

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

Study for the European Commission - DG CLIMA

## Trinomics

In cooperation with

- ► IEEP
- > Umweltbundesamt
- > Ecologic
- Carbon Counts

### Results of the Initial Study

## Pricing agricultural GHG emissions along the value chain via emissions trading





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

Policy design options and considerations for an agri-food ETS



#### 5 agri-food ETS policy options explored Trinomics 🗬



- meat and dairy processors
- 245 MtCO<sub>2</sub>e

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

- farm operators
- Three ETS options
- All GHG = 426 MtCO<sub>2</sub>e
- Livestock = 245 MtCO<sub>2</sub>e
- Peatlands =  $\sim$ 95 MtCO<sub>2</sub>e

## Certified on-farm voluntary credits Trinomics <

- 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

## Conclusions



- 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



## 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





## Conclusions



- 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

### Stakeholder preferences



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

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



#### Follow-up study

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



## Purpose of the new study



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



economic, social, administrative, and environmental impact

## **Study Timeline**



## **Policy Options**





## 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 offfarm
- > Implications for land use change
- > Consumer behaviour and dietary choices
- > Carbon leakage and impacts on emissions in third countries
- > Other environmental risks and benefits





#### 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)

## Cohesion





#### Implications for the social fabric of the EU and wellbeing 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, smallscale farming







## 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

## Engagement





1

2

This stakeholder event

Technical Workshops from September 2024 – April 2025

Any input you might find useful

## Workshops – tentative dates





## Workshops – get engaged



• Interested participants may register via the link provided in the background paper until 19 July 2024

EUSurvey - Survey (europa.eu)

- 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



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

Input welcome at any time until April 2025 to

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### Thank you for your attention!

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