

Repurposing EU Subsidies for an Effective Agrifood System Transition to Net Zero



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Summary

Agriculture accounts for 11% of EU GHG emissions, and is one of the EU's largest emitting sectors. While agriculture is a major contributor to climate change, water and air pollution, and soil degradation, the sector is also highly vulnerable to climate impacts.

The EU agricultural sector has achieved an emissions reduction of just 3% from 2005-2021; a decrease which falls significantly short of the EU's climate targets. This is despite making several amendments to policies with the objective of achieving these targets, such as the Effort Sharing Regulation; Land use, Land-Use Change, and Forestry Regulation (LULUCF), and a more significant climate focus given to the Common Agriculture Policy (CAP).

However, a significant gap remains in achieving the EU 2030 emissions reduction and 2050 climate neutrality targets which require more ambitious policies that also encompass just transition elements. Indeed, tackling both the needs of farmers, consumer demands, and climate targets will define agrifood policies during the new European Commission mandate.

The agricultural sector is not currently included in the EU Taxonomy. Crucially, this absence of a clear definition of sustainable activities and transition pathways for the EU agricultural sector makes it more difficult to align agriculture policies, including subsidies to the sector, with climate objectives.

The agrifood sector's move towards a more sustainable and resilient future comes with a high price tag.

The estimated annual public investment required to reduce the EU agricultural emissions by 53% from now until 2050 is EUR155bn. Public finance can play a crucial role not only in encouraging the sector's net-zero transition but also in increasing and accelerating the private sector's investments to close the financing gaps for the agrifood system transition.

The EU CAP represents 30% of the EU budget and can facilitate investment in agrifood transition.

Substantial subsidies in the agricultural sector provide a powerful incentive to encourage the net-zero transition. While such subsidies could be robustly aligned with climate objectives to support farmers throughout the transition, this would require science-based sectoral criteria and transition pathways, such as those developed by Climate Bonds.

Policymakers have a critical role to play in transforming agrifood systems without compromising economic prosperity and now is the time to ensure the CAP fully aligns with the EU climate targets, supporting farmers on their transition journey. The new EU Commission is already set to undertake a first performance review of each CAP strategic plan in 2025, which represents an opportunity to evaluate and measure the current gaps in the CAP alignment with EU climate targets and to restructure the CAP. The new EU Commission will need to simplify and reform the subsidy programmes, designing a comprehensive policy approach to put the European agricultural sector on a credible pathway towards net zero, while ensuring a just transition. Given the limited amount of EU financial resources, an examination and repurposing of environmentally harmful programmes is required to achieve the net-zero transition and more efficiently allocate such funding.

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List of acronyms

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| CAP: Common Agriculture Policy | EU: European Union |
| CBAM: Carbon border adjustment mechanism | FAO: Food and Agriculture Organisation |
| Climate Bonds: Climate Bonds Initiative | GHG: Greenhouse gas |
| DCF: Deforestation- and conversion-free | LULUCF: Land use, land use change, and forestry |
| ESR: Effort Sharing Regulation | PSF: Platform on Sustainable Finance |
| ETS: Emissions Trading System | SLD: Sustainability-linked debt |
| EUDR: EU Regulation on Deforestation-Free Products | |

Introduction

The destabilisation of the climate and ecosystems severely affects European food production, and hence food security, with important social consequences. Europe continues to be hit by increasingly extreme heat waves, droughts, and floods, which have a direct impact on farmers. The Food and Agriculture Organisation (FAO) estimates the hidden costs to the agrifood system at EUR12.7tn globally.¹ Such hidden costs include environmental costs from emissions, water use, and land use change; health hidden costs from losses in productivity and social hidden costs from poverty and productivity. At the same time, agriculture is a significant source of greenhouse gas (GHG) emissions both worldwide – estimates range from 21% to 37% of global total emissions – and in the European Union (EU), contributing to climate change as well as water and air pollution, and soil degradation.²

