

Pricing agricultural emissions and rewarding climate action in the land sector - Stakeholder survey, June 15th until July 28th, 2023.

Fields marked with * are mandatory.

Stakeholder survey - Pricing agricultural emissions and rewarding climate action in the land sector

Introduction

Background

A 2021 [report](#) by the European Court of Auditors concluded that EU law does not apply the polluter-pays-principle to agricultural emissions and recommends that the Commission should “assess the potential of applying the polluter-pays principle to agricultural emissions, and reward farmers for long-term carbon removals”. One of the main instruments for applying the polluter-pays principle in the EU is an emissions trading system (ETS). Against this background, the European Commission is exploring options for pricing greenhouse gas (GHG) emissions from agricultural activities along the value chain through an Emission Trading System (ETS), as well as for rewarding farmers and other landowners for climate action through carbon farming.

Why are we consulting you?

This online survey is part of an exploratory study for the European Commission conducted by Trinomics and its partners IEEP and Ecologic Institute, together with Umweltbundesamt and Carbon Counts (the Study Consortium).

This study focuses on ETS policy options for agricultural GHG emissions and policy models for linking an ETS to rewarding carbon removals in the land sector. This study does not assess the option of integrating emissions from the agricultural sector into the existing EU ETS. Rather, it looks at how to design a separate ETS covering only GHG emissions from the agricultural sector.

Under an ETS on agricultural GHG emissions, entities covered under the ETS would have to surrender emission allowances equivalent to the GHG emissions from agricultural activities. These emission allowances could be purchased from the government, generating revenues from the ETS. The government could use these ETS revenues to reward farmers and foresters that provide carbon removals. Alternatively, ETS entities could pay farmers and foresters directly for carbon removals, which they could use to

compensate a part of their GHG emissions and lower the amount of emission allowances that they need. This approach intends to ensure that only entities who do not adopt climate-friendly practices are penalised by the system.

The aim of this survey is to gather both evidence and the views of relevant stakeholders of the policy options and models explored in this ongoing study.

All stakeholders are welcome to contribute to this survey. Contributions are particularly sought from farmers, business and trade organisations' representatives along the agricultural value chain, foresters, national / regional / local authorities in the Member States, civil society organisations, academia and researchers in relevant fields.

This survey was launched at the Technical Workshop on “Pricing agricultural emissions and rewarding climate action in the land sector” (see below the workshop slides) on June 14th, 2023. The survey will be open for six weeks from June 15th until July 28th, 2023.

Technical workshop slides

[TechnicalWorkshop_230614.pdf](#)

Guidance on the questionnaire

Structure of this survey

This survey is divided into the following parts:

Part 1. About you: questions about your profile and why you are answering this questionnaire.

Part 2. General questions section: questions on your views on pricing greenhouse gas emissions from agricultural activities along the value chain and rewarding farmers and other landowners for climate action. This section does not require technical knowledge of policy instruments, and anyone can answer.

Part 3. Specialised questions section: questions on the topics/measures at hand which may require expert knowledge to answer. This part can be skipped, if preferred.

At the end of the questionnaire, you are invited to provide any additional comments or elaborate on relevant issues that have not been addressed by the questions.

We estimate that replying to all questions would take about 60-90 minutes. Please note that not all questions in the questionnaire need to be answered. In addition, all ‘mandatory’ questions include an “I do not know/not relevant” or “No opinion” option that you can use when you do not know the answer or do not have an opinion.

You are invited to respond to the best of your abilities or knowledge of the topic. Please use open fields only if there is information to be added that is strictly relevant to the related question.

How we will use your contribution

Your contribution will be processed by the Study Consortium. Contributions will also be shared with the European Commission. The results of the survey will be consolidated and anonymised in a stakeholder survey report. The findings from the survey will be integrated in the study in an anonymised manner. The stakeholder survey report and the study will be published in due course.

Please read the specific privacy statement attached to this survey with information on how personal data and contributions will be processed.

