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Promoting climate action in the future Common Agricultural Policy

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Abstract. Current projections indicate that agricultural GHG emissions are hardly expected to fall between 2017 and 2030 while the sink in the LULUCF sector is projected to decline. These trends call into question the feasibility of the Commission's roadmap to reach net zero emissions by 2050. Contributing to climate change mitigation and adaptation is proposed as one of the nine specific objectives in the future CAP. This paper discusses how Member States could use the opportunities presented by the new CAP to reduce agricultural emissions while increasing removals in the LULUCF sector. The Commission has prefigured changes in the EU's climate architecture that could give Member States greater incentives to prioritize climate action in their CAP Strategic Plans. A higher share of future CAP expenditure should also be allocated to climate action under the proposal for climate mainstreaming of the EU budget, although the effectiveness of this mandate is undermined by the poor quality of the metrics proposed. The different elements of the proposed green architecture in the future CAP are reviewed to highlight the scope for climate action, including the Commission's proposal for a carbon farming initiative. Ultimately, it will be up to Member States to determine the priority they intend to give to climate action in their CAP Strategic Plans.

Keywords: emissions, climate action, GHG mitigation, climate targets, climate mainstreaming, CAP reform.
JEL codes: Q18, Q54.

1. INTRODUCTION

Agricultural emissions in the EU27 amounted to 394 Mt CO_2e in 2018 and accounted for around 10% of EU27 territorial emissions (EEA 2020). These emissions have fallen by 21% in 2018 compared to 1990. There was a sharp fall in emissions in the very early years of this period due to the collapse in cattle numbers in the former centrally-planned economies following the restructuring of these economies after the fall of the Berlin Wall in 1989. This was followed by a slow decline until 2012 after which emissions began to increase again. DG AGRI projects that agricultural emissions will decrease only very slightly between 2012 and 2030 in a business-as-usual scenario (European Commission 2019). This is consistent with the conclusions of the

European Environment Agency based on projections submitted by Member States that show no further significant reductions in agricultural emissions by 2030. Even with additional measures planned but not yet implemented in 2019, agricultural emissions are expected to fall by less than 5% between 2017 and 2030 (EEA 2019).

Agricultural emissions cover only emissions of methane (CH_4) and nitrous oxide (N_2O) from agricultural activities (apart from very small emissions of CO_2 from liming and urea application). Changes in CO_2 stocks as well as minor emissions of CH_4 and N_2O associated with land use and land use change are reported, along with net emissions from forestry, in the Land Use, Land Use Change and Forestry (LULUCF) sector. For the EU27, croplands, wetlands but also grasslands are a net source of emissions, but because of carbon sequestration in forestry, the LULUCF sector is overall a net sink, removing around 263 Mt CO_2e in 2018. The size of this sink has been falling in recent years, in part due to natural age-dynamics of the forest stock but also due to increased harvesting for biomass. The Commission has aggregated the information on future LULUCF projections submitted by Member States as part of their National Energy and Climate Plans. These show that around a third of the 2005 EU carbon sink could be lost by 2030, and that the LULUCF sector may even become a net emitter in the years after 2030 (European Commission 2020a). This spells serious trouble for the Commission's roadmap to reach net zero emissions by 2050.

The EU-wide objective to be a climate-neutral continent with net zero emissions by 2050 is the centrepiece of the European Green Deal launched by Commission President Ursula von der Leyen on taking up office in December 2019. This objective is given legal backing in the European Climate Law proposed by the Commission and, at the time of writing (November 2020) under negotiation in the co-legislature (European Commission 2020b). The Commission has further proposed an amendment to this Climate Law that would raise the EU-wide emissions reduction target in 2030 from a target of at least 40% reduction in gross emissions to at least 55% reduction in net emissions relative to the emissions level in 1990 as part of its 2030 Climate Target Plan (European Commission 2020c). It has also discussed changes in the EU's climate architecture that would be necessary to achieve such increased ambition. The options it has proposed have important implications for the way agricultural and land emissions are measured and integrated into the EU's climate regime.

The EU is also making changes to the framework of the Common Agricultural Policy (CAP) for the coming period. The Commission put forward legislative proposals in June 2018 (European Commission 2018). The Commission proposal has three main ideas: a new delivery model and governance structure for the CAP; higher environmental and climate ambition to be implemented through a new green architecture; and greater fairness in the distribution of payments. Following agreement by the European Council on the budget allocation for the CAP in the next Multi-annual Financial Framework (MFF) 2021-2027 in July 2020, both the European Parliament and the Agricultural Council agreed their negotiating mandates for the trilogues on the Commission CAP proposal in October 2020. This will allow the CAP legislation to be approved in the first half of 2021 and to enter into force from 1st January 2023.

