CARBON MANAGEMENT

The interest in carbon removal solutions has been growing steadily for the past years, and significant progress is being made on the technological side of carbon capture and utilisation. Certain industries, like the cement or lime sector, have a lot of GHG emissions embedded in their production processes. These process emissions are unfortunately extremely difficult to get rid of, because, unlike combustion-based GHG emissions, switching from fossil fuels to renewables does not impact process emissions. Therefore, the only available solution to reduce process emissions is through carbon capture and storage.

However, implementing carbon capture and storage technologies tends to increase energy consumption quite significantly. To address this issue, investments in renewable technologies to produce this much-needed energy are a must in order to keep costs low and allow for the industry to remain competitive. On top of this, if there is not enough CO_2 produced, it is hard to find a place to store it since moving it around is a costly process and might not be worth it if the quantities are too low. In that regard, it's a possibility that bigger players (with very high CO_2 production) will develop long-term contracts, but there is currently no authority for centralizing CO_2 storage and developing a better network to transport it. A significant role will be played by carbon removal technologies, essential to enable effective climate action, avoid greenwashing and strengthen public confidence.

Carbon Dioxide Removal (CDR) refers to “anthropogenic activities removing CO_2 from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products” (IPCC). Removals can 1) accelerate the reduction of net emissions (immediately), 2) counterbalance ‘hard-to-abate’ emissions (near-term), and 3) deliver net negative emissions (long-term). Carbon removals lead to the generation of “negative emissions”, which are crucial in achieving our climate goals. CDR’s deployment is currently facing many obstacles and legitimate questions around how it can be developed and maintained as an effective, ethical, and scalable means of addressing climate change.

TRADE ASSOCIATIONS

Even if, as of today, carbon capture is technologically feasible, there is no real carbon transport network to make use of. There is a clear need from the industrial side to have a better carbon framework, that would speed up the uptake of carbon capture technologies and the pace of decarbonisation.

ENERGY INTENSIVE INDUSTRIES

Carbon removals are the only available solution that would allow certain European industries (with high process emissions) to become fully carbon neutral.