In parallel, the agricultural sector is one of the EU’s largest GHG-emitting sectors and progress in achieving GHG emissions reduction has slowed. In 2022, the agricultural sector accounted for 11% of GHG emissions in the European Union.³ While the EU’s agricultural emissions declined by 21% between 1990 and 2017 without a reduction in production levels, demonstrating some progress in decoupling emissions and agricultural production outputs, this progress has slowed down more recently, achieving a reduction of just 3% between 2005 and 2021.^{4,5} Emissions trends also vary significantly across countries, with emissions increasing in 13 and decreasing in 14 countries between 2005 and 2021. For example, emissions decreased by more than 10% in Croatia, Greece, and Slovakia while they increased by more than 10% in Bulgaria, Estonia, Hungary, Ireland, Latvia and Luxembourg.⁶

A continuation of past trends is expected due to a significant policy gap between current and announced measures and those needed to achieve the EU’s 2030 and 2050 targets. An 8% decrease by 2030 can only be achieved if the additional policies planned and announced by Member States are adopted.⁷ This falls well short of the reduction required to achieve the newly amended Effort Sharing Regulation (ESR), which sets a 40% reduction target by 2030 for sectors not covered by the EU Emissions Trading System (ETS) including the agricultural sector.⁸ Moreover, this points to a commitment gap as the ESR target is very unlikely to be sufficient to meet the EU’s overall climate neutrality target and the overall 2030 emissions reduction goal of 55%.⁹

Targeted repurposing of EU agricultural subsidies, which represent around 30% of the EU's budget, could be a potent tool to support and accelerate the transition to net zero. The agriculture sector benefits from large quantities of subsidies globally. The World Bank has calculated that explicit agricultural subsidies totalled USD635bn per year in the 84 countries where sufficient data are available, which represent 67% of the global value of agricultural production.¹⁰ Taking all countries globally, the total amount is likely to exceed USD1tn per year.¹¹ Estimating implicit agricultural subsidy amounts (in addition to direct subsidies) is even more challenging and, as of 2021, estimates exceeded USD1tr per year.¹² Together with China, Indonesia, Japan, and the United States (US), the EU is one of the largest subsidisers of the agricultural sector worldwide.¹³ Agricultural subsidies through the CAP account for around 30% of the European budget each year (34.9% in 2020), however, the overwhelming majority of such subsidies are not aligned with climate objectives.¹⁴ This presents an opportunity to repurpose existing fiscal spending to support and accelerate the transition.

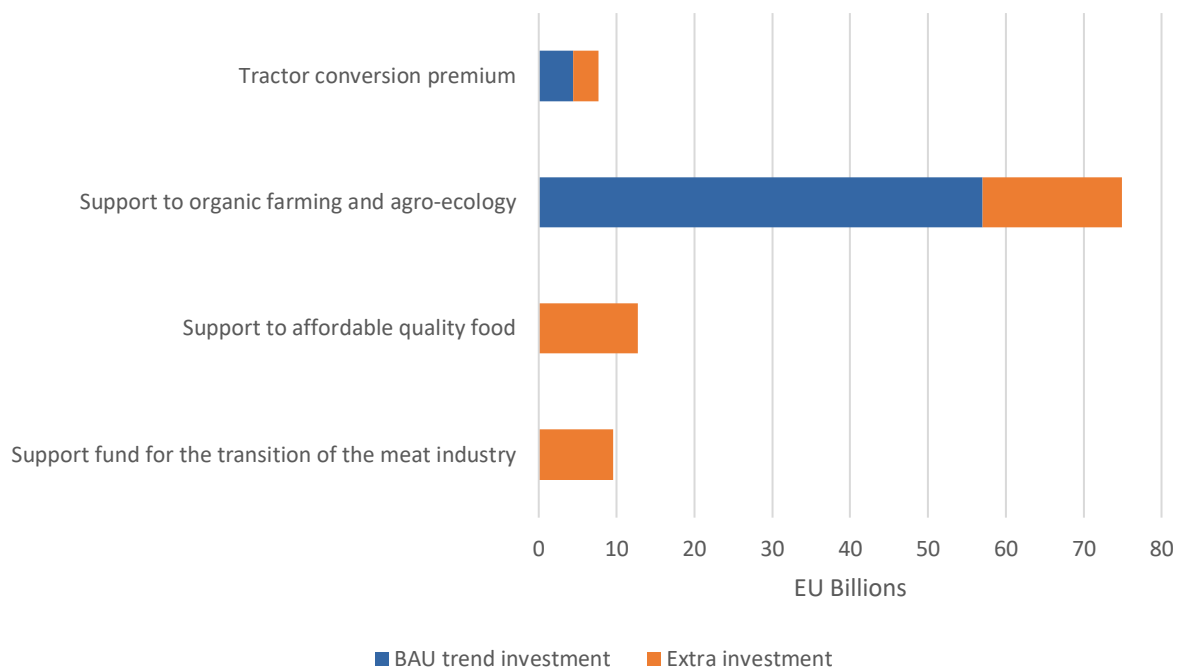
This policy paper outlines the essential components of change to repurpose EU agricultural subsidies and avoid financing emissions while supporting the financing of the transition. This is pivotal to transforming the current agrifood sector to net-zero, resilience-enhancing, and environmentally sustainable systems. Leveraging Climate Bonds Initiative's (Climate Bonds) work on providing clear, ambitious, and usable definitions of what a credible transition pathway for the agricultural sector could look like, this paper focuses on how subsidies could be restructured and reallocated to address the negative effects and distortion caused by the existing EU agricultural policy framework. While other negative externalities from agricultural production exist, including its impact on nature and biodiversity, this paper will primarily focus on emissions reduction and achieving net zero in line with the EU's emissions reduction and climate neutrality targets.

