DEUTSCHE
CARBON
MANAGEMENT
INITIATIVE

Statement

On the draft bill to amend the Carbon Di-oxide Storage Act

Berlin, July 2025

Introduction: CCU/S as a link between climate protection and competitiveness

The goal of climate neutrality by 2045 requires a wide range of solutions. Both industry and the energy sector are already making great efforts to achieve this goal. Carbon management is an essential part of the transformation towards climate neutrality. The Intergovernmental Panel on Climate Change (IPCC) confirmed this once again in its 6th IPCC Assessment Report. In the modeling of possible climate paths, both Carbon Capture and Storage (CCS) and Carbon Dioxide Removal (CDR) are described as indispensable for achieving the target. The need for the technical removal of CO_2in Germany is also emphasized in all important climate neutrality studies.

The principle of avoidance and reduction before capture and storage or use of CO_2should continue to apply. In addition, however, it must be ensured that Germany remains an attractive business location on its path to climate neutrality. This also includes securing industrial jobs, enabling German industry to participate in a transnational CO_2value chain and ensuring that Germany lives up to its responsibility as a key player within the EU.

With this draft bill to amend the Carbon Dioxide Storage Act, the issue now also has a legal foundation that can guarantee companies legal and investment security for the rapid development of a CO_2infrastructure.

The German Carbon Management Initiative represents the interests of CO_2infrastructure operators and midstreamers in particular and advocates a comprehensive application for Carbon Capture, Utilization and Storage (CCU/S). The draft law is rated positively overall. However, below are some aspects of the draft that should be adapted in order to actually enable the rapid and legally compliant development of a CO_2infrastructure.

Also take into account emissions that are difficult to avoid economically

Carbon Capture, Utilization and Storage (CCU/S) is not only a technical climate protection instrument for reducing greenhouse gas emissions, but also an industrial policy opportunity for Germany. CCU/S offers companies the opportunity to actively reduce their emissions and thus counteract the financial burdens of EU emissions trading in a targeted manner. Investments in carbon capture, utilization and storage create new scope for action directly on site - without having to rely on complex and lengthy subsidy or redistribution procedures. CCU/S is therefore much more than a technical climate protection instrument: it is an effective industrial policy instrument that enables companies to shape their transformation processes in a self-determined and economically viable manner.

The draft law focuses heavily on emissions that are technically difficult to avoid, such as those that occur in the basic materials industry. This does not take into account the fact that economically unavoidable emissions should also be considered. A framework is needed that also allows for transformations where alternative technologies are not yet economically viable. CCU/S will play an important role here - for economically feasible climate neutrality and the strengthening of industrial value creation and the preservation of jobs in Germany. The draft should therefore explicitly include this perspective and thus expand the

application possibilities for CCU/S - analogous to the draft of the Carbon Management Strategy of September 11, 2024:

> *"Difficult or unavoidable emissions are defined as those emissions that are will continue to occur in the medium or long term due to a lack of technical avoidance options or the lack of (actual or economic) availability of alternatives, which is why CCS/CCU is associated with lower lock-in risks in these applications" (Draft Carbon Management Strategy of the Federal Government of September 11, 2024).*

We expressly welcome the possibility of using CCS in the energy sector where no climate-neutral option is currently available. It is also important to think about carbon management and the development of hydrogen together. The ramp-up of low-carbon hydrogen as a pioneer for climate-neutral hydrogen cannot be realized without CO_2 capture and storage. $CO_2$is also an important raw material for effectively converting hydrogen into hydrogen derivatives, such as methanol or synthetic methane, in order to make it effectively climate-neutral and transportable for other fields of application, such as aviation or shipping.

Both technologies complement each other and must be consistently developed in parallel in order to ensure security of supply and climate targets in equal measure. Early coordination of the fields of application is necessary in order to avoid duplicate investments, leverage infrastructure synergies and ensure efficient utilization of the existing infrastructure.