Part 1: About you

* I am giving my contribution as

- Academic/research institution
- Business/trade association
- Company/business organisation (including farms)
- Environmental organisation
- EU citizen
- Non-EU citizen
- Non-governmental organisation (NGO)
- Trade union
- Public authority
- Other

* First name

Jeroom

* Last name

Remmers

* Email address

info@tappcoalitie.nl

* Please indicate your country of origin

NL - Netherlands

Organisation name

The True Animal Protein Price Coalition (TAPP Coalition)

Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)

- Large (250 or more)

Scope of your organisation's activities

- International
- Local
- National
- Regional

* Please indicate the sector you are active in [Please choose the most relevant sector]:

- agriculture (food and/or feed)
- food processing
- manufacturing of fertiliser, feed or other agricultural inputs
- distribution / wholesaling of food products
- retailer
- forestry owner or forest manager
- manufacturing of forestry products
- protection, restoration and/or management of biodiversity and/or environment
- energy production
- government
- health care
- investment and finance
- manufacturing (not related to agriculture, fertiliser or forestry products)
- public health
- raw materials extraction / primary processing
- scientific research
- transport
- none of the above sectors
- other
- I do not know, or I do not want to answer

* Please indicate which subsector you are active in [Please choose the most relevant sector]:

- Crop farming
- Livestock farming
- Mixed farming
- Other
- I do not know, or I do not want to answer

I agree with the personal data protection provisions

[Privacy Statement - Stakeholder Survey.pdf](#)

Part 2: General questions section

When looking at the projections made by EU Member States in their National Energy and Climate Plans, the existing policy framework and the additional measures planned look insufficient to reduce agriculture emissions and increase the EU land-based carbon sink in line with the EU's goal to become climate neutral by 2050 ([ETC/CME Report 6/2021](#)).

1. Do you think more policy action (at the EU and/or Member States level) is needed to reduce GHG emissions in the agriculture sector?

- Yes, **significant increase** in policy action to reduce emissions in the sector
- Yes, **slight increase** in policy action to reduce emissions in the sector
- No, current policies to reduce emissions in the sector are **adequate**
- No, current policies to reduce emissions in the sector are **too ambitious**
- No opinion

2. In your opinion, how effective is putting a price on GHG emissions (i.e., carbon pricing) from the agriculture sector to incentivise GHG emissions reduction in that sector?

- Very effective
- Somewhat effective
- Limited effective
- Not effective at all
- No opinion

3. Do you think more policy action (at the EU and/or Member States level) is needed to increase carbon removals in the Land use, Land use Change and Forestry (LULUCF) sector?

- Yes, **significant increase** in policy action to increase carbon removals in the sector
- Yes, **slight increase** in policy action to increase carbon removals in the sector
- No, current policies on carbon removals in the sector are **adequate**
- No, current policies on carbon removals in the sector are **too ambitious**
- No opinion

4. In your opinion, how effective is financially rewarding carbon removals in the LULUCF sector to incentivise carbon removals in that sector?

- Very effective
- Somewhat effective
- Limited effective
- Not effective at all
- No opinion

5. If you wish, please briefly explain your answer to any of the previous questions:

600 character(s) maximum

The Farm to Fork Strategy announced "EU tax systems should also aim to ensure that the price of different foods reflects their real costs in terms of use of finite natural resources, pollution, GHG emissions and other environmental externalities". An ETS for GHG emissions in the agri-food sector is a good way to make sure foodprices and EU tax systems reflect real costs of GHG-emissions (Polluter Pays Principle). The damage costs per ton GHG-emissions are calculated by the German government: 200 euro/ton CO₂, calculations range from 100-3000 euro/ton CO₂ (wikipedia social cost of carbon).

Part 3: Specialised questions section

The exploratory study investigates various policy options to price GHG emissions from the agriculture sector via an EU-wide Emission Trading System (ETS) and how the revenues raised through such an ETS could finance carbon removal activities in the Land use, Land use change and Forestry (LULUCF) sector through different policy models.

The main **agricultural ETS options** that are being investigated in the study are:

A.1: An on-farm ETS covering on-farm GHG emissions: farmers and landowners (above a certain size) would be obliged to participate in the ETS. This option would set a cap on the total allowable emissions. Covered farms would have a compliance obligation to surrender sufficient allowances to cover their GHG emissions, thereby ensuring emissions reductions. Farms could buy and sell emission allowances, leading to an effective price on emissions and thus a direct cost incentive to reduce their emissions. This option would impose a regulatory requirement on farmers to monitor their on-farm GHG emissions. This option could include all GHG emissions or only a subset (e.g., only livestock emissions and/or peatland emissions).