The governance structure for the CAP proposed by the Commission under the new delivery model will be performance-based rather than compliance-based. The Commission has proposed three general and nine specific objectives for the CAP. One of the three general objectives is «to bolster environmental care and climate action and to contribute to the environmental – and climate – related objectives of the Union». This is supported by a specific objective to «contribute to climate change mitigation and adaptation, as well as sustainable energy». Member States will draw up CAP Strategic Plans based on a SWOT (strengths, weaknesses, opportunities, and threats) analysis which should help them to assess and identify needs for each of the nine specific objectives, including the one on climate. For the environmental and climate specific objectives, the assessment should take account of the national environmental and climate plans emanating from a defined list of legislative acts. For the climate objective, this will include any targets established under the 2030 Climate Target Plan. Reducing agricultural emissions and increasing removals in the LULUCF sector are essential to the success of the EU's Green Deal ambitions. This raises the question how Member States could use the opportunities presented by the new CAP to address the challenges of «bending the curve» for agricultural emissions while increasing removals in the LULUCF sector.

Another element that will have a bearing on the climate ambition in the next CAP is the climate mainstreaming of the EU budget. Climate mainstreaming refers to the ambition that a certain proportion of the EU budget should help to meet the EU's climate targets and to ensure climate resilience. This share was set at 20% in the 2014-2020 MFF. The European Council endorsed an increase to at least 30% in the 2021-2027 MFF. Expenditure in the natural resources and the environment MFF heading has a key role in meeting this target. The European Council agreed that the share of

the CAP expenditure to be dedicated to climate action should be 40%. This can, in principle, give a further incentive to prioritising climate action in the next CAP.

This paper elaborates on how Member States can use the new CAP to promote climate action. Section 2 describes the climate policy framework for abatement efforts in the agriculture and land sectors. Section 3 describes how climate mainstreaming would apply to the CAP. Section 4 discusses the options that will be available in the new CAP to incentivise farmers and landowners to engage in emissions abatement. Section 5 provides a short summary and conclusions.

2. AGRICULTURE AND LAND USE IN THE EU CLIMATE ARCHITECTURE

Under the current 2030 climate framework, GHG emissions are regulated under three separate regimes with only limited interaction between them.

- The Emissions Trading Scheme (ETS) Regulation establishes a cap-and-trade system for the power and heavy industry sectors as well as aviation. This limits and reduces permitted emissions from these sectors over time.
- The Effort Sharing Regulation (ESR) regulates emissions from the transport, buildings, agriculture, waste and small industry sectors through individual national emissions ceilings and reduction pathways. For Member States with national emission reduction targets significantly above both the EU average target and their cost-effective reduction potential, there is a limited ability to transfer emissions allowances from the ETS regime to cover emissions generated in the ESR sectors. There are no EU-wide targets for reductions in agricultural emissions alone.
- The LULUCF Regulationsets a «no-debit» target for net emissions/removals from the agricultural land use and forestry sectors compared to how it would have evolved under existing land management practices. A LULUCF credit position based on this accounting canbe only partially used to offset emissions under the ESR but a LULUCF debit position must be covered by using allowances available for the ESR sector of a Member State.

In its 2030 Climate Target Plan published in September 2020, the Commission put forward options that would significantly change this architecture and the incentives to pursue abatement in the agriculture and land sectors. First, it proposes to integrate road transport and buildings into the ETS sector, putting forward two possible models. In one model, road transport and buildings are included in the ETS but also remain as ESR sectors covered by national reduction targets. The idea here is that the carbon price arising from inclusion in the ETS would provide an additional EU instrument to achieve the national emission reduction targets under the ESR. In the second model, they would be included in the ETS but removed from the ESR sector. In that option, agricultural emissions would become a much larger share of the remaining ESR sector. For the EU27, agricultural emissions are currently 18% of ESR emissions; this share would increase to 40% under the second model. As such, the national ESR reduction target would become almost a *de facto* reduction target for agriculture as it would no longer be possible to avoid reductions in agricultural emissions if the national reduction target were to be met. This model would also have very different consequences for individual Member States. The Commission proposes to decide between these two models in the upcoming impact assessment for both the review of the Emissions Trading System and the Effort Sharing Regulation.

Under the current LULUCF Regulation, credits and debits in the LULUCF sector are generated compared to a baseline assuming continuation of existing land management practices. Credits and debits using these policy-determined accounting rules are different to the emissions and removals reported to the UNFCCC and used in the EU's long-term strategy to achieve carbon neutrality by 2050. In the 2030 Climate Target Plan, the Commission proposes to remove this inconsistency and to allow the full net LULUCF sink to be included when looking at GHG ambition. The Commission emphasises that the current trend of a decreasing land carbon sink needs to be stopped and reversed, and that over time, the sector should do more. Increased flexibility between the LULUCF Regulation and the Effort Sharing Regulation would strengthen incentives for removals in the land use sector itself.

