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Ammonia Europe's position on the European Commission's Industrial Carbon Management Strategy

Ammonia Europe welcomes the Commission's communication on the Industrial Carbon Management Strategy that recognises the important role that carbon management has to play in the full decarbonisation of hard-to-abate industries.

In order to achieve climate neutrality by 2050, the European ammonia sector, which is an energy intensive, hard-to-abate industry, must be able to make the best use of carbon management technologies as a tool to decarbonise. In particular, the use of CCS/U technologies must be seen as a complementary part of a combined approach, together with the production of renewable ammonia or low-carbon ammonia and the use of biomethane and low-carbon electricity, for our industry to be able to reach net-zero emissions by 2050. The production of blue ammonia represents a competitive decarbonisation pathway for ammonia producers that in current practice already capture a pure CO₂ stream from their process.

In order to guarantee the decarbonization of the sector on a large scale throughout Europe a technologically neutral approach is needed. It is important to underline that keeping production of renewable and low-carbon ammonia for fertilisers in Europe is a driver of a decarbonised food value chain and will contribute to ensuring food security. In addition, clean ammonia deployment can accelerate emission reduction of both the industrial and maritime shipping sectors and is a promising decarbonised energy carrier.

For a carbon capture strategy which will help the EU to achieve its net-zero ambitions, Ammonia Europe believes that the following areas need to be addressed when realising the strategy.

CCS should be fully recognised and promoted as a decarbonisation option for hard-to-abate industries, such as the ammonia sector.

The Commission's recognition of the need for carbon management for hard-to-abate sectors, is crucial to start reducing emissions. Any CO₂ avoided should be seen as progress. Therefore, flexibility on combinations of technology pathways is the best approach.

Ammonia production for fertilizers and other future downstream applications as a decarbonised energy carrier and shipping fuel, is an exceptional candidate for both CCS and CCU as during the production process a pure stream of CO₂ is already captured, requiring only to liquefy and to transport it to a storage location. Therefore, it can provide the volumes needed to reach an economically viable scale for transport and storage.

The decarbonisation of ammonia production in the EU faces significant challenges. The feasibility of specific technologies for decarbonisation is highly site and location dependent. Deployment of affordable renewable energy or low-carbon energy is not accelerating fast enough, so in regions that do not have access to renewables in the capacity required, CCS is the only practical and competitive pathway to abate emissions. Consequently, ammonia plants will need access to dedicated infrastructure to be able to use CCS.

Faster permitting processes, incentives for transport and storage operators and guarantees for CO₂ emitters are required to ensure that the carbon capture goals are realised.

Ammonia Europe welcomes the recognition and recommended provisions to remove the roadblocks on infrastructure construction by streamlining the permitting process. This should facilitate investment and the realisation of the necessary infrastructure. It will also be crucial to promote co-ordinated EU and MS funding with guarantees or Contract-For-Difference schemes and market regulations in order to incentivise the uptake of the technology and private investments. With these support measures industrial emitters may maintain the option to transition away from fossil fuels, without hampering the investment case for the storage facility.

The targets that have been proposed for CO₂ carbon capture and storage capacity are a very positive step forward which could lead to the needed investments.

A regulatory environment is needed for carbon capture technologies.

The realisation of a strong regulatory environment, fit for purpose, with a clear implementation plan will be necessary to create a framework for the emerging CCS infrastructure, transport and market. It will need to outline plans for connecting storage site operators to hard-to-abate industry CO₂ emitters.

Ammonia Europe stresses the importance, also underlined in the Communication, of considering requirements of sustainability, quality and purity criteria of CO₂ for captured carbon infrastructure. This will ensure that CCU/S is being deployed in processes with the capacity to greatly reduce emissions.

Ammonia Europe would also like to stress that any future regulatory development should encourage the use of available industrial CO₂ for CCU applications, particularly in sectors like ammonia where a very pure stream can be captured and directly utilised, in doing so avoiding less sustainable practices for sourcing CO₂ such as CO₂ mining from natural reservoirs.

Creating a market for low-carbon ammonia products

Finally, attention and support should be given to create a market for low-carbon products. The development of a low-carbon market for ammonia can only materialise with the right incentives and support. Those incentives should be put in place for both upstream producers of low-carbon products and downstream users of these products. This can be achieved by including demand and supply side policy initiatives. These initiatives targeting the demand and supply for low-carbon products are needed to support industrial decarbonisation.

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