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# Reaching climate neutrality in agri-food: identifying the right policy mix

Climate  
neutrality in  
agri-food

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*As part of the Think2030 Conference (27 March 2024), the Institute for European Environmental Policy organised a session titled "Reaching climate neutrality in agri-food: identifying the right policy mix". This policy brief summarises the key takeaways from this session. Moderated by Harriet Bradley – Head of Programme CAP & Food, Institute for European Environmental Policy (IEEP), the session featured interventions by the following speakers: presentation by Julia Bognar – Head of Programme Climate & Land Use, Institute for European Environmental Policy (IEEP); Speakers: Aaron Scheid – Fellow at Ecologic Institute, member of [Think Sustainable Europe network](#) in Germany; Valeria Forlin – Policy Officer at DG CLIMA, European Commission; Megan Waters – Senior Policy Advisor, FAIRR; Marco Contiero – EU Policy Director on Agriculture, Greenpeace; Rūdolfs Pulkstenis, Vice-President, Conseil Européen des Jeunes Agriculteurs (CEJA).*

## Reaching climate neutrality in agri-food: identifying the right policy mix

### KEY RECOMMENDATIONS:

- Overall, a target for emissions reduction in the agricultural sector will be needed to set a direction of travel
- Carbon pricing policies should be assessed as a potential way forward
- Farmers will need targeted support for transition and the EU budget should be focused on this
- Farmers, the agri-food industry and investors need policy certainty on how the EU plans to achieve its 2040 target

### Context

The EU has an objective to become climate neutral by 2050. To reach this objective by 2050, the European Commission has suggested in a recent communication that the EU sets a target to reduce emissions by 90% by 2040. GHG emissions have decreased by one third since 1990 in the EU27, decreasing particularly in the energy supply, industry, and residential sectors. However, despite this progress, in order to meet its future targets, substantive efforts in reducing emissions will need to be made in all sectors.

Currently, agriculture accounts for approximately 13% of the EU's GHG emissions. According to the European Environment Agency (EEA, 2022), approximately 45% of non-CO<sub>2</sub> emissions from this sector come from enteric fermentation from livestock causing methane (CH<sub>4</sub>) emissions, while around 38% comes from nitrous oxide (N<sub>2</sub>O) emissions from agricultural soils

caused by synthetic fertilisers, organic fertilizers, crop residues, and cultivation of organic soils, and around 15% comes from manure management (both CH<sub>4</sub> and N<sub>2</sub>O emissions). Emissions reductions in this sector have stagnated over the past two decades, and the sector is currently on track for a 5% reduction by 2030. The contribution of the agriculture sector to this target is inescapable: a feasible pathway to 90% inevitably entails reductions in agricultural emissions.

However, there is little evidence thus far to suggest that enough progress is being made under the current EU climate policy framework in the agricultural sector. According to the European Commission's 2023 Climate Progress Report, progress in reducing emissions and increasing removals in the agricultural sector has been "too slow" and "more effort is needed." The Commission has emphasised that ambitious gaps remain, with additional measures proposed falling short of the overall GHG reduction target for 2030, calling for additional measures to address agricultural emissions.

A recent report by the European Scientific Advisory Board for Climate Change (ESABCC) has also suggested that there are currently policy gaps in the EU's climate framework in addressing agricultural emissions, recommending an exploration of new climate policy instruments such as carbon pricing.

At the 2024 Think2030 conference, the panel discussed the policy mix that the EU could put in place in order to deliver on these reduction targets. Panellists were invited to share their thoughts on the following questions:

- What policy levers are needed to deliver climate mitigation in agriculture, in order to deliver on the 2040 target?
- How can this be done in a way that supports the agriculture sector in a just transition?
- Is a polluter pays instrument such as an ETS the best possible instrument for reducing emissions and increasing removals?

## What changes could be made to the EU's climate framework?

### *Potential guiding principles for the 2040 framework*

The discussion highlighted that the EU needs to significantly reduce agricultural emissions between 2030 and 2040 to reach climate neutrality by 2050. This requires policy instruments that address climate mitigation in the agri-food sector and prioritise effective emission reductions. Farmers should receive **incentives for adopting measures** that help reduce emissions from agricultural activities, such as enteric fermentation from livestock animals, and the application of fertilisers or emissions from drained peatlands. However, it needs to be acknowledged that agriculture is a hard-to-abate sector that cannot be fully decarbonised.