Pay greater attention to the European dimension

Germany is dependent on close cooperation with European partners in order to store CO_2 efficiently and permanently. The North Sea in particular, with its geological conditions, offers significant storage capacities that must also be used by German emitters. Although the draft legislation mentions storage facilities in EU and EEA states, it does not mention the United Kingdom - despite its key role in the development of offshore CCS infrastructures and its existing projects and plans. In addition, there is no regulation for the legally secure approval and coordination of cross-border CO_2 transports. This is essential for projects such as the Delta Rhine Corridor (DRC). The Delta Rhine Corridor is a cross-border pipeline project that is intended to enable the transport of CO_2 from industrial centers in the Netherlands and Germany to storage sites in the North Sea and thus create a central infrastructure for the implementation of carbon capture and storage (CCS). Legislators must make it clear that cross-border cooperation is desired and actively supported.

Strengthen legal certainty for infrastructure development

CO_2 terminals as an integral part of the transport chain

In the view of the German Carbon Management Initiative, it is essential that the overriding public interest also applies to CO_2 pipelines and storage facilities. However, this must also be explicitly extended to CO_2 terminals, as they play a central role in the transport and storage infrastructure, especially in their function as an interface for exports. The current wording of Section 4b leaves open whether the overriding public interest covers the entire infrastructure chain, including intermediary structures such as floating or land-based export terminals. Although the explanatory memorandum refers to connections to ports and pipeline networks, it does not refer to the infrastructure required there for intermediate storage and onward transportation by ship. Clarification and explicit inclusion of these facilities is absolutely necessary in order to avoid unnecessarily delaying the development of an efficient and future-proof CO_2 infrastructure in line with climate targets.

Proposed amendment:

> § Section 4 Planning approval for carbon dioxide pipelines
>
> *"(1) [...] The construction, operation and major modifications of carbon dioxide pipelines, carbon dioxide storage facilities and carbon dioxide terminals are in the overriding public interest."*

Clarification on the classification of technical installations under planning law

The integration of accompanying technical infrastructure is essential for accelerated infrastructure expansion. "Facilities serving transportation" include a large number of components - in particular compressor, pressure boosting, expansion, control and measuring stations, which can be taken into account as part of a planning approval. The current version leaves open the question of whether these are components subject to planning approval or merely optional components subject to planning approval. This ambiguity harbors considerable potential for conflict regarding the authority to interpret in the approval procedure and should be replaced by a clear regulation. The current version of Section 3 No. 6 KSpTG provides for the inclusion of "facilities used for transportation". In our view, this wording should instead appear in Section 4a KSpTG and be supplemented by a clear reference to Section 43 (2) EnWG.

In addition, Section 4b KSpTG should be amended to include the aforementioned technical installations in particular in order to provide a legally secure basis for upcoming questions regarding land ownership.

Proposed amendment:

> § Section 4b Expropriation
>
> *"If the construction and operation of a carbon dioxide pipeline, including the installations serving the operation of the pipeline, in particular compressors, pressure boosting, expansion, control and measuring systems, serve the public good, , the expropriation or restriction of land ownership or rights to land ownership by way of*

expropriation is permissible insofar as this is necessary for the implementation of the project and the expropriation purpose cannot be achieved in any other reasonable way."

Do not set technology limits when converting existing pipelines

The possibility of implementing CO_2 pipelines along existing or planned hydrogen routes with simplified approvals is expressly to be welcomed. However, this regulation should also be extended to existing natural gas, hydrogen and product pipelines so that existing infrastructures can be used comprehensively and without technology restrictions.

The current restriction to natural gas pipelines in Section 4a (1) KSpTG does not go far enough and prevents the flexible and economic use of existing pipeline networks for CO_2 transport. We therefore propose including a reference to Section 43l (5) EnWG in Section 4 (1). This would mean that conversions of pipelines, such as those used in industrial and chemical parks in particular, would also fall under simplified approval procedures.