1. Both ambitious policies and significant investments are needed for a credible and speedy agricultural transition

Decarbonisation options for the agricultural system exist but all would require policy alignment and significant investment. The main decarbonisation options for the agricultural system are focused on improving farming practices such as organic methods, cover cropping, and reduced tillage, together with reducing herd sizes and feed additives, manure management, and feed sourcing, which require a significant initial investment in equipment, training, and certification. Reducing large-scale intensive agriculture's reliance on fossil energy sources will also play a crucial role in the agrifood system net-zero transition. Precision agriculture tools, data analytics, and automation hold promise for efficiency and sustainability but with high upfront costs. Restructuring logistics and distribution networks for shorter, more localised food systems would also require investment. At the other end of the chain, consumer behaviour also plays a role in reducing emissions. As such, encouraging dietary shifts towards less resource-intensive options such as plant-based proteins would support lower emissions but would also come at a cost in terms of public awareness and policy and infrastructure changes.

The estimated annual public investment required to reduce the EU-27 agricultural emissions by 53% by 2050 could be as much as EUR155bn. This would require an extra annual public investment of EUR44bn compared to current spending (EUR108bn), see Figure 1.¹⁵ The total (public and private) investment requirement associated with the transition of the EU agricultural sector remains difficult to estimate. This is because of the significant heterogeneity in farm sizes and location, and farming approaches and production systems across Member States, which are all key drivers of transition costs.

Figure 1. Total yearly public investment needed to reduce the EU-27 agricultural emissions by 53% by 2050



The first issue is the commitment gap for the agricultural sector, as no sectoral emissions reduction targets have been set in the EU legislation for agriculture, except for the wider ESR and LULUCF targets.¹⁶ The newly amended ESR sets a 40% reduction target by 2030 for sectors not covered by the EU ETS, including the agricultural sector, but this is unlikely to be sufficient to achieve the EU's 2050 targets.¹⁷ In addition, an EU-wide target of raising the net sink to -310 MtCO₂e by 2030 is set by the recently revised Land Use, Land Use Change, and Forestry (LULUCF) Regulation, requiring further emission reductions from agricultural land.¹⁸ Beyond a commitment gap, a policy gap also exists, including the lack of inclusion of agricultural activities in the EU Taxonomy. From a funding and financing perspective, while some changes to align the CAP to climate objectives have been introduced, they are far from sufficient (see below), even as climate aspects became a specific CAP objective in 2013. Several other EU legislations and strategies, including the Industrial Emissions Directive, the Soil Monitoring Law, the Carbon Removal Certification Framework, and the Farm to Fork Strategy, are also set to shape and drive emissions reductions in the agricultural sector.

