



Workshop on the role of carbon markets in reaching carbon neutrality

17 - 21 June 2023

12:00-13:30 | Session 7: Legislation for carbon pricing

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Title: The integration of negative emissions in the EU legislation

Introduction: The objective of this paper is to analyse and enhance the understanding of how negative emissions resulting from carbon dioxide removal activities (CDRs) can be integrated and accounted for in the EU's climate change policy framework. The EU's climate objective is to achieve climate neutrality by 2050 and aim to achieve negative emissions thereafter (Regulation (EU) 2021/1119). Within this context, the accounting of carbon removals refers to the recognition of the value that CDRs can have towards the fulfilment of emissions reduction commitments in the EU, which can either be regulatory, if enshrined into EU law, or voluntary. Before delving into the topic, it is essential to outline the key assumptions and definitions underlying and framing this analysis. First, the paper relies on the assumption that carbon removal technologies are technically feasible. This assumption is a fundamental requirement: the technology must be working and must be deemed reliable in order to have a fruitful discussion about the potential role of CDRs and negative emissions in the EU climate policy. The feasibility or otherwise of CDRs is still a valid debate, but it is beyond the scope of this paper. CDRs are defined in this paper as activities removing carbon dioxide (CO₂) from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or products – in line with the definition of the Intergovernmental Panel on Climate Change (IPCC 2022) and the EU's definition as in the Provisional agreement on a Union certification framework for carbon removals (Interinstitutional File 2022/0394(COD) – 7514/24) – and that result in carbon removals or negative emissions, which will be then used to balance out (positive) emissions. CDRs can also be categorised based on whether they rely on technology-based or nature-based solutions (Figure 1), although this classification should not be regarded as rigid, as both solutions are composed of a technological part and a natural part. The first category, also referred to as industrial CDR, includes technologies like storage in long-lasting products, direct air capture with carbon storage (DACCS), bioenergy with carbon dioxide capture and storage (BECCS), etc. DACCS and BECCS share the downstream part of their value change - the transport and storage of CO₂ - with carbon capture and storage (CCS) technology, which is a mitigation solution already regulated by EU legislation (Chapter 2.2). It can be argued, in fact, that the difference between the two technologies is that, in the former case, the technology is applied to the stack of an industrial plant, whereas in the case second case, the CO₂ is captured from the atmosphere, which means that it is CO₂ that has already been emitted. On the other hand, removal activities such as afforestation and reforestation, ecosystem restoration and soil carbon sequestration fall in the category of nature-based solutions.

Webpage and programme [here](#).



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