A.2: An upstream ETS covering GHG emissions associated with the use of feed and inorganic fertiliser: producers of feed and inorganic fertiliser, which are upstream of farms in the value chain, would be obliged to participate in the ETS. These entities would have a compliance obligation to surrender an equal amount of emission allowances to the expected GHG emissions that their products would cause on farms. GHGs emitted during the manufacturing of the product are not covered by this policy option, because most of it is already covered under the current EU ETS. The GHG reduction incentive relies on the upstream entities to pass on the cost of GHG emissions to farmers, which could lead to GHG emission reductions through change in on-farm practices (more efficient use of commercial feed and fertilisers, switch to different practices) and/or use of low-emitting products. This option would impose a regulatory requirement on the upstream entities to determine the expected on-farm GHG emissions.

A.3: A downstream ETS covering GHG emissions associated with farm products processed: Food processors (such as meat and dairy processors), which are downstream of farms in the value chain, would be obliged to participate in the ETS. These entities would have a compliance obligation to surrender an equal amount of emission allowances to the on-farm GHG emissions associated with production of the farm products that they process into food products. GHGs emitted during the processing of the final food product are not covered by this policy option, because a large portion of it is already covered under the current EU ETS. The GHG reduction incentive relies on the food processors working with (and financially supporting) their suppliers (farms) to reduce on-farm emissions and/or switching to farms with lower GHG emissions. This option would impose a regulatory requirement on the downstream entities to determine the on-farm GHG emissions.

The **main policy models for linking a reward system for carbon removals with an agricultural ETS** that are being investigated in the study are as follows, where each removal policy model can in principle be linked to every ETS option:

B1: Fully integrated in an agricultural ETS: not only farmers but also foresters are a part of the agricultural ETS, and both groups are rewarded with emission allowances if they generate carbon removals on their land. They can sell these emission allowances to entities under the agricultural ETS

that face a compliance obligation for their GHG emissions. These would be other farmers in an on-farm ETS, feed or fertiliser producers in an upstream ETS, or food processors in a downstream ETS. In an on-farm ETS, farmers could also use the emission allowances earned from generating carbon removals to meet their own compliance obligation with regards to their on-farm GHG emissions.

B2: Interconnected through carbon removal offsets credits: farmers and foresters (even those that may not be part of the ETS) can, on a voluntary basis, earn offset credits based on the amount of carbon removed and sell them to ETS entities that face a compliance obligation for their GHG emissions (farmers in an on-farm ETS, feed or fertiliser producers in an upstream ETS, or food processors in a downstream ETS). In an on-farm ETS, farmers could also use their own offset credits to meet their compliance obligation. However, the generated offset credits are not part of the ETS, and regulators can limit the amount and type of offset credits that can be used by ETS entities to meet their compliance obligation.

B3: Interconnected through carbon removal deductions: if combined with an on-farm ETS, only farmers that fall under the ETS can be rewarded for carbon removal activities; farmers would be allowed to deduct the amount of carbon removed in the same year from their GHG emissions that fall under the ETS, lowering the amount of emission allowances they need to purchase and surrender. There is no generation of removal credits that can be sold to other entities. If combined with a downstream ETS, only farmers that supply ETS food processors can be rewarded for carbon removal activities; food processors would be allowed to deduct the amount of carbon removed by their supplier farms from their compliance obligation. This creates an incentive for food processors to work with (and financially support) their supplier farms to implement carbon removal activities.

B4: Interconnected with the government as an intermediary: the government would use the revenues from selling emission allowances to ETS entities to purchase removal credits from farmers and foresters. The functioning of the ETS is directly impacted by this removal option because the government converts the purchased removals into emission allowances and makes them available to entities under the ETS, either by auctioning them or allocating them for free.

B5: Disconnected markets: the government would use the revenues from selling emission allowances to ETS entities to finance carbon removal activities from farmers and foresters. There is no link between the amount of carbon removed and the total number of emission allowances (i.e., the emission cap) under the ETS. The payments to farmers and foresters do not necessarily have to be based on the amount of carbon removed and could instead be activity-based.