Importantly, the agricultural sector is not currently included in the EU Taxonomy, a cornerstone of EU sustainable policies, thereby creating a problematic definition and policy gap. Despite efforts by the Platform on Sustainable Finance (PSF) to advocate for its inclusion, as well as engagement by investors to highlight the importance of agriculture, the EU Commission has excluded agriculture from both the 2021 delegated acts (focused on mitigation and adaptation) and the 2022 delegated act (focused on biodiversity, water, pollution, and circular economy).¹⁹ This means that there is currently no single, clear and comprehensive definition in EU legislation of what sustainable agricultural practices are and how they could help to meet the EU's climate objectives. As mentioned above, the EU generally addresses sustainability in agriculture in various policies and frameworks which emphasise environmental, economic, and social aspects of sustainability without providing a universally agreed-upon definition. In particular, the CAP does not provide overarching definitions. However, it outlines a framework for sustainable agriculture through various mechanisms that establish a trajectory towards sustainability and offer incentives for farmers to adopt environmentally friendly practices, such as eco-schemes. This absence of clear definitions, of both sustainable activities and transition pathways, makes it more difficult to align agriculture policies, including subsidies to the sector, with climate objectives.

The EU Taxonomy is a crucial classification system of sustainable economic activities and how those align with the EU's climate objectives. The Taxonomy defines six core climate environmental objectives, establishing clear criteria for each, based on scientific rigour and practical feasibility.²⁰ The EU has the power to lead the way as a global climate leader and around the globe, taxonomies are setting strict limits on economic activities. Environmentally sustainable economic activities are described as those which make a substantial contribution to at least one of the EU's climate and environmental objectives, while at the same time not significantly

harming any of these objectives and meeting minimum safeguards. The Taxonomy does not set mandatory requirements on environmental performance for companies or financial products but it is expected to encourage a transition towards sustainability to achieve the EU's climate and environmental goals over time.²¹ The Taxonomy could benefit from some enhancements, such as the inclusion of transition pathways for all economic activities and enhanced compatibility with international standards.²² Despite this, the absence of the agricultural sector in the Taxonomy also removes the possibility of anchoring the broader agriculture policy landscape in the EU to clear definitions and standards aligned with credible climate objectives. The absence of the agricultural sector is also a missed opportunity to help private investors identify ambitious and sustainable agricultural activities that they can support to accelerate the transition.

The private sector could also significantly contribute to the financing of the transition but requires guidance and further encouragement to do so via public policy. Both farmers and private companies in the agricultural sector are making progress in sustainable practices, new technologies, and innovative products, responding to the growing consumer demand for environmentally friendly food choices, often in collaboration with the public sector.²³ Some investors are also already aligning portfolios with climate goals, but have highlighted the need for public support to be better aligned with these objectives, and in 2023, investors with over USD7tr specifically called on finance ministers to repurpose agricultural subsidies to align with climate and nature goals and to support a just transition for farmers.²⁴ Several examples of policy aimed at spurring private sector investment exist: the Netherlands' ProteinShift programme promotes plant-based protein production and consumption, while Italy's Smart Agrifood Cluster initiative fuels technological advancements in precision agriculture and digital farming tools.²⁵ In France, the Food and Agriculture Resilience Mission initiative, a public-private coalition which lists sustainable production as one of its three pillars, was launched in 2022.²⁶

Finally, the EU faces complex challenges, including to the political economy, in transforming its agricultural sector to put it on a credible pathway towards net zero, see Box 1. The first step will be to translate the EU's ambitious climate targets into concrete plans and actions for the agricultural sector, which has yet to be done and remains a contentious point. So far, the proposals for specific agricultural emission cuts beyond the ESR targets have faced significant resistance from farmers, who are concerned about the economic impact of the transition and the present and future viability of their sector. While the specific concerns vary from country to country, the EU's overall net-zero objective, and the current implemented or proposed methods to reach it, have been contested across the EU, leading to the election, in June 2024, of several Members of the European Parliament who campaigned on their opposition to the Green Deal with a specific focus on agriculture. Juggling the needs of farmers, consumer demands, and climate targets will hence define agrifood policies during the new European Commission mandate.