Proposed amendment:

§ Section 4 Planning approval for carbon dioxide pipelines

"(1) [...] If the construction, operation and significant modifications of carbon dioxide pipelines are to be carried out predominantly in or directly adjacent to a route that already contains hydrogen pipelines or is to be used for such pipelines in the future, it shall be assumed in the context of the assessment that the construction, operation and significant modifications of such a carbon dioxide pipeline do not represent any additional impairment of other interests that goes beyond the mere laying of the hydrogen pipeline, unless there are indications to the contrary. This applies in accordance with Section 43l (5) EnWG, according to which the parallel routing of energy supply lines is to be assessed as equivalent under planning law, provided there are no overriding public interests to the contrary."

In addition, there is a need for a clear legal interpretation rule - for example analogous to Section 113a EnWG - which ensures that existing permits also apply to CO_2 use. This creates legal clarity, reduces the planning effort and facilitates a rapid, economically sensible infrastructure ramp-up.

Adaptation of the liability regime in Section 29 to the state of the art and standard sector regulations

The stricter liability and presumption of proof regulations provided for in Section 29 were introduced in the context of earlier testing regulations. This special position is no longer justified today. The technology concerned has now proven to be technically mature and safe, so that differentiated treatment in the liability regime is no longer objectively justifiable.

Against this background, we advocate an adjustment of the liability framework to the usual level in the energy sector. A harmonization would contribute to a consistent and investment-friendly legal framework that does not unnecessarily inhibit innovation without neglecting the protection of the environment and the general public.

Deadline for transfer of liability

The mandatory transfer of liability after 40 years (in Section 31) is not touched in the draft bill. The period should be shortened here - of course if the relevant conditions are met - whereby a reduction to up to 20 years would be possible in accordance with the EU CCS Directive (2009/31/EC). If the long-term safety of a storage facility is proven, companies should be able to transfer liability at an early stage, which would make it easier for them to make new investments.

> Proposed amendment: § 31 Transfer of responsibility
>
> *"(1) The operator may~~, at the earliest 40~~ 20 years after the completion of the decommissioning of the carbon dioxide storage facility, request the competent authority to transfer the obligations arising for it from Section 18 of this Act, from the fulfillment of statutory compensation claims, from the Greenhouse Gas Emissions Trading Act and from the Environmental Damages Act to the state that has established the competent authority (transfer of responsibility)."*

Establishing accelerated expansion as an overriding public interest

In the interests of an ambitious climate policy, the legislator should also emphatically underpin the objective of the KSpTG - namely the achievement of net greenhouse gas neutrality by 2045 - under planning law. The "accelerated expansion as a priority concern" (see Section 43 (3a) EnWG) should therefore be expressly included in Section 4a KSpTG. This will help the approval authorities by providing clear legal guidance for the weighing up of protected interests and effectively relieve the planning process.

Introduce a toleration obligation analogous to the expansion of the electricity grid

As with the expansion of the electricity grid, the rapid development of a CO_2 transport grid will depend on acceptance measures and accelerated planning. The duty to tolerate (Section 48a) enshrined in the Energy Industry Act has proven to be an important instrument in this regard. A corresponding, adapted reference in Section 4a KSpTG is also necessary for CO_2 pipelines in order to make planning procedures legally secure, predictable and efficient - particularly with regard to supra-regional routes.

Do not hinder market ramp-up with rigid requirements - create realistic framework conditions for storage operators

The sanction regulation for storage facility operators in the event of non-compliance with certain CO_2 injection volumes (Section 25 (4) No. 2) provided for in the draft bill should be viewed critically in the early market phase. In this phase, there are naturally considerable uncertainties regarding available CO_2 quantities and reliable delivery commitments. Storage facility operators have no direct influence on the CO_2 capture of upstream facilities and therefore cannot guarantee that their storage facilities will be completely filled. Penalization in this situation would create unnecessary barriers to investment and significantly hinder the market ramp-up.

