

Temporary carbon units from carbon farming and EU agri-food climate policy

Risks, opportunities and policy design choices

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Research question

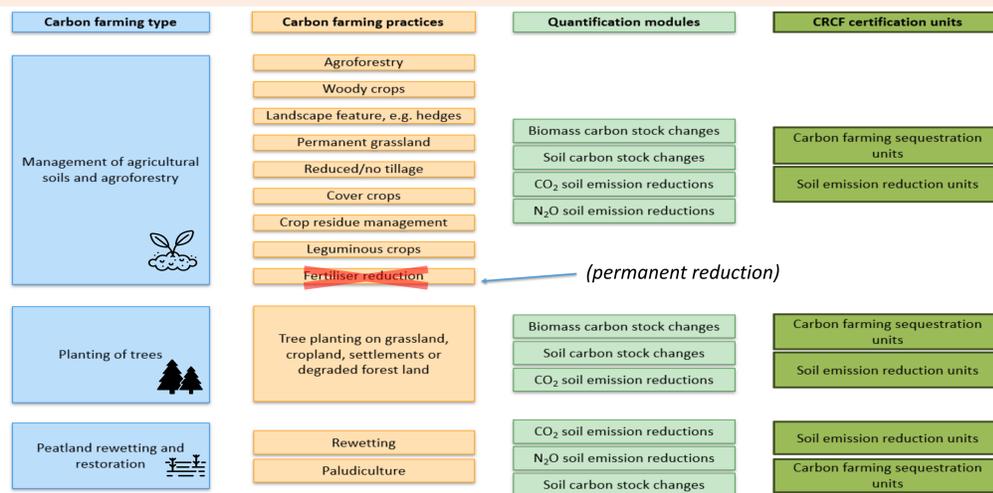
How should temporary CRCF carbon units be integrated into the proposed EU agri-food climate policies (Agricultural Emissions Trading System, Mandatory Climate Standards and public procurement policies)?

What are temporary CRCF carbon units?

Carbon farming activities eligible under the Carbon Removals and Carbon Farming (CRCF) Regulation cover both carbon sequestration and emissions reductions in soils, biomass and peatlands. In most cases, the **climate benefit is reversible**: its maintenance depends on continued management and land use, as well as the durability of temporarily stored carbon and avoided emissions. Biophysical disturbances, such as drought, can also reduce carbon stocks and diminish emissions reductions over time, e.g. if peatland water tables cannot be maintained.

Accordingly, the climate benefit of carbon farming generally persists only as long as the underlying practice is maintained and stored carbon is not reversed. In this sense, **both avoided emissions and removals outcomes may be temporary**. Note: an exception is carbon farming CRCF units from reduced fertiliser use; these deliver permanent emissions reductions and we therefore exclude these from our analysis.

Figure: Overview of temporary carbon farming activities eligible under the CRCF



Assessment of integrating temporary units into the proposed EU agri-food climate policies

To promote climate change mitigation in the agri-food value chain, policymakers are considering three new, mandatory climate policies for the agri-food sector, that would put a price on agricultural emissions. These mandatory policies offer great potential to accelerate climate change mitigation. We assess the risks of integrating temporary units into the three proposed policy options under discussion at the EU level:

- 1. Agricultural Emissions Trading System (AgETS):** Emissions of processors or (large) farms are capped and translated into tradable allowances. Processors/farmers must return sufficient allowances to cover their emissions.
- 2. Mandatory Climate Standards (MCS):** Downstream actors (processors or retailers) are obliged to reduce the emissions associated with the products they sell – or purchase CRCF units, with more stringent targets over time.
- 3. Public procurement of temporary CRCF units (public, blended):** The EU buys CRCF units from farmers and landowners who voluntarily implement carbon farming practices. Funding can be fully public or co-funded by private buyers (blended).

Each of these policies entail risks of varying degrees. A brief overview of our assessment of these risks is provided in the table below.

Table: Assessment of key risks from the integration of CRCF temporary carbon units in the proposed EU agri-food climate policies

| Risk/benefit dimension (Potential to ...) | AgETS and MCS (offsetting) | Public procurement (public-funded, contribution) | Public procurement (blended finance, offset or contribution) |
|--|----------------------------|--|--|
| Promote temporary carbon farming activities | High | Medium | Medium |
| Avoid agri-food emissions reduction deterrence | Low | High | Medium |
| Minimise environmental integrity risks | Low | High | Medium-High |

Conclusions on the integration of temporary carbon units in EU agri-food climate policy

- Carbon farming can deliver climate and wider environmental benefits, but crediting temporary sequestration through the CRCF poses major quality risks.
- Risks are especially high for easily reversible management changes, such as soil carbon sequestration measures, compared with land-use changes, such as peatland rewetting and agroforestry.
- AgETS and MCS policies offer strong potential for reducing agri-food emissions, but allowing temporary CRCF units as offsets would pose risks to environmental integrity.
- Public procurement funded only with public money avoids offsetting risks, and therefore (even for low-quality units) avoids any environmental integrity risks.
- Blended public-private finance should be designed to avoid offsetting claims and be limited to contribution claims.
- Targeted activity-based payments represent a more credible way to support carbon farming, especially for high-risk temporary sequestration measures.

Recommendation: Exclude low-quality temporary CRCF units from the EU agri-food climate policies that allow offsetting of emissions elsewhere (particularly AgETS and MCS designs).

Alternative approaches to support carbon farming: activity-based payments



General approach
Activity-based payments for carbon farming offers an alternative to the results-based approach used in CRCF crediting



Benefits and drawbacks

- ✓ By focusing on the activity rather than the measured outcome, payments are easier to administer, reduce the need for complex MRV systems, and broaden participation.
- ✗ However, when no certified carbon credit is generated, it may weaken incentives for private companies to finance carbon farming activities. Accuracy and cost-effectiveness may be lower than result-based approaches.



Policy Options

- ▶ **Through the CAP:** Existing agri-environmental-climate measures (AECM) and eco-schemes can be used to finance carbon farming activities, with options available to make CAP payments more targeted.
- ▶ **Beyond the CAP:** Additional options exist at EU, Member State, and private level, including use of AgETS auction revenues, dedicated public funds, national programmes, and private contributions.

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