

EEB European Environmental Bureau

A CHECK ON 6 FINAL UPDATED NECPS

EEB assessment on agriculture in the EU National Energy and Climate Plans (NECPs)



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Some EU countries' climate plans still show little action on agriculture, missing an opportunity to tackle the climate crisis and build resilience

Introduction

Introduced under the <u>Governance Regulation</u>, to meet the EU's energy and climate targets for 2030, EU countries have established 10-year <u>National Energy and Climate Plans (NECPs)</u> for the period from 2021 to 2030. These Plans outline individual countries' energy and climate targets and explain the policy measures put in place across all sectors to achieve them. The first NECPs were submitted by Member States in 2018-2019, assessed by the European Commission, and then finalised by each country in 2020-2021.

As a result of the revised EU-level greenhouse gas (GHG) emission reduction targets in the Effort Sharing Regulation (ESR), and Land Use, Land Use Change and Forestry (LULUCF) regulation, Member States had to submit their draft updated NECPs by the end of June 2023 to include these new legally binding targets. Many of the draft updated NECPs were published with significant delays. An EEB assessment of selected available draft updated NECPs at the end of 2023 looked at the level of ambition of the targets for the agriculture sector, focusing on significant emission sources: livestock, fertilisers, and drained peatlands. Together, these categories make up 17% of the EU's greenhouse gas emissions. While emissions from agriculture cannot be reduced to zero, they can be significantly reduced, and the updated NECPs are a crucial tool in this regard, laying out key measures and policies at a national level in order to achieve climate reduction targets. Unfortunately, the suggested measures for the agricultural sector have consistently been the weakest part of NECPs, with emissions from fertilisers and livestock rearing left largely untouched, while emissions from agricultural land-use were not included in NECPs until their revision in 2023. The assessment concluded that the concerning absence of any agricultural emission reduction targets in many countries' plans sheds light on the systemic reluctance to effectively tackle this major source of GHGs.

After receiving formal feedback from the Commission on their drafts, Member States were required to submit their final updated NECPs by the end of June 2024. However, as was the case with the draft plan, few met the deadline. As of March 2025, 22 out of 27 plans are available on the Commission's website. Building on the analysis of the draft plans and focusing on case study countries represented in the <u>Methane Matters</u> <u>Coalition</u>, this report takes stock of the final updated NECPs of Denmark, Hungary, Italy, the Netherlands, Spain, and Sweden, evaluating the level of ambition of these countries' agricultural targets in relation to the EU's overall climate commitments, and comparing the plans against their draft versions, as well as the Commission's recommendations.

Denmark

The EEB's review of Denmark's draft updated NECP was positive on the level of ambition, but critical on certain sets of measures on the pathway to achieve its goal. It found that the country showed strong ambition with diverse measures for reducing emissions and nutrient pollution from fertiliser use, and did well with concrete targets for the rewetting of peatlands. On livestock, the review found that Denmark exclusively relies on technological solutions such as manure management, feed additives, and biogas for bringing down emissions, which do not address the wider pressing issues caused by the scale of intensive livestock rearing present in the country.

The Commission's review of the draft updated plan acknowledged that Denmark recognises the need to reduce its agricultural emissions, and that attention is paid to methane and nitrous oxide emissions from the sector. However, like the EEB, it also raised the issue of Denmark's combined agriculture and forestry target approach, clouding the extent to which the agricultural sector would reduce its emissions in contribution to the ESR target, which at the time of the draft plan, the country was set not to reach. The review therefore recommends adding cost-efficient policies, particularly in the agriculture sector to achieve the missing emission reductions, and providing additional information on the expected timeline, scope, and impact of different policies and measures, including the Common Agricultural Policy (CAP).

In its final updated NECP, Denmark answers the Commission's requests and states that with the Green Tripartite Agreement reached in 2024, the country will meet its domestic 70% overall emission reduction goal, as well as the EU's ESR and LULUCF objectives. Denmark maintains its combined agriculture and forestry target, but details that the Green Tripartite Agreement is estimated to reduce agriculture's non-energy GHG emissions by 1.8-2.6 Mt CO₂e by 2030, and 3.3-3.6 Mt CO₂e by 2035. Furthermore, if the planned reductions are not achieved, the agreement states that other measures will be taken to reduce agricultural emissions. The final updated NECP includes an impact assessment of individual measures (such as the tax on livestock emissions) on emissions over the next years, although for some actions estimates are missing. Even though the Green Tripartite agreement provides significant stimuli for nature restoration and includes steps on enhancing the development of plant-based foods, the agri-food aspect of the agreement remains very centred around achieving emission cuts through "green innovation" while maintaining the "competitiveness" of the sector. Meaning the country's intensive production system is further encouraged rather than challenged.