Box 1. Political economy challenges of the agricultural transition

The political economy challenges of translating the EU's overall climate neutrality objectives into specific targets, policies, and concrete actions have remained controversial. Proposals for specific EU-wide agricultural emission cuts have faced significant resistance and concerns over transition costs for farmers.

A combination of existing and potential future, downward pressure on subsidies and prices, as well as upward pressure on production costs, are leading to a difficult context for change. Farmers across the EU facing such challenges often also lack sufficient bargaining power within the agrifood supply chains, within which they are most likely to face the strongest squeeze. This affects many EU Member States including France and Germany; both important beneficiaries of the CAP with large agricultural sectors. In such situations, reductions in subsidies, for example, particularly fuel subsidies, have led to large-scale protests across the EU as farmers see their costs rising. A combination of climate policy in the form of environmental regulations, for example, coupled with trade policy constitutes another flashpoint, such as in France, where farmers are concerned that increased regulation at home could make them less competitive in an increasingly globalised market. Likewise, Polish farmers are particularly concerned about the influx of lower-cost grain, especially from Ukraine, and have resorted to blocking border crossings to voice such concerns. This makes striking a balance between commercial viability for farmers and achieving environmental and social goals crucial.

Faced with large-scale or persistent social unrest, many EU Member States have made U-turns on climate policies and ambitions even as the consequences of increased emissions are likely to directly impact farmers. In many cases, Member State governments and the EU Commission have caved in to demands from farmers, or at least partially. For example, in 2023, thousands of Dutch farmers protested against the government's plan to cut nitrogen emissions, which was then put on hold.²⁷ These protests came after

similar events in Belgium, where Flemish farmers blockaded Brussels with more than 2000 tractors over an EU plan to limit emissions.²⁸ France President Macron called for a simplification of EU regulations, after weeks of farmer protests across Europe had blockaded motorways.²⁹

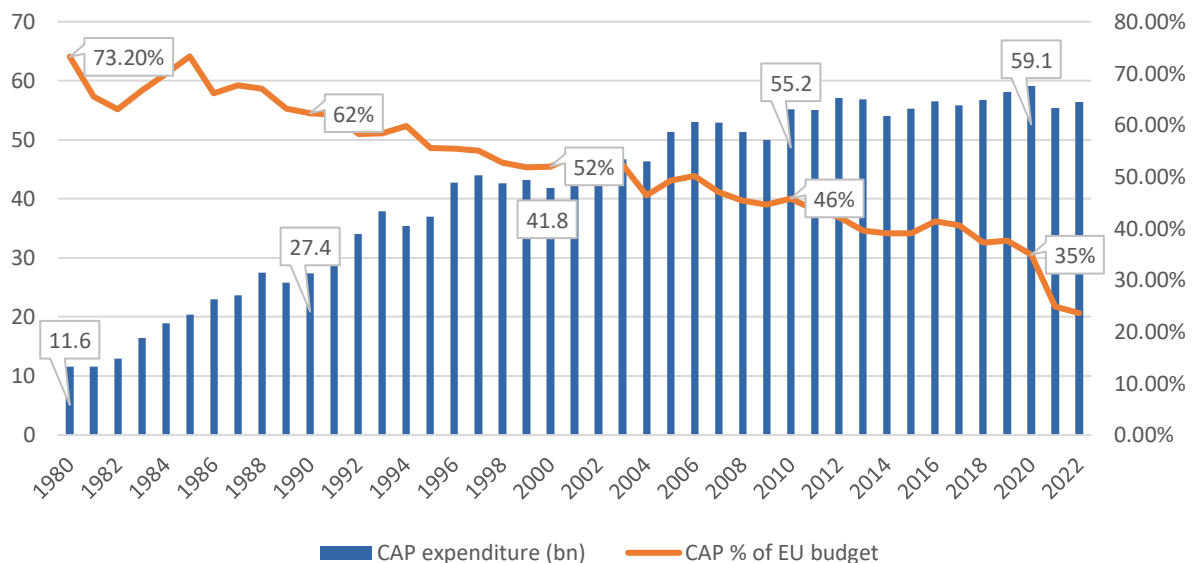
The CAP already places a strong emphasis on social impact but would need to undergo further reform to effectively address existing political economy challenges in the agricultural sector. There are several areas that CAP reforms should address to achieve social objectives and contribute to addressing current challenges.

