

Towards a climate neutral Europe: The land sector is key

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Land use choices can have a significant impact on climate change mitigation and help meet the increased ambition foreseen by the "European Green Deal." It is time to step up efforts to quantify the land



sector's carbon emissions and removals. A study, which includes the CMCC Foundation's participation analyzes the EU regulations in force on the subject, which to date still place limits on the contribution that the land use sector can make to achieving the Union's climate objectives.

In 2014, EU leaders agreed that all sectors should contribute to the European 2030 emission reduction target, including the land use sector, which did not count towards the achievement of the previous <u>climate</u> change mitigation goals. In 2018, this agreement was implemented by the Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry (LULUCF) in the 2030 EU climate and energy framework. The Regulation lays down new rules for the accounting of the sector's emissions and removals, and for assessing EU Member States' compliance with these. For the first time, this allows the land sector to contribute, at least in part, to the achievement of the EU's climate change mitigation targets.

The paper "Making sense of the LULUCF Regulation: Much ado about nothing?" realized with the collaboration of the CMCC Foundation, assesses the importance and highlights the weaknesses and strengths of the LULUCF Regulation in the context of current EU climate and sustainability policies.

The three authors—among which Maria Vincenza Chiriacò and Lucia Perugini, researchers at the CMCC within the division dedicated to the study of agriculture, forests and ecosystem services—explain that the land sector plays a crucial role in climate change mitigation due to a peculiarity: the sector can either release greenhouse gases into the atmosphere, acting as a source of emissions or, conversely, store carbon and therefore acting as a sink. Whereas some sectors can reduce or even eliminate their emissions by foregoing the use of fossil fuels (which can be achieved via a transition to renewable energy sources and increased energy efficiency interventions), other sectors—such as food production



and waste—cannot. With its capacity to absorb CO_2 , the land sector can therefore compensate for part of these unavoidable emissions, thus becoming an important player in the EU's mitigation targets of reducing emissions by 40% before 2030.

"Given the potential for climate change mitigation embedded in the good management of the LULUCF sector, and underlined in the latest IPCC Special Report on "Climate change and land," it is extremely important that emissions and removals of the land sector are accounted for, to incentivize virtuous forest and agricultural management in the EU. Thanks to this Regulation, the sector can finally contribute to the EU's mitigation targets. This was also necessary to align the EU with the Paris Agreement requirement for economy-wide mitigation targets. Although the new Regulation has much improved the accounting rules for the LULUCF, it is still constrained within certain limits. We can consider the LULUCF regulation as a first step towards its full recognition," affirms Perugini, who is currently involved in the negotiating process under the UNFCCC (United Nations Framework Convention on Climate Change) as part of the Italian delegation dedicated to defining the role of the land sector.

Indeed, the Regulation demands that EU Member States ensure, between 2021 and 2030, that the LULUCF sector remain emission "neutral," and therefore generate neither credits nor debits. As of today, only a small part of credits generated by the LULUCF can be used to compensate emissions generated in other sectors towards the EU climate goals. Furthermore, the Regulation allows for possible debts arising from the land sector, under given conditions, to go unaccounted for by single member states.

The authors look forward to a further review of the 2030 EU climate framework, as envisioned by the EU Green Deal, as an opportunity to better tap into the sector's sizeable mitigation potential. "With the



increased ambitions foreseen by the "European Green Deal," which includes the specific objective to make of the EU the first climate neutral continent, including the contributions of every economic sector into the EU targets is even more important, as it incentivizes all sectors to do their best in the fight against climate change," continues Chiriaco.

The roadmap designed by the EU Commission—with the final objective of having zero net emissions of greenhouse gases by 2050—includes the target of reducing GHG emissions by at least 50%, and possibly towards 55%, by 2030 compared with 1990 levels, and therefore increasing current ambitions.

Achieving these climate goals will require a deep cut in emissions in all sectors.

"The subject matter of the LULUCF Regulation closely intersects with that of other EU law and policy instruments dealing with agriculture and forestry, most saliently the Common Agricultural Policy (CAP) and the Renewable Energy Directive (RED). The EU's ambitious targets ask for a strong coordination and integration among the various sustainability and climate policies linked to the land sector, where all debits and credits generated are accounted for, with no limitations. Only in this way will we have full accountability of emissions and removals from the agriculture and forestry sectors, which will be crucial to monitor progress and reward those that engage in virtuous behavior, and penalize those who do not," concludes Perugini.

More information: Annalisa Savaresi et al, Making sense of the LULUCF Regulation: Much ado about nothing?, *Review of European, Comparative & International Environmental Law* (2020). DOI: 10.1111/reel.12332



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