Finally, the Commission floats the idea of creating an Agriculture, Forestry and Land Use (AFOLU) sector with its own specific policy framework covering all emissions and removals of these sectors. The Impact Assessment notes that «A policy architecture that combines more explicitly both sectors into one legal instrument may ease designing efficient and effective policies in these sectors and better align them with EU agricultural policy instruments»(European Commission 2020d). Creating a combined AFOLU sector would require a novel policy approach that would (i) set national and sub-sectoral targets and benchmarks, (ii) create flexibility across the EU ensuring cost-effective incentives and mobilise the necessary financial resources, as

well as (iii) develop the certification of carbon removals. Under this proposal, the agriculture and land sectors would undoubtedly face more ambitious climate targets at Member State level than is the case today.

3. CLIMATE MAINSTREAMING OF THE CAP BUDGET

For the 2021-2027 MFF the European Council decided that 40% of the CAP budget should be allocated to climate action (adaptation measures to strengthen resilience as well as mitigation) as a contribution to its overall target of 30% for the whole MFF (the latter an increase from the initial Commission proposal of 25%). This 40% commitment is not legally binding but appears in the preamble to the draft Strategic Plan Regulation (Recital 52) which notes that «Actions under the CAP are expected to contribute 40% of the overall financial envelope of the CAP to climate objectives». It will be one of the parameters used by the Commission in evaluating and approving draft Strategic Plans submitted by the Member States.

The Commission's method to determine the climate relevance of CAP spending has been criticised by, among others, the European Court of Auditors (ECA, 2016; Matthews, 2020). The Commission adapted an existing OECD methodology called «Rio markers» that the OECD had developed to track climate-related development assistance expenditure. This called for the use of three categories: climate related only (100%); significantly climate related (40%); and not climate related (0%). The Court was particularly critical of the Commission assumptions that, due to cross-compliance conditions, 19.5% of direct payments were related to climate action and that 100% of Areas of Natural Constraint (ANC) payments could be counted towards climate action. It concluded that the Commission's methodology overestimated the likely contribution of CAP spending to climate action.

Given the higher ambition level set for the climate relevance of CAP spending in the 2021-2027 period, there is a need for a robust measure of this contribution. The Commission has specified the methodology it intends to use in the draft Strategic Plans Regulation (art. 87). The Commission has partly taken account of the Court's criticism by reducing the weighting for ANC expenditure from 100% to 40%. At the same time, it will apply a weight of 40% to expenditure under the Basic Income Support for Sustainability and the Complementary Income Support measures to take account of the mandatory standards applied under enhanced conditionality. This represents a different interpretation of how to apply the Rio markers approach than in the current programming period. It has the effect of increasing the climate weighting for this expenditure from 19.5% to 40%, even though the Court of Auditors had already criticised the 19.5% figure as too high. The Court repeated its criticism of this methodology in its Opinion on the Commission's CAP draft legislation (ECA 2018).

Setting a high indicative target for the share of CAP spending that should be related to climate action is intended to focus Member State priorities on this objective when drawing up their CAP Strategic Plans. However, the proposed metrics are not sufficiently focused on climate outcomes to be helpful in this respect. The European Parliament, in its negotiating mandate for the trilogues, has called on the Commission to "develop a science-based and internationally recognised common methodology for more precise tracking of expenditure on climate and environmental objectives, including biodiversity, and evaluate the estimated contribution of different intervention types, as part of the Mid-term Review …". If adopted, this would ensure greater integrity in measuring the climate ambition of the next CAP.

4. CLIMATE ACTION IN THE NEW CAP

Under the new CAP, Member States will draw up CAP Strategic Plans that will set out the objectives they intend to achieve with their CAP budget and the instruments they will use. The Plan should set out an intervention strategy for each specific objective identified in the Plan. An intervention strategy would define targets for specific result indicators and related milestones, identify the interventions that contribute to achieving these targets based on sound intervention logic, and set out an appropriate allocation of financial resources.

For the climate specific objective, interventions will mainly be drawn from the revised green architecture proposed by the Commission comprising enhanced conditionality obligations to be respected by all recipients of CAP payments, new eco-schemes financed from Pillar 1 direct payment envelopes, and the well-knownagri-environment-climate measures (AECMs) financed from Pillar 2 rural development programmes.