Instead, the legislator should rely on cooperative and market-based instruments - such as flexible compensation mechanisms or models of state risk sharing, such as those already successfully used in the energy industry (e.g. amortization accounts, certificate trading or borrowing approaches).

In addition, the amended Carbon Dioxide Storage Act should be more closely harmonized with the requirements of the EU CCS Directive (2009/31/EC). This allows the transfer of liability after just 20 years, provided that permanent storage can be proven. Other member states such as the Netherlands (Mining Act) and Denmark (Subsoil Act) have already implemented this regulation in practice. To ensure a uniform investment environment throughout Europe, the KSpTG should also contain a flexible regulation on the transfer of liability based on clear criteria and should not be tightened beyond the EU requirements. The removal of the rigid 40-year rule would improve investment conditions and significantly strengthen the international competitiveness of Germany as a CO_2 storage location.

In this context, we also expressly welcome the opt-in regulation for onshore storage in Germany. However, we suggest that suitable options for incentivization be developed at an early stage in order to allow municipalities to participate in the value chain and thus strengthen the social acceptance of CCU/S.

Creating a financing framework

The creation of a CO_2 transport and storage infrastructure network requires considerable upfront investment from initial investors. To enable this, a robust mechanism for risk hedging is needed at an early stage, particularly for investments in storage facilities and pipelines. The current draft bill does not yet contain any statements on this - neither on targeted support for "early movers" nor on possible investment subsidies or CAPEX/OPEX hedging. An amortization account, contracts for difference (CfD) or state purchase guarantees would be suitable instruments for effectively supporting the market ramp-up.

Even if the draft - understandably - does not make any statements on the financing of the grid, a suitable financing mechanism should be considered in the further design.

In addition, it should be ensured in the future that grid fees and storage costs for CO_2 infrastructure can be regulated in order to guarantee non-discriminatory access and fair and investment-friendly competitive conditions in line with European law in the long term. A corresponding clarification in the law would be an important step towards strengthening planning security and market confidence.

Shaping further necessary regulatory components for the development of a CO_2 market

This draft creates part of the necessary legal basis for a CO_2market in Germany. However, it is important to emphasize that essential building blocks are still missing to enable the actual use of this climate protection instrument. These include

- London Protocol: ratification of the amendment to Article 6 of the London Protocol, conclusion of bilateral agreements with storage states to regulate supervisory duties and reporting.
- High Seas Storage Act: Specifically, a legal exemption is needed for CO_2 transports for storage, the introduction of a new Section 6a HSEG to implement the amended London Protocol and legal clarification on CO_2 storage in the EEZ.
- Regulation of CO_2 infrastructure: Introduction of an investment-incentivizing regulatory framework for CO_2 infrastructure, including non-discriminatory access, fee regulation and long-term refinancing models.
- Ownership and liability regulations: Clarification of the civil and public law status of CO_2 in as a product and commodity as well as clear allocation of ownership and liability responsibilities along the entire value chain.
- Negative emissions: Development of a national framework for the recognition, accounting and promotion of negative emissions - including integration into national climate policy and potential creditability towards climate targets.
- Local acceptance and participation: Development of suitable instruments for local incentivization and participation of affected regions and municipalities in CO_2 infrastructure projects to increase approvability and acceptance.

Contact

German Carbon Management Initiative

Rasmus Portmann
Project Manager
T +49 151 58025769
mail@carbon-management-initiative.de

The German Carbon Management Initiative (DCMI) is the central platform for solution providers in the CO_2 value chain in Germany. It pools expertise along the entire CO_2 value chain - from capture technologies, trading, transportation and storage to the use of CO_2 - to promote carbon management in Germany. The initiative promotes dialog between industry, science, environmental associations and politics. The aim is to establish carbon management as an effective climate protection instrument and to create the political and economic framework conditions for the market ramp-up.