Policy enablers

6. Please rate the importance of having the following enablers in place for the successful implementation of an ETS on agricultural emissions: [1 = minor importance, 5 = major importance, no opinion]

	1	2	3	4	5	No opinion
Improve the availability, accuracy and robustness of data on agricultural GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Ensure the availability of cost-effective and user-friendly monitoring, reporting and verification methods of agricultural GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise administrative and transaction costs for the actors participating in the ETS	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure the involvement of farmers, landowners and all relevant stakeholders into policy-making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Financially reward good farming practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Increase funding for research and development of measures to reduce agricultural GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of low-cost GHG emission reduction measures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of funding for investment in GHG emission reduction measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training on skills and knowledge on measuring emissions and implementing GHG emission reduction measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limit negative impacts on international competitiveness and carbon leakage	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mitigate impact on food prices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Mitigate social impacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

If other, please specify

100 character(s) maximum

A high CO2-eq price /ton is very important for succes and a emissionceiling going down every year.

7. Please rate the importance of having the following enablers in place for the successful implementation of a reward system for LULUCF carbon removals: [1 = minor importance, 5 = major importance, no opinion]

	1	2	3	4	5	No opinion
Improve the availability, accuracy and robustness data on the carbon removed from the atmosphere by carbon farming	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure the availability cost-effective and user-friendly monitoring, reporting and verification methods of carbon removals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimise administrative and transaction costs for the actors rewarded for carbon removals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure the involvement of farmers, landowners and all relevant stakeholders into policy-making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Increase funding for research and development of carbon removal activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Availability of low-cost carbon removal activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of low-cost Monitoring, Reporting, and Verification methods	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training on skills and knowledge on measuring emissions and implementing carbon removal activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limit leakage risks (i.e., rewarded carbon removal activities cause a decrease of removals or an increase in emissions elsewhere in the economy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Mitigate impact on land prices and risk of land grabbing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Availability of funding for investment in carbon removal activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

If other, please specify

100 character(s) maximum

CAP subsidies should focus on + oblige increasing soil carbon and GHG-emission reduction first/too

8. If you wish, please briefly explain your answer to any of the previous questions on policy enablers:

600 character(s) maximum

A Social Food Climate Fund (similar to the Social Climate Fund) is needed to compensate low income groups and small companies for higher food prices as a result of the ag-ETS. Eg. by subsidising food with a low carbon footprint. Another priority should be to urgently phase out perverse EU CAP agrisubsidies such as direct payments on drained peatlands or coupled income support or state aid for intensive livestock farms, causing most GHG-emissions including beef/dairy. Imports to the EU of meat/dairy can be accounted in the same way like the CBAM in other ETS EU markets: meat/dairy import taxes

Scope

9. Rate how important it is that these sources of agricultural GHG emissions are included under an ETS [1 = minor importance, 5 = major importance, no opinion]

	1	2	3	4	5	No opinion
Enteric fermentation (livestock)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Manure management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Fertiliser application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Drainage of peatlands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Burning crop residues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

On-farm energy use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Urea and liming application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Rice farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Rate how important it is that these carbon removal activities are included under a reward system for LULUCF carbon removals [1 = minor importance, 5 = major importance, no opinion]

	1	2	3	4	5	No opinion
Afforestation & reforestation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Agroforestry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Forest management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biochar	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Increase in soil carbon (on mineral soils)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

If other, please specify

100 character(s) maximum

Organic agriculture / soil management under EU organic label / equivalent (increase in soil carbon)

11. If you wish, please briefly explain your answer to any of the previous questions on scope:

600 character(s) maximum

Forest management should only be promoted as „close to nature forestry“.

Re. a reward system for LULUCF removals, all of the carbon farming practices listed (except biochar) can already be supported through the CAP, although Member States continue to under-utilise the relevant instruments and insufficiently target subsidies at beneficial practices. The priority should be to optimise the targetting and effectiveness of CAP subsidies.

