

Incentivising climate action for a sustainable and competitive agri-food value chain

Date and time: 19 June 2024, 10:00 – 16:30 CEST

Location: European Commission Charlemagne building in Brussels (+online attendees)

Background paper

1. Introduction

The stakeholder event on **“Incentivising climate action for a sustainable and competitive agri-food value chain”** is part of the new exploratory study that will be conducted by Trinomics, IEEP, Ricardo, and Wageningen University & Research. This is a follow-up from the [exploratory study](#) “Pricing agricultural emissions and rewarding climate action in the agri-food value chain” published by the European Commission, Directorate General for Climate Action (DG CLIMA) last year.

Stakeholders will be actively involved over the duration of the study to ensure that outcomes are modelled along real-life challenges, inputs and preferences. This event will mark the kick-off of the study and will inform the series of accompanying technical workshops that will take place in the 2nd half of this year and 1st half of next year. The aim of these forthcoming workshops is to gather inputs on the best approaches towards policies that can unlock incentives for innovative climate solutions, and create new business and income opportunities for EU agriculture and the whole value chain, as well as foster food security, competitiveness, and sustainability. This is part of the continued dialogue on the European transition to a sustainable and competitive agri-food value chain.

2. Setting the scene – Towards a sustainable and competitive agri-food value chain

The accelerating climate change and biodiversity loss create a challenging landscape for all areas of the economy—but uniquely so for the farming sector and for the agri-food value chain. Greenhouse gas (GHG) emissions from the agricultural sector have decreased only by approximately 5% compared to 2005 levels equivalent to an average drop of 1 Mt CO_{2e} per year between 2005-2022. The European Scientific Advisory Board on Climate Change found that this is mainly due to a lack of adequate financial incentives for farmers. The Board also indicated that tripling this annual reduction rate would be necessary to put the sector on track towards reaching modest reductions by 2030, with even steeper cuts needed beyond 2030.

Widespread adoption of sustainable practices by farmers—supported by all actors in the agri-food chain—offers a chance to increase farm resilience, income stability and food security, while reducing GHG emissions and increasing carbon removals. However, the implementation of these changes faces significant challenges. The highly fragmented nature of the sector—with two-thirds of farms under five hectares—requires careful policy tailoring. Many rural producers are also grappling with economic insecurity caused by a complex interplay of factors, including climate vulnerability, environmental degradation, economic pressures and policy inertia. The sector at large has seen a decline in employment, marked by trends such as land abandonment and an ageing farmer population, as well as problems of marginalisation and deterioration of physical and social infrastructure in rural areas across Europe. Many farmers struggle with access to finance as well as to land.

This volatile and unpredictable context in which EU farmers operate calls for increased policy certainty and solutions to offer them a stable future perspective. Market-based climate policies could play an important role in achieving this. Such policies could unleash the potential for new business opportunities for sustainable agri-food value chains, while ensuring fair rewards for farmers, increased climate resilience, and environmental integrity.

3. Key findings of the initial study

The objective of the initial [study](#) was to explore options for pricing GHG emissions from agricultural activities and how this can be accompanied with financial rewards for farmers and other landowners for climate action. These options should ultimately unlock innovative climate solutions and create business opportunities for sustainable agri-food value chains.

The first part of the study investigated on different options for an emission trading system that could incentivise climate mitigation action in agriculture along the value chain (agri-food ETS):

1. **An on-farm ETS for agricultural GHG emissions:** farmers and landowners (above a certain size) would be obliged to participate in the ETS. The study looked at three variations of this option: an ETS on all on-farm GHG emissions, an ETS on only livestock emissions, and an ETS on emissions from drained peatlands utilised for agricultural production.
2. **An upstream ETS:** producers and importers of animal feed and fertiliser, which are upstream of farms in the value chain, would be obliged to participate in the ETS. Feed producers and importers would be covered for the emissions caused by the digestion of the feed by the animals. Fertiliser producers and importers would be covered for the emissions caused by the use of the fertiliser.
3. **A downstream ETS:** Meat and dairy processors, which are downstream of farms in the value chain, would be obliged to participate in the ETS for the emissions from enteric fermentation and manure management.

The second part of the study outlined different policy models how the agri-food ETS options could be accompanied with financial rewards for farmers and other landowners for climate action:

- A. **Disconnected markets:** the government uses revenue from auctioning agri-food ETS allowances to fund LULUCF removals. The LULUCF removals do not affect the agri-food ETS.
- B. **Interconnected through government:** the government funds LULUCF removals using agri-food ETS revenues and subsequently releases allowances into the agri-food ETS corresponding to these removals.
- C. **Deductions:** agri-food ETS entities can reduce their compliance obligation by carrying out LULUCF removals on their own land (under an on-farm agri-food ETS) or in their own supply chain (under a downstream agri-food ETS).
- D. **External credits:** farmers and other landowners can voluntarily sell LULUCF removal credits to agri-food ETS entities to use to meet their compliance obligations.
- E. **Integrated ETS:** Removers are integrated into the agri-food ETS as obligatory compliance entities and are rewarded with ETS allowances in return for certified LULUCF removals.

The results from a survey conducted for this study below showed that stakeholders had a **clear preference for the downstream ETS** and a neutral opinion of the upstream ETS. An on-farm ETS was the least preferred, irrespective of the accompanying policy model for rewarding carbon removals. While stakeholder acceptance is a crucial factor, the success of any agri-food ETS option will also hinge on the environmental, economic, social and administrative impacts of such policy.