Hungary

Compared to 2021 levels, Hungary must reduce emissions by an additional 16.7 million tonnes to meet the Fit for 55 target. However, the country's emission trend is going the wrong way, including for agriculture. The EEB's assessment of the Hungarian draft NECP found the plan to be severely lacking in its ambition to reduce emissions from

agriculture and the measures it proposed, failing to apply the needed detail in the analysis across all categories.

The Commission highlights the same elements: the absence of a target for agricultural emissions, insufficient attention for non-CO₂ emissions, and lacking specificity around measures to mitigate emissions from agriculture.

Despite the Commission's observations and recommendations, Hungary's final NECP falls short of providing a pathway for reducing agricultural emissions. On the contrary, even with anticipated additional measures through the CAP strategic plan, compared to 2005 levels, overall agricultural emissions will increase further until 2030 (currently already up 18% since 2005), to then stagnate all the way to 2050. The increase in GHG emissions over the period 2005-2030 applies to soil nitrous oxide emissions (14%), and methane emissions from enteric fermentation (13%), which then are expected to decline after 2035 with enhanced breeding and feeding strategies. While emissions from manure management are expected to decrease (37%) due to changes in herd composition and significant uptake of converting manure into biogas, increased use of urea-based fertilisers and associated emissions would lead to 25% higher emissions by 2030. Agriculture accounts for 83% of nitrous oxide emissions, primarily due to the use of chemical fertilisers and the expansion of the cattle herd.

It is clear that, despite the opportunity for synergies with the country's National Air Pollution Reduction Programme, which aims to reduce levels of pollutants (among which are nitrogen dioxide, volatile organic compounds, and ammonia from agriculture) ambitious changes in the agriculture sector are not part of Hungary's climate efforts. Its final NECP states that "the emission reduction potential of the sector is limited, as the reduction should be achieved while maintaining or increasing agricultural production".

Italy

Italy, a country with intensive livestock rearing concentrated in its northern region, suggests tackling emissions from the sector by implementing feed and manure management strategies and incentivising biomethane production. The EEB's review of the draft updated NECP found this end-of-pipe approach to be lacking in the context of regions in which livestock density surpasses the local environment's carrying capacity. For addressing the emissions from fertiliser use, Italy plans the use of green fertilisers, nitrogen cycling, and improved manure storage and spreading. The EEB review stated that, given the country's compliance issues with the Nitrates Directive, more ambition is needed. Peatlands did not receive any attention in the plan, which is unsurprising given their limited size in the country. Nevertheless, Italy's peatlands are degraded and would benefit from restoration and protection.

The Commission requested additional policies and measures for the reduction of non-CO₂ emissions, including methane and nitrous oxide from agriculture, to bridge the 6-9% gap in reaching the 43.7% ESR target, as well as further measures to promote the production of biomethane. The Commission's assessment observes that the plan fails to prioritise action to reduce emissions from the agricultural sector, despite acknowledging that existing measures have not had significant impacts in the past decade. This is reflected in both of Italy's projections, which show only a minimal decrease of N₂O by 2030, and in the limited information on the measures planned to address agricultural emissions.

Italy's final plan recognises that agriculture is an important source of GHGs and air pollutants such as methane, nitrous oxide, and ammonia, and that past measures have not succeeded in bringing them down. It shows that emissions have remained stable and only varied slightly year-to-year depending on changes in agricultural practices as outlined in the CAP, and marginally influenced by the production of biogas and change in fertiliser use. It proposes a mix of solutions to address this, including improved manure management (anaerobic digestion and the production of biomethane), changes in types of animals and crops, and the uptake of precision farming to reduce input use (nutrients and water). It also "attaches great importance" to reducing the impacts of intensive livestock farming. When considering the lack of details and commitment behind most of these measures (except biomethane), especially compared to the amount of information on energy measures such as introducing photovoltaics in agriculture, and, in combination with the projection of the country's agricultural emissions until 2030 and 2040, it is clear that Italy has very limited ambition to address the climate impact of the sector.

The Netherlands

In its draft updated NECP, the Netherlands included an agricultural emissions target of 5 Mt CO₂e reduction by 2030 to be achieved by livestock and arable crop activities (greenhouse horticulture following a separate pathway). The EEB review found the plan to be comprehensive and detailed. It highlighted that it is the only country that explicitly uses livestock number reduction through buy-out schemes as an approach to decrease livestock emissions as well as reduce wider environmental pressures. Alongside this transformational measure, it also offers subsidies for technical solutions related to barn improvement as well as manure management and feed strategies, grazing schemes, and research and innovation on the reduction of livestock emissions. On fertilisers, the draft plan focuses on the management and processing of manure to replace mineral fertilisers, which is a welcome evolution, although it misses the important first step of reducing the need for fertilisers through agroecological practices that improve natural soil fertility. Finally, also on peatlands, the plan lays out concrete targets and pathways for rewetting conventional agricultural fields and developing strategies for wet crops and peat grazing.