Policy design options

12. Which actor(s) in the agricultural value chain should be the compliance entity under an ETS on agricultural emissions, and thus directly face a carbon price (Note that for the three options, the ETS would be designed in a way ensuring there is no double-covering of GHG emissions)? [1 = strongly disagree, 5 = strongly agree, no opinion]

	1	2	3	4	5	No opinion
Farmers (on-farm ETS) – see option A1 described above	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fertiliser and feed producers (upstream ETS) – see option A2 described above	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Food processors (downstream ETS) – <i>see option A3 described above</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other actors (e.g., retailers, consumers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

13. Under the on-farm ETS option (option A1), what should be the threshold for exempting small farms:

- No exemption of any farms
- Exemption of farms with less than 10 employees
- Exemption of farms with less than 50 employees
- Exemption of farms with less than 250 employees
- No opinion

14. Under the upstream ETS option (option A2), what should be the threshold for exempting small feed and fertiliser producers:

- No exemption of any feed and fertiliser producers
- Exemption of feed and fertiliser producers with less than 10 employees
- Exemption of feed and fertiliser producers with less than 50 employees
- Exemption of feed and fertiliser producers with less than 250 employees
- No opinion

15. Under the downstream ETS option (option A3), what should be the threshold for exempting small food processors:

- No exemption of any food processors
- Exemption of food processors with less than 10 employees
- Exemption of food processors with less than 50 employees
- Exemption of food processors with less than 250 employees
- No opinion

16. Which carbon removal activities should be allowed by entities covered under an agricultural ETS to meet their compliance obligation?

- Removal activities on farms only (e.g., soil carbon sequestration, agroforestry)
- Removal activities in forests only (e.g., afforestation, improved forestry management)
- All LULUCF carbon removal activities (i.e., both on farms and in forests)
- LULUCF carbon removal activities should not be allowed for ETS entities to meet their compliance obligation
- No opinion

17. Under the on-farm ETS option (option A1), which of the following options should be allowed as ways for farmers to meet their compliance obligation? (select 1 or more)

- Farmers covered by the on-farm ETS can meet their compliance obligation by taking actions to implement carbon removal activities on their own farm or purchasing emission allowances earned from carbon removal activities by other ETS entities – *see model B1 described above*
- Farmers covered by the on-farm ETS can offset their compliance obligation by paying for the carbon removed by other farmers and/or foresters (even those not covered by the on-farm ETS) – *see model B2 described above*
- Only carbon removal activities that farmers covered by the on-farm ETS have taken on their own farm can be used to reduce their compliance obligation – *see model B3 described above*
-

Farmers under an on-farm ETS should not be allowed to (directly) use LULUCF carbon removal activities to meet their compliance obligation

No opinion

18. Under the upstream or downstream ETS options (options A2 or A3), which of the following options should be allowed as ways for upstream producers or downstream processors to meet their compliance obligation? *[select 1 or more]*

Purchasing emission allowances earned from carbon removal activities by farmers and/or foresters integrated in the agricultural ETS – *see model B1 described above*

Paying farmers and/or foresters outside their value chain for their carbon removed to offset their compliance obligation – *see model B2 described above*

Paying farmers within their value chain for carbon removal activities to reduce their compliance obligation – *see model B3 described above*

Entities under an upstream or downstream ETS should not be allowed to (directly) use LULUCF carbon removal activities to meet their compliance obligation

No opinion

19. What role should the government play in a reward system for LULUCF removals linked to an agricultural ETS? *[select 1 or more]*

The government only certifies the type of carbon removal activities that are eligible for meeting the compliance obligation under an agricultural ETS, but otherwise leaves the market to run itself – *models B1, B2 and B3*

The government acts as an intermediary, procuring removals certificates and then making these available as allowances to actors that face a compliance obligation under an agricultural ETS (e.g., through an auctioning process) – *see model B4 described above*

The government uses revenues from the agricultural ETS to fund removals activities, but the amount of funded removal units does not affect the emission cap of the agricultural ETS – *see model B5 described above*

Other

No opinion

20. If you wish, please briefly explain your answer to any of the previous questions on policy design options:

600 character(s) maximum

An on-farm ETS would be technically and administratively hugely burdensome. The best option is a new stand-alone agri-ETS downstream option; CEJA and TAPP Coalition both prefer this option (14 June '23 technical workshop). In this option farmers don't suffer. All GHG-emissions in the food chain should be included, also from land use change (soy-deforestation in S-America).