- **Strengthening farmer livelihoods:** while direct payments provide a crucial safety net, greater emphasis on market-based income and risk management tools is needed to build long-term resilience.
- **Revitalising rural areas:** efforts to create jobs and improve living conditions are essential, but more targeted support for the young, women, and marginalised groups is required to address inequalities.
- **Promoting social inclusion:** expanding access to training and support services for disadvantaged farmers is crucial, as is ensuring equitable distribution of CAP funds.
- **Improving animal welfare:** while standards are rising, consistent enforcement and adequate funding for inspections are essential to guarantee effective implementation.³⁰

2. A reformed green CAP would be a key accelerator of the transition

Around 30% of the EU budget, over EUR50bn each year since 2005, is allocated to the CAP. This share has decreased considerably, from 73.2% in 1980 to 34.9% in 2020, see Figure 2.³¹ The recent additional expenditures due to the Next Generation EU funds caused a further reduction of the CAP share of the overall EU budget to 23.6% in 2022. EUR387bn in funding will be allocated to the CAP for the 2021-2027 period.³² Despite this, the CAP has been one of the most important areas of European policy since 1962, see Box 2. EU subsidies available to catalyse and facilitate investments in agrifood transitions are disbursed within the framework of the CAP and National Strategic Plans (NSP) specific to each Member State.³³

Figure 2. CAP expenditure as % of EU total expenditure, 1980-2022



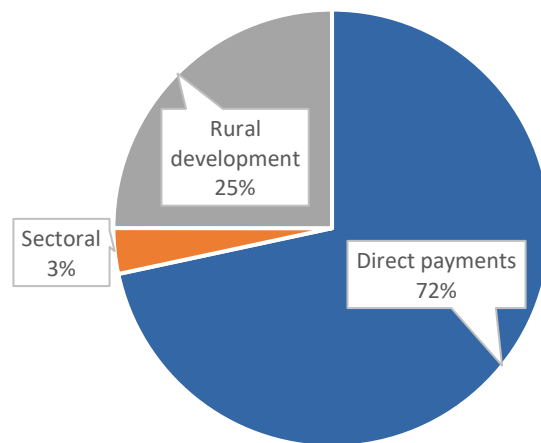
Despite recent changes to integrate environmental and climate considerations, reforms could go much further in aligning the CAP with EU climate objectives and supporting farmers to achieve them. So far, the CAP's original goals remain at the heart of current priorities: increasing productivity and stabilising markets; ensuring the availability of food at reasonable prices; and providing fair living standards for farmers.³⁴ Over the years, changes to the CAP have been intended to reflect changes to economic circumstances and

citizens' requirements and needs, and to consolidate the role of European agriculture. Since 2013, there has also been a targeted focus on the CAP's role in fighting climate change. The EU Commission estimates that during the 2014-2020 CAP funding period, 25% (EUR104bn) of funds have been allocated to actions relevant to tackling climate change. These include measures aimed at reducing GHG emissions, increasing carbon sequestration and storage, and helping farmers adapt to climate change impacts.³⁵ However, the EUR104bn attributed to climate action had very little impact on reducing EU agricultural emissions, which have remained stable since 2005, and most mitigation measures supported by the CAP have shown a minimal potential to mitigate climate change.³⁶

The CAP funding is divided into three main categories, see Figure 3:

- income support through direct payments;
- sectoral measures to deal with difficult temporary market situations; and
- rural development measures with national and regional programmes to address the specific needs and challenges facing rural areas.³⁷

Figure 3. Planned financial allocations under CAP Strategic Plans 2023-2027 in EUR billions



While at least 25% of support or direct payments is contingent upon specific sustainable farming practices and outcomes, these are subject to extensive modifications and redirections.³⁸ Overall, 40% of the CAP budget is allocated to climate-relevant activities. Table 1 summarises the main changes brought to the 2023-2027 CAP framework and a high-level assessment of impact in terms of climate mitigation.