In achieving a net 90% reduction target for 2040, setting a sectoral target for agriculture could establish a clear direction of travel that will provide certainty for agri-food value chain actors on what needs to be accomplished. Different opinions (during Think2030 discussions) concurred that the **EU needs to provide actors in the agri-food value chain with greater certainty on climate mitigation**. Setting a sectoral target for agri-food emissions, for

instance, can bring more stability and help guide the investments of agri-food stakeholders in measures that accelerate the transition towards a low-emission sector. This brings planning certainty and de-risks investments for both farmers and private investors.

Measures that **target supply side actions**, such as changes in on-farm practices, must be **balanced with demand side measures** that incentivise changes in consumer behaviour towards more sustainable food choices. Farmers will need access to large-scale financing both from the private and public sector and policies will need to facilitate access to set a clear investment agenda. To incentivise behavioural change along the agri-food value chain, policymakers must consider how the true cost of food production can be internalized to better reflect its environmental impacts.

**Nature-based carbon removals** will be essential to meeting the 2040 target. However, there are risks of impermanence, as removals from soils, forests, or wetlands can be reversed either unintentionally, such as from impacts of natural disasters, or intentionally for economic purposes. In addition, there is a high degree of uncertainty with the measurement and quantified estimates of nature-based removals, particularly those from soils. Furthermore, there are risks of mitigation deterrence in which the agri-food sector does not follow-through on needed emission reductions if it relies too much on carbon removals. Due to risks of impermanence and measurement uncertainties, and to avoid mitigation deterrence, the EU should consider separate targets for emission reductions and removals – this can help to ensure that genuine emission reductions are achieved according to the needed level of ambition. To ensure that the maximum potential of nature-based carbon removals can be achieved, there should be genuine coordination between biodiversity and carbon removals objectives, particularly through the protection of existing areas of high biodiversity, such as old-growth and primary forests, as well as through the restoration of degraded land. To ensure the integrity of nature-based carbon removals, a system of Monitoring, Reporting, and Verification (MRV) based on high quality, robust, and up-to-date data needs to be established and fully implemented before the beginning of the next climate framework (2030-2039).

### ***Potential changes to the current policy framework and potential new types of instruments***

Currently, the Common Agricultural Policy (CAP) insufficiently addresses the challenges posed by climate change and does not adequately incentivise farmers to shift towards more climate-friendly and sustainable practices. Funding under the CAP should be streamlined in the following manner: 1) greater transitional aid for farmers towards adopting more sustainable business models; 2) ongoing public financing for environmental services and public goods; 3) funding for advice, training, and engagement; and 4) funding for innovation and research geared to this transition (Baldock and Bradley, 2023).

In light of the shortcomings of the CAP in addressing climate mitigation, the European Court of Auditors (ECA) (2022) recommended for the Commission to explore potential '**polluter-pays-principle**' policy options for agricultural GHG emissions. In response to the ECA's recommendation, the Commission recently commissioned an exploratory study to examine potential policy models for an agricultural ETS. This study concludes that an ETS could potentially incentivise emission reductions along the agri-food value chain, by applying the 'polluter-pays-principle' to internalise the true costs of food production. During the session,

panellists discussed the potential of an agri-food ETS as a viable primary policy to facilitate emission reductions in the sector. Such an instrument has successfully incentivised innovation and resulted in mitigation of emissions in other key sectors. By setting a cap on the total amount of emissions the sector can emit, an ETS lays down a clear pathway for climate action in the agricultural sector. The revenues generated from an ETS could be used to provide financial support to invest in on-farm innovative measures to reduce emissions.

Various design elements of an ETS will require careful consideration to mitigate trade-offs between policy objectives under multiple instruments. Overall, the level of financial support needed to assist farmers in transitioning towards climate-friendly practices needs to be addressed. In any case, the ETS system needs to be simple to use for farmers, easy to implement, and able to minimise administrative burdens.