Rewarding farmers for LULUCF should remain separate and never included in an ETS system because of its specificities (e.g. non-permanence) and complexity. This is the only certain way to effectively achieve emission cuts.

Key challenges

21. The monitoring, reporting and verification (MRV) of agricultural GHG emissions could be done with proxy values as a way to minimise the administrative burden. However, this approach would not

necessarily recognise climate-friendly practices carried out on a specific farm, and implementing these practices would therefore not result in a lower compliance obligation under the ETS. Should an MRV approach prioritise minimising the administrative burden or incentivising climate friendly on-farm practices?

- Minimise the administrative burden (using proxy values)
- Incentivise climate friendly on-farm practices (set up of more accurate MRV)
- Hybrid approach (default proxy values with option to set up a more accurate MRV to prove GHG emissions are lower)
- No opinion

22. Where do you see the main current challenges and/or future opportunities regarding improving accuracy and/or reducing costs of MRV for agricultural GHG emissions?

600 character(s) maximum

The first priority for more reliable MRV of agricultural GHG emissions must be to develop and apply Tier 3 methodologies across all main sources in all EU countries for UNFCCC reporting, but working with default proxy values will be needed too (hybrid approach) to keep the system feasible, low cost. Proxy values are advised by ETS-agri scientists (.e.g. Jonathan Verschuuren, Frits van der Schans) like nr. and breed of farm animals, type stable, type of soil, organic/non organic farming etc. Organic/extensive farms should be rewarded with a KPI measuring GHG-emissions per hectare, not per kg.

23. Linking a reward system for LULUCF carbon removals with an agricultural ETS can come with significant challenges. How big of challenge would the following aspects be to overcome with policy design? [1 = minor challenge, 5 = major challenge, no opinion]

	1	2	3	4	5	No opinion
Additionality: that the carbon removed would not have occurred without a reward system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Emission reduction deterrence: that the carbon removed decrease the effort to reduce agricultural GHG emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Non-equivalence: that the carbon removed is not equivalent to a reduction in agricultural GHG emissions, e. g., because it is not permanent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

24. For each of the challenges, please explain succinctly how it could be overcome through policy design or another way:

	Open text (maximum 600 characters)
<p>Additionality</p>	<p>Additionality concerns would be strongly reduced by strictly separating emissions and removals (scenario B5). By setting clear criteria and requirements, policymakers can ensure that carbon removal activities eligible for rewards are truly additional and would not have occurred without the incentive. This can include establishing baseline scenarios, assessing the impact of the reward system on behavior change, and implementing rigorous monitoring and verification mechanisms to validate the additionality of carbon removals. Rewarding LULUCF removals: doing it through the Common Agricultural Policy and other practice-based or hybrid reward system (practice-based main payment + result-based top up) essentially removes additionality requirements, as long as positive environmental outcomes are achieved</p> <p>Additionality: Overcoming the challenge of additionality can be achieved through careful policy design. By setting clear criteria and requirements, policymakers can ensure that carbon removal activities eligible for rewards are truly additional and would not have occurred without the incentive. This can include establishing baseline scenarios, assessing the impact of the reward system on behavior change, and implementing rigorous monitoring and verification mechanisms to validate the additionality of carbon removals.</p>
<p>Emission reduction deterrence</p>	<p>Strict separation of emissions and removals will ensure that removals do not substitute the urgent emission reductions and is the only way to unequivocally prevent emissions reduction deterrence and solve the non-equivalence issue. The least problematic scenario of the ones proposed is therefore B5, i.e. no linking of units under LULUCF (and in particular removals) with an ETS. Policy design should consider measures that incentivize both emission reductions and carbon removals, ensuring that the reward system complements efforts to reduce agricultural GHG emissions. This can be achieved through setting emission reduction targets alongside carbon removal targets, implementing safeguards to prevent a decrease in emission reduction efforts</p>
<p>Non-equivalence</p>	<p>Strict separation of emissions and removals will ensure that removals do not substitute the urgent emission reductions and is the only way to unequivocally prevent emissions reduction deterrence and solve the non-equivalence issue. The least problematic scenario of the ones proposed – or only acceptable one – is therefore B5, i.e. no linking of units under LULUCF (and in particular removals) with an ETS. Any linking of units would mean increasing ETS allowances – ultimately reducing emissions reductions - and imply equivalence</p>

25. Would an ETS on agricultural GHG emissions linked with a reward system for LULUCF carbon removals conflict with any existing EU policy? If so, which one(s)?