The Commission assessment of the draft plan commends the plan's aim for a 60% ESR emissions reduction by "overprogramming measures" to ensure the 55% will be met and recognises the attention for the mitigation of non-CO₂ emissions, including the reference to the Global Methane Pledge. On the other hand, it highlights the absence

of biomethane promotion measures and requests an update of GHG projections based on the additional policies and measures mentioned in the plan, including for non-CO₂ measures in the agricultural sector, since without them, the projections fall 9 percentage points short of the 55% objective.

In their response to the Commission's review, the Netherlands clarify that according to the projections from 2023, the agricultural emissions by 2030 are expected to be between 19 and 22 Mt CO₂e, whereas the goal is to bring it down to 17.9 Mt CO₂e. While the greenhouse horticulture subsector is on track to deliver its emission reductions in line with the target due to a system of emission pricing and subsidies, the livestock and arable farming sectors were projected to deliver limited reductions. Therefore, additional efforts have focussed on the latter two. With new measures being taken around livestock and manure, the expectation is that also these activities will bring down their emissions, contributing to the ESR target, and to the achievement of the 30% reduction in methane emissions under the Global Methane Pledge. They also mention their CAP Strategic Plan as a tool for supporting sustainable agricultural practices on permanent and peatland grasslands, and landscape features, but recognising that this is insufficient, provide national co-funding. There is, however, a mention of remaining measures needing to be decided by the next government. Positive underpinnings of the Dutch NECP are the explicit recognition of the importance of improving the sustainability of the agriculture and land use sector to reach climate neutrality and a sustainable food system among other things by increasing the share of plant-based proteins in Dutch diets, and of the interlinkage between different challenges: climate, nature, nitrogen, and water, and the commitment to address them in a coherent manner.

The Dutch government in power since July 2024 has backtracked on ambition by creating lighter version of the plans included in the NECP, scrapping a large part of the agriculture transition budget, delaying livestock density measures, and attempting to reinstate the derogation on the Nitrates Directive, as well as promoting RENURE and delisting Natura 2000 sites, all in order to limit the reduction in livestock numbers. There is money for peatlands in the CAP Ecoschemes, but they are voluntary, and farmers are mostly opting for light schemes that do not involve rewetting. The agroecological transition is not on the agenda.

Spain

The EEB's analysis of Spain's draft NECP resulted in a mixed evaluation. The measures included in the plan are expected to lead to a 21% reduction in emissions from agriculture by 2030, and the level of detail provided on measures to address agricultural emissions from different sources was relatively high. It included practices such as cover crops and crop diversification, including leguminous crops to reduce input use and its associated emissions, as well as a wetlands restoration objective (be it modest, and

lacking specific attention for peatlands). In some other cases, the scope of measures was considered narrowly fixated on end-of-pipe technical solutions, for example in the case of addressing livestock emissions through manure management.

The Commission's assessment of the draft is rather positive about the comprehensiveness of the plan, including its attention for non-CO₂ agricultural emissions. On methane from livestock, the Commission identifies the blind spot also highlighted in the EEB's review: methane from enteric fermentation is ignored. In its recommendations, the Commission requests to provide additional information such as scope, timeline, and impact of existing and planned policies to meet ESR targets "including in the agricultural sector". It does not follow up on the enteric fermentation gap it identified in its supporting Staff Working Document.

The final NECP remains unchanged in its ambition, scope, and information regarding agricultural emission mitigation. This means that the Spanish plans for climate change mitigation in agriculture remain a mixed bag.

Sweden

The EEB analysis of the draft updated NECP scrutinised the absence of a target for agricultural emissions, and the overall lack of ambition in addressing this issue. It highlighted the high expectations placed on, and resources dedicated to, upscaling biogas from manure, but otherwise lack of proposed measures, with the exception of specific funding provided for the protection and maintenance of peatlands.

The Commission highlights the fact that Sweden seems to have an ambitious ESR emission reduction target and is likely to achieve reductions beyond the legal requirements. However, it requests additional information about the measures that will be taken and their impacts, for example in the case of bioenergy trajectories for which the impact on LULUCF sinks, biodiversity, and air quality has not been assessed in the plan. The Commission notes the absence of a national target for the reduction of agricultural emissions and further evaluates that methane and other agricultural non-CO₂ gasses have been neglected which is problematic given their sizable contribution to overall emissions. As a result, the Commission requests Sweden to "complement the information on the policies and measures, including for non-CO₂ emissions, notably methane, N₂O, and F-gases from agriculture".

