

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

Study for the European Commission - DG CLIMA



- In cooperation with
- IEEP
  - Umweltbundesamt
  - Ecologic
  - Carbon Counts

## Results of the Initial Study

Pricing agricultural GHG emissions along the  
value chain via emissions trading



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# Part 1: Pricing agricultural GHG emissions along the value chain via emissions trading

Policy design options and considerations for an agri-food ETS



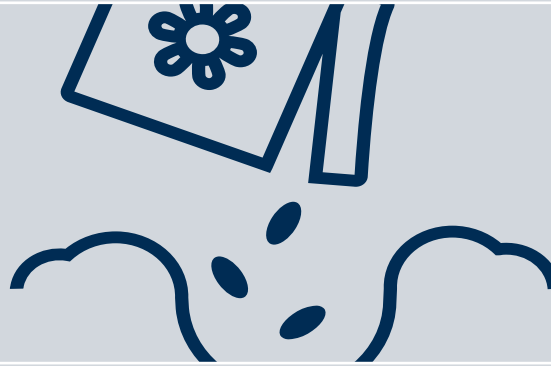
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# 5 agri-food ETS policy options explored



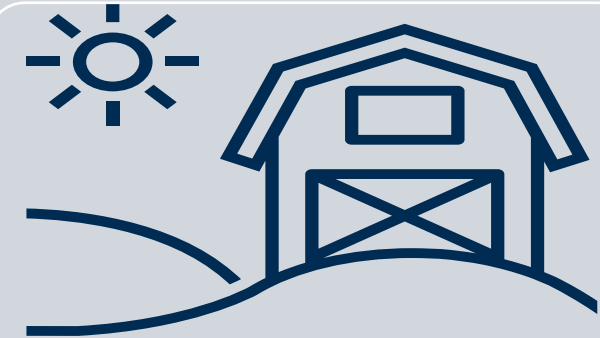
## Downstream ETS

- **Point of obligation:** meat and dairy processors
- 245 MtCO<sub>2</sub>e



## Upstream ETS

- **Point of obligation:** fertiliser and feed producers and importers
- 305 MtCO<sub>2</sub>e



## On-Farm ETS (3)

- **Point of obligation:** farm operators
- Three ETS options
  - All GHG = 426 MtCO<sub>2</sub>e
  - Livestock = 245 MtCO<sub>2</sub>e
  - Peatlands = ~95 MtCO<sub>2</sub>e