600 character(s) maximum

Aligning objectives of ETS + Common Agricultural Policy (CAP) is essential to avoid conflicts (policy coherence). CAP should become focused on delivering GHG-emission reduction goals shifting the majority of CAP subsidies to plant based protein production in stead of animal based proteins. It would conflict with the Climate Law due to undermining the decarbonisation of the agricultural sector. Emissions and removals must be kept separate at all times, so as to reasonably mitigate emission reduction deterrance. Activities already bound to reach targets under the ESR should not be withdrawn,

26. Please rate the expected administrative feasibility of each agricultural ETS options and policy model for linking a reward system for carbon removals to an agricultural ETS:

a) Agricultural ETS options

	Very feasible	Somewhat feasible	Limited feasibility	Not feasible at all	No opinion
On-farm ETS (option A1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Upstream ETS (option A2)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downstream ETS (option A3)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) Policy models for linking a reward system for carbon removals to an agricultural ETS

	Very feasible	Somewhat feasible	Limited feasibility	Not feasible at all	No opinion
Fully integrated in an ETS (model B1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interconnected through offsets credits (model B2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interconnected through deductions (model B3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interconnected with government intermediary (model B4)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disconnected markets (model B5)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Where possible, please indicate any evidence basis that you use for your rating on the expected administrative feasibility:

600 character(s) maximum

The number of ETS-actors in the downstream and B4 model is reduced considerably, making this option the most feasible and effective, this is shown in two publications: <https://cedelft.eu/publications/pay-as-you-eat-dairy-eggs-and-meat-internalising-external-costs-of-animal-food-products-in-france-germany-and-the-eu27/> TAPP Coalition Position Paper on focusing at livestock and downstream ETS options <https://www.tappcoalition.eu/images/ETS-for-livestock-amendment-1658826425.pdf>. We also would advise that 25-30% of ETS revenues are used for global climate finance (Loss and Damage Fund).

Impacts

28. Please rate the expected impact on global competitiveness and trade balance of each agricultural ETS options and policy model for linking a reward system for carbon removals to an agricultural ETS:

a) Agricultural ETS options

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
On-farm ETS (option A1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Upstream ETS (option A2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Downstream ETS (option A3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

b) Policy models for linking a reward system for carbon removals to an agricultural ETS

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
Fully integrated in an ETS (model B1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnected through offsets credits (model B2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnected through deductions (model B3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnected with government intermediary (model B4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disconnected markets (model B5)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. Where possible, please indicate any evidence basis that you use for your rating on the expected impact on global competitiveness and trade balance:

600 character(s) maximum

Disconnected markets (B5) is the only system that will work, while other models will fail, cost extra money and so will harm competitiveness /trade. In B5, ETS revenues are used to pay farmers for carbon removals. Determining the impact on global competitiveness and trade balance of these policy models requires a detailed analysis considering various factors such as market dynamics, trade agreements, and competitiveness implications. Detailed studies and assessments are necessary to evaluate the specific effects on global competitiveness and trade balance in relation to these policy models.

30. Please rate the expected impact on food prices and consumer choices of each agricultural ETS options and policy model for linking a reward system for carbon removals to an agricultural ETS:

a) Agricultural ETS options

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
On-farm ETS (option A1)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upstream ETS (option A2)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downstream ETS (option A3)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) Policy models for linking a reward system for carbon removals to an agricultural ETS

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
Fully integrated in an ETS (model B1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnected through offsets credits (model B2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnected through deductions (model B3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Interconnected with government intermediary (model B4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disconnected markets (model B5)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. Where possible, please indicate any evidence basis that you use for your rating on the expected impact on food prices and consumer choices:

600 character(s) maximum

Reducing (agri) GHG-emissions globally will reduce negative impacts on food prices as a result of climate change (less heats, droughts, lost harvests etc). So even if an agri-ETS will lead to higher food prices (eg for meat, dairy) foodprices will be also be reduced compared to a situation without any agri-ETS system. The disconnected model B5 probably has a somewhat positive impact on food prices because farmers will receive subsidies for carbon removals from governments (both CAP subsidies and from revenues of the ETS system, with political pressure by farmers groups to maximise subsidies).