Enhanced conditionality builds on the cross-compliance requirements in the current CAP but also includes conditions currently supported by the greening payment (maintenance of permanent pasture, crop rotation, a minimum share of non-productive land). Some of the obligations contribute to climate objectives. These include GAEC (Good Agricultural and Environmental Condition) standards to maintain permanent grassland,

to ensure appropriate protection of peatland and wetland, a ban on burning arable stubble, to plant cover crops to avoid bare soil in sensitive periods, to rotate crops, and to allocate a minimum share of non-productive land. Many of these conditions are already part of the current CAP rules and will not necessarily lead to additional climate benefits. However, requiring appropriate protection of wetlands and peatlands is a new measure with potential climate benefits. The Commission proposals also specify crop rotation rather than crop diversification as required for the greening payment. They would also extend the requirement for a minimum share of non-productive land to all holdings and not just larger arable holdings as required for the greening payment. The Commission also added a requirement for payment beneficiaries to adopt nutrient management plans that could help to lower N_2O emissions. However, these additional elements may not survive the trilogues as both Council and Parliament see these as excessively onerous obligations for payment beneficiaries to observe.

Eco-schemes are a new instrument and their potential to contribute to climate action remains to be tested. They can reward farmers for management practices contributing to environmental and climate objectives that go beyond the mandatory standards under enhanced conditionality. They will differ from similar measures supported by AECMs in Pillar 2 in that payments will be annual rather than part of multi-annual contracts, and payments will not necessarily be limited by the requirement that they should be based either on costs incurred or income foregone because of the practice. DG AGRI has highlighted four flagship eco-schemes – agro-forestry; agro-ecological practices such as organic farming, more sustainable land management practices, enhanced crop rotation, or more extensive grazing; precision farming; and carbon farming(ARC2020 2020). All these measures could also be supported in AECMs although it will not be possible to have the same schemes targeted at the same groups of farmers in both Pillars.

Carbon farming is defined by DG AGRI as a result-based system for CO_2e removed or emissions avoided. Although proposed for support under eco-schemes by the Commission, many practices may be more suited to AECM multi-year contracts that can provide greater certainty to farmers. Practices that can help to increase carbon sequestration and reduce emissions include conservation agriculture (no ploughing and reduced tillage); soil cover with cover crops, trees, landscape elements; afforestation with native species to create a species-rich forest that is resilient, also to climate change; appropriate management of dried peatland (e.g. rewetting, rewetting with paludiculture, higher water table); conversion of arable land to grassland; and grassland management, for instance switching to multisward grasslands.

Carbon farming will make an important contribution to reducing emissions from the AFOLU sector in future. For farmers, it offers a potential new source of revenue, either in the form of CAP payments or from private sector actors seeking to offset their emissions. Various pilot projects are currently underway to test the concept. However, there are significant challenges before an EU-wide scheme can become operational. There are questions around monitoring, verification, additionality, reversibility, transactions costs and ensuring accounting integrity. In the Farm To Fork Strategy, the Commission has promised to come forward with a carbon farming standard for certification purposes. Changes in the LULUCF rules such as the Commission has proposed in its 2030 Climate Target Strategy will also be necessary so that Member States can gain credit for initiatives that sequester carbon and are thus incentivized to introduce them.

5. CONCLUSIONS

The urgent need for climate action is underlined by the European Green Deal target to ensure a climate-neutral Europe by 2050. All sectors including agriculture and the land sector will be required to contribute to this goal. Without additional measures, agricultural emissions are unlikely to reduce by much under a business-as-usual scenario, whereas the land sink is projected to decrease. Incentives under the new CAP will be necessary to turn this disturbing prognosis around.

This will require changes in the treatment of agriculture and land use in the EU's climate architecture so that Member States have an incentive to give greater priority to climate action in the CAP. The Commission's proposal to integrate agriculture and LULUCF into a new AFOLU sector with its own reduction targets and rules could be a promising start. Strengthening the way in which climate mainstreaming is measured in the CAP would also contribute to this goal. Removing the limit on LULUCF credits that can be used to offset agricultural emissions and emissions from other sectors would also give Member States a greater incentive to act. A robust carbon farming standard for certification purposes will be essential, however, if LULUCF credits are to be credible elements of GHG accounting.

Member States also need, in addition, to be able to adopt appropriate instruments in their CAP Strategic Plans to achieve more ambitious targets. The new eco-

schemes potentially can encourage greater targeting of direct payments in Pillar 1 on climate action rather than pure income support. Member States also can make greater use of AECMs in Pillar 2 to encourage management practices that address climate mitigation and resilience. It is, however, up to Member States to decide on the priority they will give to climate action relative to the other eight specific objectives in the new CAP. This underlines the importance of putting the climate architecture in place that will ensure that greater efforts are made to pursue climate objectives in the new CAP than has been the case to date.

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