Policy models for rewarding LULUCF carbon removals	Agri-food ETS options		
	On-farm ETS	Upstream ETS	Downstream ETS
Disconnected markets	+/-	+/-	++
Interconnected through government	--	-	+
Deductions	--	+/-	++
External credits	--	-	+
Integrated ETS	-	+/-	+

Note: ++ = strongly preferred, +/- = neither prefer or not preferred, -- = strongly not preferred.

4. Objectives of the new study

This new follow-up study aims to contribute to a better understanding of policy options for sustainable climate action across the agri-food value chain and the impacts on competitiveness, farmer income and consumer prices. It is essential that the design of the policy options ensures a high coherence with all relevant EU policies and that their assessment takes into consideration the current and forthcoming challenges identified.

With this study, the project team will support DG CLIMA in assessing viable policy options more concretely over the forthcoming year. This will be achieved by actively gathering the input from stakeholders, and by undertaking a more in-depth assessment of the legal and practical feasibility of policy options and their economic, social, administrative, and environmental impact.

5. Topics for discussion

Discussions at the stakeholder event will essentially evolve around two main topics: what makes the business case for reducing GHG emissions in the agri-food chain and what is the most effective policy response.

Part 1 – Building the business case

Climate action is of macroeconomic importance and requires the contribution of all sectors. Yet, in light of existing, new and emerging challenges for farmers and the agri-food industry described above, agricultural climate solutions need to be designed in a way that builds a business case for the farming sector. This becomes even more important with a view to increasing the resilience of farmers and the agri-food chain in the face of climate change and biodiversity loss, coupled with the economic and innovation potential of the agricultural sector to provide climate solutions. The first part of the stakeholder event will be dedicated to this overarching question of what makes a successful business case for climate action in agriculture.

Many examples for sustainable climate solutions in agriculture exist, and some of them were presented in the initial exploratory study. Climate solution models are being developed by farmers together with companies that largely depend on agricultural products for their direct operations, and that want to contribute minimising the climate risk to their supply chain. Such systems need to

be attractive to farmers, putting them in the driving seat of their farming operations and simultaneously providing them with financial rewards.

Existing examples demonstrate that there is great potential in market-based solutions for GHG reduction in agriculture if combined with effective reward models. Panellists in the event will discuss questions such as where the greatest innovation potential lie, how to scale up and accelerate climate solutions in agriculture, and who should take leadership for change. The panel will also discuss how such change can be supported and financed, as well as how to develop market-based climate policies to be a good deal for farmers.

Part 2 - Addressing the key policy questions

The second part of the event will be dedicated to discussing the most effective market-based solutions, reward models and their impacts, guided by key questions that will feed into the following themes that will determine the development of the study over the next year:

- ***Policy options that can contribute to a successful and practical policy:*** A key question is which part of the agri-food value chain is best placed to be the centre point of a market-based climate policy. Other discussion points look into achieving better coherence and synergy with existing policies in the fields of climate (e.g. Certification Framework for Carbon Removals and Carbon Farming), environment (e.g. National Emissions Ceiling Directive, Nitrates Directive) and agriculture (e.g. Common Agriculture Policy), as well as into synergies between public and private funding.
- ***Options and features for designing effective policy options in achieving sustainable GHG reductions and increasing carbon removals in the agri-food sector:*** Discussions will focus on market-based policy options (or combination of policy options) that can contribute to incentivising changing practices and fund innovations on farms to reduce agricultural emissions and increase carbon removals. Discussions will also revolve around ensuring that the policy can be implemented in practice.
- ***Ensuring competitiveness and a level playing field:*** The debate will evolve about expected economic implications for farmers as well as for other agri-food supply chain actors. This also includes what needs to be considered to ensure the competitiveness of the EU agri-food sector on a global level.
- ***Cohesion:*** Implications for the social fabric of the EU and the well-being of EU inhabitants need to be reviewed. Key questions revolve around the expected social impacts on EU consumers and households, small and medium-sized farms, rural areas, and across Member States, as well as how positive socio-economic effects can be optimised and negative impacts minimised.
- ***Enabling Factors:*** The discussion will focus on identifying the enabling factors that make a successful policy in light of debated questions above, as well as the question of how to maximise access to fresh funding for climate solutions through for example reward models.

6. How to engage in this study

Stakeholder engagement and active involvement are crucial for the development of this study. Therefore, the study is kick-started by this stakeholder event. The outcome of this event will influence the focus and design for the policy options that will be assessed in this study. Furthermore, stakeholders will have the opportunity to engage with the project team through a series of five technical workshops starting from September 2024 through to April 2025 (see the study timeline below, exact dates will be announced in the near future). Workshops 1, 3 and 5 will be in-person workshops in Brussels and workshops 2 and 4 will be online. No reimbursement of travel costs is available for workshop participants.

These workshops will be dedicated to the five topics outlined above in the section on *Addressing the key policy questions*. Workshop participants will receive specific input papers prior to each respective workshop. Importantly, these workshops are intended to generate as much information and data as possible. Hence it is expected that all participants will engage actively either in the discussions or through providing written input and material. Since the number of participants will be limited to 35 to ensure in-depth discussions, interested stakeholders have to apply for the workshops.

When applying, stakeholders will have to specify certain details such as their organisation name and type, their key expertise and whether they want to attend all workshops or only a few (specify which). In addition, stakeholders that sign up to the workshops will have to commit to actively providing input either during the workshop or in writing a week after the workshop, based on the input papers. On the basis of applications received, the project team, together with DG CLIMA, will make a selection of the invitees for the workshop, ensuring a broad representation of stakeholder groups and experts.

In case you wish to register your interest already at this stage and apply for the workshops, please use this [registration link](#). **Registrations will be open until 19 July 2024.** In case you have any further written input you wish to provide in relation to this event or the future process, please send any material to agri-food-climate@trinomics.eu.

Study Timeline