In response to the recommendations by the Commission, Sweden's final updated NECP expands on the scope of work of the climate and environment knowledge hub under the Board of Agriculture, which provides on-farm advice on, among other things, the production of biogas and manure management, as well as animal fertility and health to livestock farmers, and plant nutrient strategy advice that results in lower emissions and improved soil health to crop growers. The Board of Agriculture has also received the mandate to develop methods for mapping the climate impact of measures in agriculture to increase the climate efficiency of agriculture. However, specific targets are still nowhere to be seen. This is not surprising, given the approach laid out in the

plan: "Significantly reducing GHG emissions from agriculture in a cost effective and competitively neutral way is more difficult than in other sectors. The current assessment is therefore that residual emissions from the agricultural sector need to be compensated by the use of accompanying measures and that it is above all the remaining sectors whose emissions need to be reduced in order to reach the net-zero target" and "By rapidly reducing emissions from the transport sector, Sweden can reach the ESR target without draconically reducing production in agriculture and forestry."

Conclusion

Looking at the final updated NECPs for Denmark, Hungary, Italy, the Netherlands, Spain, and Sweden exposes a troubling fact: despite the urgency of the climate crisis and the widespread benefits of making our food systems more sustainable, many Member States maintain their tradition of ignoring agriculture in their climate plans.

In half of the final updated plans analysed for this report, there seems to be little ambition on agricultural emissions, and the agricultural elements remained mostly the way they were at the time of the draft updated NECP. As explicitly stated in some countries' NECPs, agriculture is seen as a complex sector in which emission reductions are difficult and costly to achieve. With this sweeping statement, an opportunity for significant GHG emissions reduction and a shift towards sustainable food systems is missed. Concretely, this translates into the absence of a target for agricultural emissions in most Member States, and where measures are proposed, both in the case of livestock and fertilisers, these often remain in the technical realm and lack the ambition needed to bring about more fundamental change.

While the Commission in some cases highlights the lack of ambition and attention for agricultural emissions, its recommendations on this topic are generally few, generic, and lacking urgency. In addition, they are omitted from the highlights of the Commission's assessment on the fact sheet for each country, failing to make a compelling case for Member States to change their plans in this regard. In similar fashion to the Member States' preferred approaches to reducing emissions from agriculture, the Commission seems to favour technological solutions that do not challenge the inherent unsustainability of current production methods. Its recommendation on promoting biomethane production is a good example of what seems to be a blanket recommendation (provided to every analysed Member State), portrayed as an ideal way to tackle emissions from agriculture and energy at the same time. This end-of-pipe measure, however, does not pave the way for a more sustainable food system based on agroecology, but instead locks the EU in into an intensive animal rearing production model that is highly dependent on vast amounts of land for (often imported) feed, and exerts great pressures on the environment. Reducing livestock numbers accompanied by a shift towards direct plant-based protein consumption (a measure that would fit in a wider transition) is not suggested as a measure, even in countries where excessive animal numbers are causing systemic non-compliance with EU environmental laws, and as a result, only the Netherlands makes this part of their plan.

A stronger, more ambitious push is needed from the Commission, as it is clear that there is little appetite from Member States to reduce emissions from agriculture, and even less so to rethink their agricultural production models. We cannot afford delays in emission reduction at a time when Member States should be pursuing maximum emission reductions across all sectors simultaneously. Every emission that is not added to the atmosphere contributes to halting the climate crisis.

Country	ESR target 2005-2030	Agriculture target 2005-2030	Agri emissions projection 2005-2030	Mentioned measures
Denmark	-50%	-55 to 65% (incl. forestry)	-19%	Emission pricing
				Manure management
				Feed management
				Organic agriculture
				Biogas
				Buy-out scheme
				Peatland rewetting
				Plant-based proteins
Hungary	-18.7%	None	+4.1%	Manure management (storage)
				Feed and breeding management
				Herd composition
				Biogas
				CAP support for agroecology and organic farming
Italy	-43.7%	None	-14%	Manure management (nitrogen cycling, storage and spreading techniques)
				Feed management
				Reducing ammonia emissions from mineral fertilisers

The Netherlands	-55%	-25% (incl. horticulture CO ₂) -40.9% (incl. land use, incl. horticulture CO ₂)	-14.4 to -26.1% (incl. horticulture CO ₂) -12.5% (incl. land use, excl. horticulture CO ₂) -18.7 to -32% (incl. land use, incl. horticulture CO ₂)	Livestock number reduction through closure and extensification Feed and grass management Manure management Housing improvement Plant-based proteins Peatland strategy
Spain	-55%	None	-18.6%	Fertilisation plans Crop rotations Conservation agriculture Manure management (slurry pond covering, solid liquid separation) Biogas/biomethane CAP Ecoschemes for carbon farming and extensive grazing
Sweden	-50%	None	-4.8%	Nutrient strategy Biogas Manure management Breeding management Peatland protection