Box 2. CAP context and development historical changes

The agrifood sector is one of the biggest economic sectors in the EU, with 10 million farmers and around 40 million jobs in food processing, retail, and services dependent on agriculture.³⁹ While agriculture is also critical to food security objectives, farming is subject to specific challenges, including a high degree of business unpredictability due to weather and climate pressures, as well as market instability caused by unstable demand patterns and volatile prices.⁴⁰

The CAP was adopted by the EU in 1962 to provide a unified policy on agriculture in EU countries and is one of the oldest EU policies still in application while undergoing regular updates.⁴¹ It is managed and funded at the European level by resources from the EU's budget.⁴² The EU institutions have recently reformed the CAP, and the 2023-27 reform entered into force on 1 January 2023. Support for farmers and rural stakeholders across the 27 EU countries is based on the CAP 2023-27 legal framework and the choices detailed in the CAP Strategic Plans, approved by the Commission.

The 2023-2027 reforms aimed, among other objectives, to make a significant contribution to the ambitions of the European Green Deal, Farm to Fork Strategy, and EU biodiversity strategy for 2030.⁴³ The newly adopted CAP introduces a simplified approach to align EU agriculture with the globalised world's

changing economic, societal, and environmental demands. The policy shifts its focus from strict compliance and rules to achieving results and performance. This new approach is centred on ten main objectives that form the foundation of the CAP 2023-2027, reflecting the ambitious goals of the EU.⁴⁴ The new CAP Strategic Plans allow EU countries to develop intervention strategies that align with these objectives and address specific needs within their country. These plans consist of targeted interventions aimed at achieving tangible outcomes in line with the CAP objectives and contributing to the objectives of the European Green Deal.

Table 1. Main changes brought to the CAP 2023-2027 framework in relation to climate objectives

Previous CAP (2014-2020)	New system (2023-2027)	Pros	Cons
Income support based on farm size	Shifting payment focus	Encourages environmentally friendly agriculture	May initially disadvantage larger farms reliant on current system
No conditions on CAP payments	Funding conditions on environmental/climate factors	Potential to drive positive environmental change	Creates uncertainty for farmers if targets are too ambitious to meet
Limited investment in sustainable practices	Knowledge transfer and innovation of sustainable practices	Equips farmers with tools and knowledge through key mechanisms supporting sustainable agriculture, productivity, and rural development	Innovation particularly requires upfront investment and may take time to see results
Complex administrative procedures	Streamlining administrative procedures ⁴⁵	Makes CAP easier to navigate for farmers	Risk of losing oversight or accountability
Strategic planning only in Pillar 2 (rural development programmes)	Introduction of national strategic plans for the entire CAP	Greater flexibility for the Member States to prioritise subsidy allocation	Constraints of common objectives and supervisory role for the Commission
Cross-compliance and greening requirements ⁴⁶	Introduction of flexible eco-schemes and environmental and climate-related measures	Measures in both pillars to meet the environmental and climate objectives	Requires a higher level of ambition

Despite recent changes to the CAP, it still represents an untapped source of funding to accelerate the transition and support farmers through it. A reconfiguration of the CAP is hence urgently needed to reduce emissions and achieve the EU climate objectives. A first barrier to change is that the CAP lacks a clear definition of what constitutes ‘green’, relying instead on targets outlined in the Green Deal, Farm to Fork Strategy, and biodiversity framework.⁴⁹ Despite the CAP’s ambition to support the EU’s net-zero objectives, its effectiveness remains undermined by the absence of consensus on what constitutes a green agricultural activity as well as the most credible transition pathway to achieve this. Aligning subsidy programmes such as the CAP to green and efficiently allocating agricultural subsidies is crucial to facilitating the net-zero transition, especially in the context of limited public funding. Finally, there needs to be a recognition of the interaction between climate mitigation, adaptation, and biodiversity, see Box 3.