- Provide farms in the downstream/upstream ETS options an opportunity to receive financial support in transitioning towards mitigation practices
  - Farms could calculate and certify their emissions in a detailed and accurate way on a voluntary-basis
    - Given tradeable credits generated through the certified MRV approach
    - Quantity of credits generated can reflect the difference between their certified emissions, and what their calculated emissions would have been on the standard proxy calculation.
    - Regulated entities could present these certificates to help meet their obligation to retire allowances covering the total of their emissions
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- An Agri-food ETS can provide incentives for farmers to change their practices:
    - Impact of on-farm Agri-food ETS options mainly depends on the emissions covered and cost-effective on-farm mitigation measures available
    - Impact of the upstream and downstream AgETS depends on the extent to which incentives are passed on to farms
  - Upstream and downstream Agri-food ETSs can further facilitate new vertical arrangements in agri-food value chain and incentivise innovation:
    - Upstream, innovation for more efficient and lower emitting fertilisers could be facilitated
    - Downstream, food processors could change food recipes to lower emissive ingredients or innovate to develop new products such as alternative protein technologies
    - The Certified MRV method could further create collaborative **approaches and generate additional income for farmers should they choose to adopt mitigation actions on-farm**
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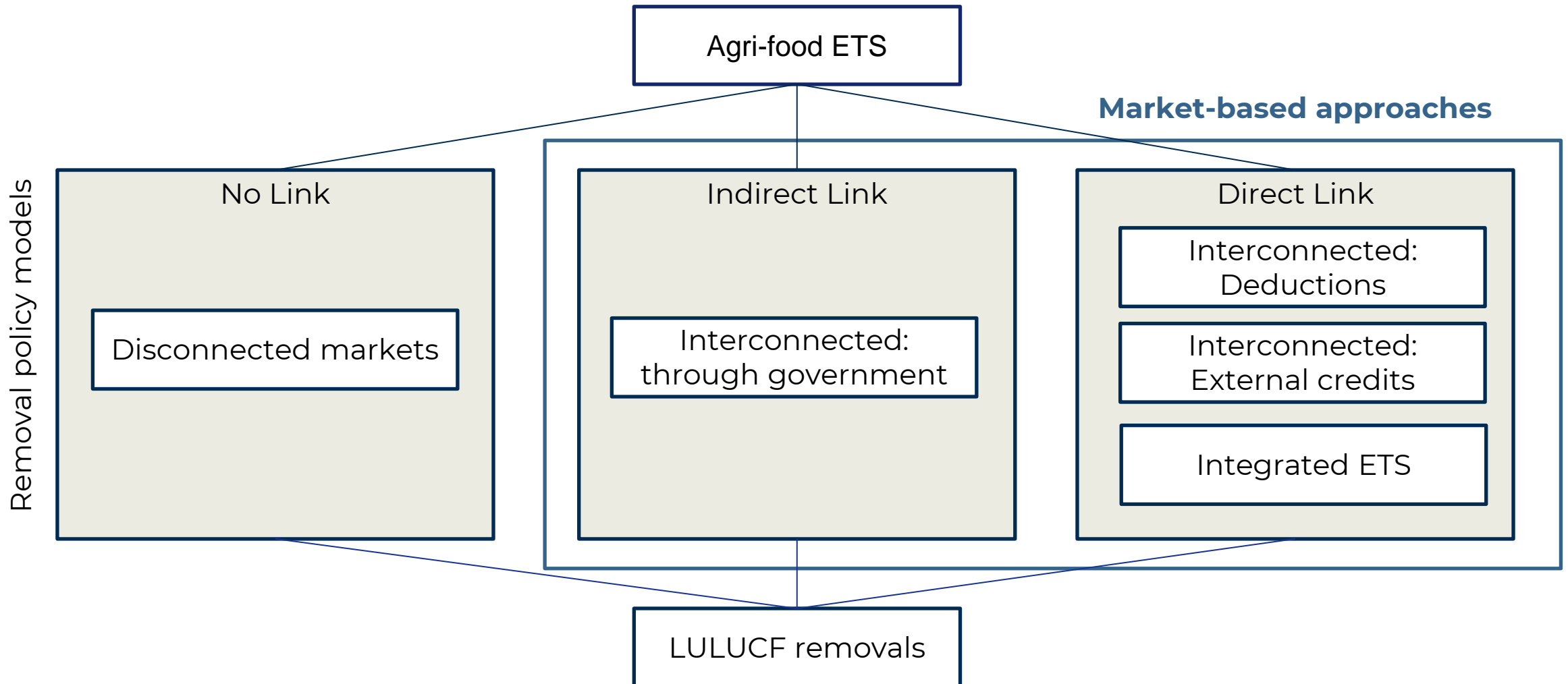


# Part 2: Linking carbon removals in the land sector to an agricultural ETS

Policy models for an Agri-food ETS+Removals and associated challenges



# 5 removal policy model options





- LULUCF carbon removals will be essential to attain the EU's climate objectives
    - but cannot replace rapid emissions reductions in all sectors
  - The nature of LULUCF removals poses challenges to their incorporation into an Agri-food ETS, especially related to non-equivalence of LULUCF removals and Agri-food ETS emissions reductions and emissions reduction deterrence
    - Policy design, including the CRCF, may be able to address some of these challenges
  - The different removal policy models explored in this study pose different strengths and weaknesses, and there is not a single best solution
    - Different removals types could and should be governed by different policy models
    - Sequencing of policy models over time should also be considered
  - Agri-food ETS+Removal policy design should be considered as part of a wider systemic change to best transition the agriculture and land sector and our food system to sustainability
  - Many open questions – but no time to lose
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Stakeholder preferences on the combinations of Agri-food ETS options and removal policy models:

- Strong stakeholder preference for a downstream Agri-food ETS in combination with the No link: Disconnected market policy model or the Direct link: Deductions
- General opposition to an on-farm ETS in almost all combinations

Policy models for linking LULUCF carbon removals	Agri-ETS options		
	On-farm ETS	Upstream ETS	Downstream ETS
<b>No link: Disconnected market</b>	+/-	+/-	++
<b>Indirect link: Interconnected through government</b>	--	-	+
<b>Direct link: Deductions</b>	--	+/-	++
<b>Direct link: External credits</b>	--	-	+
<b>Direct link: Integrated ETS</b>	-	+/-	+



## Follow-up study

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



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# Purpose of the new study

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## Two policy goals

Accelerate GHG emission reductions in the agriculture sector



Create an enabling environment for the sector to fulfil this role, considering new business and income opportunities

## Aim of the study

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.