Nevertheless, an ETS would constitute one tool within the EU's overarching climate policy framework, and that there needs to be coherence with other instruments and measures. Other policy options targeting actors besides farmers were also discussed. For example, agri-food value chain sustainability requirements have been considered, in which processors and retailers would be required to meet requirements in which a certain percentage of their goods would need to be classified as sustainable. Consumer demand measures, such as informational instruments like climate labelling, which indicates the GHG intensity of a product, could also be considered.

The Effort Sharing Regulation obliges non-ETS sectors, including agriculture, to meet an emissions reduction target. However, both the agricultural sector and transport sector have failed to contribute towards Member States' ESR obligated targets in any meaningful manner. Thus, for the 2040 framework, the introduction of ESR sector targets could be considered as one potential reform to the current climate framework. Under the Industrial Emissions Directive, the Commission originally proposed to include cattle agro-industrial installations under its scope. However, this decision was postponed until 2030. As of date, there are no policies at the EU level addressing methane emissions from livestock in any meaningful way. For the 2040 framework, the IED and enhancing requirements under revised *Best Available Techniques* (BAT) could be an avenue to consider for reducing livestock emissions. Alternatively, enhancing the ambition of the Nitrates Directive may also be a viable option for better addressing such emissions. To ensure the environmental integrity of voluntary carbon markets, the EU could also consider requirements for VCMs to rely only on the trading of certificates generated under the recently agreed Carbon Removal Certification Framework. Enhancing requirements for strategic planning for the land use sectors under the Governance Regulation could be considered as a means for improving the ambitions of Member State measures for the agri-food sector under National Energy and Climate Plans (NECPs). While the failure to implement the Farm to Fork Strategy target for the sustainable use of pesticides has put into question the implementation of other targets under this Strategy, the EU could consider new instruments aimed the reduction of fertiliser use and the reduction of nutrient losses target for a new climate framework.

One of the main levers for reducing emissions in the agri-food sector is the re-wetting of peatlands in use for drainage-based agriculture. Drained peatlands utilised for farming, forestry and peat extraction release previously stored carbon and are responsible for approximately 5% of the EU's total emissions (Greifswald Moor Centrum, 2022). Once re-wetted, emissions from peatlands cease and can store and regulate water, producing a cooling effect that will be essential for climate resilience. Because of the huge climate benefits, the objectives for peatland re-wetting under the recently approved Nature Restoration Law will be fundamental in reducing agricultural emissions.

## Conclusions from the session

Overall, it must be noted that farmers currently fear more policy changes, requirements and potential additional costs which could jeopardise their economic viability in the long-run. Thus, they will need a **policy mix that provides a long-term perspective** in which they can sell their products for a fair price. It is in the larger interest of all sectors to ensure the long-term productivity of the agricultural system through healthy soils and thriving biodiversity.

The transition towards more climate-friendly agri-food sector must **balance efforts across all value chain actors to ensure that farmers are not disproportionately burdened**. In addition to a whole value chain approach, an **optimal mix of public and private finance** needs to be activated. Subsidies for farmers will play a key role in the transition, but private finance will be essential to facilitate the needed price signals for reducing emissions and increasing removals.

There are opportunities to facilitate new types of business models for landowners and new types of vertical arrangements between agri-food actors.

However, **the task for the 2040 climate framework will be to unlock new business opportunities and ensure the economic security of farmers, whilst achieving the needed contribution from this sector towards climate objectives**. Policymakers, stakeholders, and experts will need to engage in fundamental conversations on designing a policy mix for 2040 that can ensure the effectiveness of climate mitigation efforts, maintain the competitiveness of the sector, and enhance the social cohesiveness of rural areas. It is a challenge that all of the panellists at Think2030 agreed needs to take place in the coming months and years.

## About Think2030

Launched by IEEP and its partners in 2018, Think2030 is an evidence-based, non-partisan platform of leading policy experts from European think tanks, civil society, the private sector and local authorities.

By focusing on producing relevant, timely and concrete policy recommendations, Think2030's key objective is to identify science-policy solutions for a more sustainable Europe.

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