32. Please rate the expected impact on income of farmers of each agricultural ETS options and policy model for linking a reward system for carbon removals to an agricultural ETS:

a) Agricultural ETS options

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
On-farm ETS (option A1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Upstream ETS (option A2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Downstream ETS (option A3)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) Policy models for linking a reward system for carbon removals to an agricultural ETS

	Very positive impacts	Somewhat positive impact	Neither positive nor negative impact	Somewhat negative impact	Very negative impact	No opinion
Fully integrated in an ETS (model B1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interconnected through offsets credits (model B2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Interconnected through deductions (model B3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interconnected with government intermediary (model B4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Disconnected markets (model B5)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. Where possible, please indicate any evidence basis that you use for your rating on the expected impact on income of farmers:

600 character(s) maximum

On-farm and upstream ETS models will result in higher costs for farmers and farmers have not much power to ask for higher payments (from supermarkets), so this may result in less profits by farmers and more farmers who will stop farming. In the downstream model the consumer will pay for the ETS costs. The disconnected model B5 probably has a somewhat positive impact on farm income because farmers will receive subsidies for carbon removals from governments (both CAP subsidies and from revenues of the ETS system, with political pressure by farmers groups to maximise subsidies).

34. If applicable, please describe any key impact(s) that have not been mentioned above and explain briefly why they are important to consider in an agricultural ETS and a reward system for carbon removals linked to such ETS:

600 character(s) maximum

Emissions and land sinks are not equivalent, so if offsets of emissions with LULUCF removals are allowed in any way, mitigation deterrence is a major concern – this is insufficiently addressed and is one of the major shortcomings of this approach. The overall usefulness of the entire initiative depends on this. Redistributive impacts within the farming sector should be studied carefully and it must be ensured that more extensive farms are not impacted negatively by carbon pricing. An ETS system is needed too, to realise the methane pledge commitments of EU countries/EU; 30% reduction 2030

Concluding questions & remarks

35. If you wish to expand on any of your answers or if you wish to add comments or information on anything else, which is relevant to the study, please do so in the box below.

800 character(s) maximum

The agri-food sector is the only sector in the EU not yet part of any CO2 pricing system, this has to be corrected by an agri-ETS: level playing field. An ETS system for agriculture should be developed in such a way that the price for GHG emissions would be at least 100 euro per ton from start in 2026. It is important not to link a new agri-food ETS to the existing ETS for energy/industry but create a new stand alone ETS for agri/food, see arguments in CE report 'Pay as you eat meat, dairy, eggs. Preventing carbon leakage and maximising ETS prices per ton GHG-emissions (for maximum impact on CO2-reduction are very important. So no free allocation of allowances is needed (resulting in higher ETS-agri prices) together with a CBAM: an import tax for food (esp. meat/dairy) coming to the EU.

36. If you consider there are materials / publications available online that should be considered further in relation to this study, please feel free to describe them (title and author) in the box below and include any relevant links

800 character(s) maximum

<https://www.tappcoalition.eu/images/ETS-for-livestock-amendment-1658826425.pdf>

<https://www.tappcoalition.eu/nieuws/20522/eu-commission-dg-clima-present-draft-study-ets-options-for-ghg-emissions-in-food-systems>.

https://www.i4ce.org/wp-content/uploads/13-03-Climate-Report-39-Agriculture-in-the-EU-ETS_CDC-Climate-Research.pdf says some large agri-food actors are already covered by the existing ETS, upstream and downstream for direct CO2 emissions, eg. 121 out of nearly 9000 EU dairy factories in the EU. So it would be a big mistake to believe dairy factories are already included in ETS now. Organic beef and dairy production is more GHG efficient per kg milk compared to conventional dairy and beef production according to 'Pay as you eat meat' CE-report <https://cedelft.eu>

Contact

Andrea.Finesso@trinomics.eu