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# Delegated Act on permanent emission storage through carbon capture and usage(CCU)

In response to a European Commission consultation, CMW outlined its view on the role of permanent carbon capture and utilisation in the EU's Emissions Trading System

Currently, carbon captured and permanently stored (CCS) is not considered emitted under the EU Emission Trading System (ETS) - therefore it does not oblige the surrender of ETS allowances. In the last EU ETS reform, policymakers agreed to include a clause that allows the same to be possible for emissions captured and permanently chemically bound in a product, as outlined in the new **Article 12 (3b)** of the EU ETS Directive<sup>1</sup>.

The requirements for CO<sub>2</sub> to be considered permanently chemically bound in a product will be laid out in this **draft Delegated Act (DA) on permanent emission storage through carbon capture and usage (CCU)**. While wary of [any disturbance](#) to the environmental integrity of the EU ETS (which remains a tool primarily aimed at directly reducing emissions), CMW acknowledges the willingness of the European Commission to adhere to strict standards in the enforcement of this clause.

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<sup>1</sup> *Article 12 (3b)* An obligation to surrender allowances shall not arise in respect of emissions of greenhouse gases which are considered to have been captured and utilised in such a way that they have become permanently chemically bound in a product so that they do not enter the atmosphere under normal use, including any normal activity taking place after the end of the life of the product.

The Commission shall adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the requirements for considering that greenhouse gases have become permanently chemically bound as referred to in the first subparagraph of this paragraph.

CCS and CCU from industrial or fossil sources do not extract past emissions from the air but prevent new ones from happening. These pathways are energy-intensive, increasing systems costs and lowering overall efficiency, since more energy is needed to produce the same output: the majority of the energy penalty stems from the processes that separate the carbon from the gas composition in order to capture it.

Despite these energy requirements, CCS and permanent CCU, based on carbonated products that chemically bind the carbon permanently under normal use and end of life (i.e. mineral carbonates used in some construction products), can result in emissions reductions. In fact, the greatest climate benefits for permanent CC(U)S can be obtained from tackling process emissions from industrial applications, ie. emissions unrelated to the consumption of fossil fuels.

As such, Carbon Market Watch supports a **scientifically sound and environmentally integer use of permanent CCU** in industry and under the EU ETS Directive to incentivise its deployment and obtain additional emissions reductions. To achieve this goal, it is essential to design incentives correctly and avoid incentivising carbon lock-in (or even increased use of fossil fuels).

### **Maximising the climate benefits of (permanent-only!) CCU**

As a general assessment, CMW welcomes the current draft of the DA as it strikes a good balance between hinting towards the use of CCU in heavily polluting industrial processes and due caution in including this new technology under the EU ETS framework, in order to avoid damaging its environmental integrity.

The criteria laid out in the DA are strict enough to ensure credibility and effective carbon capture over a long enough timeframe to ensure real emission reduction:

- ✓ carbon **captured** AND **utilised**: the additional requirements should prevent carbon captured but not utilised (and not stored) from going unreported;
- ✓ requirements for the "**chemical bound**" process, specifically mentioning the global warming impacts of CO<sub>2</sub>;
- ✓ **permanence**: the requirement of the captured carbon having to be embedded in the product "over several centuries" ensures meaningful climate benefits of CCU technologies;
- ✓ Broad definitions of **product**, **normal use**, and normal activity after **end-of-life** of the product.



Similarly, CMW appreciates the **“white-list” approach** adopted by the Commission: as CCU technologies are scaled up, this represents a step in the right direction as it minimises the (high) risk of overestimating the climate benefit of certain products.

### **Still, caution should prevail**

While the Act is satisfactory, the main risk regarding an expansion of a whitelist concerns the **“end of life” criterion**: while the risks of exposing products to high temperatures are clearly expressed, there's no specific attention to other potential normal end-of-life activities - such as deterioration after disposal, that can lead to CO2 release. Any products at risk of CO2 release due to deterioration should be ruled out and not added to the white-list in the future.

Furthermore, it's essential that the Commission ensure **transparency** not only when adding, but also when removing a product from the list. With regards to the former, CMW suggests making the examination of products excluded from the whitelist publicly available. This will increase transparency in the process, and allow for public debate and feedback on how the list is determined.

On the latter, CMW supports the inclusion of a provision that would enable the **immediate removal** of CCU applications from the list if uncertainty about compliance arises, and to keep such CCU applications out from the list until evidence of the opposite is provided.

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