# Purpose of the new study

**The project team will assess viable policy options more concretely over the forthcoming year**

**Engagement  
and  
Transparency**

Active input  
from  
stakeholders

**In-depth  
assessment**

legal and  
practical  
feasibility

economic, social,  
administrative,  
and  
environmental  
impact

# Study Timeline





## Shaping the policy options for in-depth assessment



- Point of obligation, scope of emissions, thresholds, payments for removals, regulatory flexibilities – including alternatives to what was in original study
- How can options be aligned with existing policies in the fields of climate, environment and agriculture
- Administrative impacts – transaction costs and MRV costs, compliance costs



## Design options for agri-food climate solutions to be effective in achieving sustainable GHG reductions and increasing carbon removals



- Potential for emission reductions and removals
  - Incentives for innovation and changing practices both on and off-farm
  - Implications for land use change
  - Consumer behaviour and dietary choices
  - Carbon leakage and impacts on emissions in third countries
  - Other environmental risks and benefits
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## Economic implications of policy options for farmers and other agri-food value chain actors - costs and benefits



- How costs will vary across the value chain depending on the point of obligation – transaction costs, compliance costs, MRV costs
- Market power distribution/re-distribution
- Global competitiveness – imports, exports (export substitution)



## Implications for the social fabric of the EU and well-being of EU inhabitants



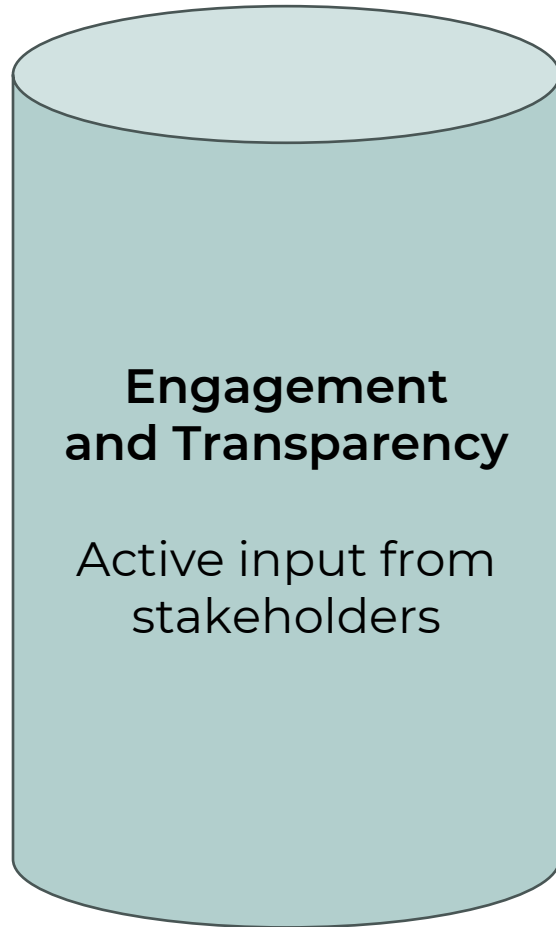
- Implications of rising food prices and vulnerable households
  - Dietary choices and health/well-being
  - Impacts on small- and medium-sized farms
  - Risks of land abandonment and age structure of farms
  - Rural areas – employment, population, opportunities for revitalization
  - Member States – CEE countries, countries with many farms, small-scale farming
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## Enabling factors or levers that will facilitate a positive trajectory for agri-food climate solutions



- A vision with objectives for effective agri-food climate solutions – how to achieve positive outcomes and limit negative impacts
  - Maximise access to fresh funding for climate solutions through for example reward models
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This stakeholder event

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Technical Workshops from September 2024 –  
April 2025

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Any input you might find useful

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# Workshops – tentative dates



# Workshops – get engaged

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- Interested participants may register via the link provided in the background paper until 19 July 2024  
[EUSurvey - Survey \(europa.eu\)](https://europa.eu/eusurvey)
- Workshops will be limited to 35 persons in the interest of lively and informative discussions
- Selection will be undertaken in light of expertise and in view of achieving a balanced participation of all stakeholders concerned

**Participation comes with a commitment to contribute actively either in the discussions or through providing input and material in writing**

# Input request

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We want to hear your views and benefit from your knowledge and experience.

Input welcome at any time until April 2025 to

[agri-food-climate@trinomics.eu](mailto:agri-food-climate@trinomics.eu)



Thank you for your attention!

[agri-food-climate@trinomics.eu](mailto:agri-food-climate@trinomics.eu)



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