, we believe that the EU CCUS strategy should call on Member States to consider not only CCUS, but carbon removals in general, as a separate topic or a separate chapter of their NECPs and LTSs. To make this recommendation work, it would be beneficial to amend the Regulation on the Governance of the Energy Union⁶ and to include the issues related to CCS in the general frameworks for NECPs and LTSs.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A222%3AFIN&qid=1653033811900> (for details see article 15b and 15c to be inserted in the RED Directive).

² https://climate.ec.europa.eu/system/files/2016-11/gd2_en.pdf.

³ https://cdn.catf.us/wp-content/uploads/2022/01/11074424/CATF_CarbonCapture_StorageGap_Paper_Proof_01.10.22.pdf.

⁴ <http://www.cgseurope.net/Sections.aspx?section=491.492.494>.

⁵ https://setis.ec.europa.eu/european-co2-storage-database_en.

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02018R1999-20230516>.

Thanks to that we could expect the EU Member States to outline strategic actions in the field of carbon capture and storage.

An issue requiring clarification and coordination at the EU level is undoubtedly the transport of captured CO₂. We appreciate the efforts already made when it comes to amending the EU ETS Directive in such a way it does not discriminate the other ways of CO₂ transport than by pipelines. However, the legislative process is still halfway – there is a need to amend the Monitoring and Reporting Regulation⁷ as it still recognises only CO₂ transported by pipelines as eligible to be subtracted from the emissions of the installation. The EU Carbon Management Strategy should have a non-discriminatory approach to any of CO₂ transport technology until it does not assume significant CO₂ leakage on the way to CO₂ storage site, which should be reflected in respective EU regulations. In terms of CO₂ transport, it is also worth paying attention to the possibilities and plans for creating cross-border connections. Thus, ***the EU strategy should strive to create unified technical standards for CO₂ transport pipelines in order to facilitate the creation of cross-border projects. At the same time, the strategy should include coordinated actions to overcome the barriers to the export of carbon dioxide to foreign CO₂ storage sites emerging from the London Protocol.***

The development of the transport system will force the creation of a pipeline management and operation model. It seems justified to establish an EU association of national system operators modelled on the natural gas market. At the same time, the carbon dioxide collection and transport market will differ significantly in its specificity from the natural gas market. Thus, in our opinion, it does not seem necessary to separate (“unbundle”) the storage operator from the pipeline operator in this case. Pipelines and storage sites are closely intertwined and it could be even more efficient to develop CO₂ storage and transport network jointly by one entity, as it would resolve the “chicken and egg” problem and provide an incentive for the development of carbon capture installations through an easy access to CO₂ storage sites. Unbundling of CO₂ storage and transport service might be however recommended when it comes to offshore carbon storage sites, where CO₂ delivery from carbon capture installations to harbours via onshore transport routes and CO₂ shipment are necessary. Offshore carbon storage will therefore require a multi-modal CO₂ transport and competitiveness and elasticity of CO₂ transport market could be desirable in this case.

The accompanying issue is to provide competitive price of CO₂ transport and storage, especially in the early development phase of CCS industry in the EU. CO₂ transport price by roads, rivers, rails and ships could be efficiently shaped by the market itself given a variety of entities that could provide such a service, but CO₂ transport pipeline network is a natural monopoly. Therefore, ***there should be a dedicated, transparent tariff system for CO₂ transport by pipeline, regulated by national authorities, that would ensure the price of CO₂ transport by pipelines to be justified and not unreasonably excessive.***

⁷ <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A02018R2066-20220828&qid=1691671649742>.

This and other CO₂ transport-related issues should be addressed by the regulatory framework for CO₂ transport infrastructure to complement the CCS Directive.

Moreover, the strategy could also foresee a possibility for the state to have a substantial share in CO₂ storage projects. This solution would provide for the distribution of liabilities and risks desired by private investors and would enable the state to influence the price of CO₂ storage service to make it not unjustifiably high.

We welcome the results of subsequent rounds of financing from the Innovation Fund, in which CCUS projects constitute an increasingly significant group of projects eligible for EU financial support. At the same time, we believe that the role of CCUS should be strengthened in financial support schemes, e.g. by announcing separate competitions under EU funds for CCUS projects (a good example to follow could be competitive bidding for renewable hydrogen production⁸), so that they do not compete directly with other RES or hydrogen projects and do not crowd out funds for their development. In addition, it is necessary to include a support mechanism for the CCUS infrastructure, e.g. in the form of carbon contracts for difference.

It is also worth noting that the plans of the European Union's climate policy go beyond 2050, when negative emissions are planned to be achieved. This will not be possible without the capture of carbon dioxide from the atmosphere (Direct Air Capture) and BECCS. It is essential that the strategy foresee how to support these technologies now, at an early stage of their development, so that their market is mature in time.

Also emission accounting presents a challenge if it comes to utilizing the captured carbon. Although some of the emissions are avoided in the production process of e.g. synthetic fuels, their combustion ultimately releases carbon dioxide into the atmosphere. Thus, the strategy should present the possible and preferred methods of settling these emissions.

❖ **Communication**

The basis for good communication is knowledge about the social moods accompanying a given project. The last Eurobarometer survey showing the attitude of European Union citizens to CCUS technology dates back to 2011, thus it can be considered outdated and irrelevant to the current situation. Therefore, we believe that the EU CCUS strategy should include a repetition of the pan-European survey of public sentiment towards CCUS.

The strategy should provide for social dialogue at every stage and from the very beginning of its implementation. We consider the announcement of preliminary consultations to be an important step, but we also identify the need for additional consultations on the final draft of the strategy. [Social dialogue](#) should also be an integral part of communication at literally all stages of CCS project implementation. We believe

⁸ https://climate.ec.europa.eu/eu-action/funding-climate-action/innovation-fund/competitive-bidding_en.

that only a reliable dialogue with stakeholders can mitigate the growing risk of misinformation around CCS projects.

We observe a growing interest in CCUS technologies, which unfortunately also translates into a growing number of false information about them spread in the media. In our opinion, communication activities should therefore focus on presenting safety aspects, including those already developed, such as setting geological standards for storage. It should also be emphasized that the implementation of CCUS is for some sectors of the economy, such as cement production, where it is the only solution to reduce emissions. The escape of these industries from the European Union, in case of not mitigating CO₂ emissions, would have fatal socio-economic consequences, e.g. for the labour market, or such socially important issues as housing or road construction.



WiseEuropa Foundation

WiseEuropa is an independent think-tank and research organization based in Warsaw that undertakes a strategic reflection on European politics, foreign policy and economy.

The mission of WiseEuropa is to improve the quality of Polish and European policy-making as well as the overall business environment by promoting the use of sound economic and institutional analysis, independent research and evidence-based approach to impact assessment.

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On 16 March 2023, during the Polish Climate Congress, the WiseEuropa Foundation was honoured with the Energy Transition Leader 2023 award. The competition jury included representatives of the Polish Climate Congress, the Polish National Energy Conservation Agency (KAPE) and the Industrial Development Agency.