Box 3. The importance of the biodiversity-agricultural nexus in building sustainable food systems

Not only climate objectives, but also broader environmental objectives form part of the newly reformed CAP (2023-2027). This includes enhanced conditionality linking CAP payments to mandatory requirements, such as dedicating arable land to biodiversity preservation and safeguarding wetlands and peatlands. Funding is also directed towards eco-schemes, allocating a minimum of 25% of the budget to incentivise climate- and environment-friendly farming practices and animal welfare enhancements. Rural development measures also receive dedicated funding to support initiatives related to climate, biodiversity, environment, and animal welfare, while operational programmes in the fruit and vegetables sector focus on environmental initiatives, directing a significant portion of their budget to biodiversity protection. This is in line with the broader commitment to allocate 10% of the EU budget to biodiversity objectives by the end of the current seven-year multiannual financial framework period (2021-2027) which outlines the EU's spending priorities and supports long-term objectives such as sustainability, economic growth, and social cohesion, underscoring a commitment to sustainability within the agricultural sector.⁵⁰

However, similar to issues in the climate mitigation area described above, the current CAP does not align biodiversity objectives with other biodiversity commitments across the policy landscape. By aligning agricultural subsidies with biodiversity and LULUCF goals, CAP subsidies could incentivise farmers and businesses to adhere to frameworks and policies such as the Kunming-Montreal Biodiversity Framework, the EU Regulation on Deforestation-Free Products (EUDR), and the Nature Restoration Law.⁵¹ This more comprehensive approach would also facilitate increased funding for practices that protect and enhance ecosystems, contribute to climate action, and preserve natural resources, thereby driving a shift towards more environmentally sustainable agricultural policies within the EU.

3. Recommendations for a structural realignment of the CAP

Science-based sectoral criteria and transition pathways are vital for aligning EU agricultural policies and subsidies credibly with climate objectives and supporting farmers throughout the transition. Achieving the EU's climate objectives requires credible definitions of which agricultural activities are aligned with the EU's climate objectives, and, where such activities are not aligned, what would be a credible transition pathway. Criteria and pathways will also provide the necessary guidance as to the trajectories or routes through which the agricultural and food systems can transition towards more sustainable and resilient models. Clarity of definitions will support the alignment of agricultural subsidies as well as provide clear signals and certainty to all actors along the chain. As such, the EU should aim to develop science-based sectoral criteria and transition pathways for the agricultural sector, such as those developed by Climate Bonds, see Box 4. These may or may not form part of the EU Taxonomy, depending on the possibilities in the policy-making cycle.

Box 4. Climate Bonds Initiative Criteria

Climate Bonds is leading the development of transition plans that can deliver quick and meaningful change. This aligns with global goals to halve emissions by 2030 and achieve net zero by 2050, following Paris Agreement guidelines. The Climate Bonds Criteria currently under development will expand the scope of the Agrifood Criteria beyond green bonds to include certification of entities and sustainability-linked debt (SLD) covering crops and livestock, deforestation conversation-free (DCF) sourcing commodities, and food value chain criteria. The proposed new Criteria will build upon existing Agriculture Criteria, which can already be used to certify assets and activities.

The Climate Bonds Criteria on agrifood transition started in 2021 and cover DCF Sourcing Criteria, Crop and Livestock Production, Food Value Chains, and Alternative Proteins. The set of Criteria is expected to be ready for Certification under the Climate Bonds Standard by 2024 and are built upon existing Agriculture Criteria, which can already be used to certify assets and activities:

- in the whole agricultural production unit,
- specific intervention in the agricultural production unit, and
- supporting activities outside of the agricultural production unit.

However, the new Criteria will also cover Entity, Asset, Use of Proceeds, and Sustainability-Linked Debt Instrument Certification.⁵²

It is both feasible and necessary to repurpose the entirety of the CAP to align it with science-based criteria and transition pathways to support farmers throughout the transition. Aligning subsidies under the CAP with science-based criteria and transition pathways would provide greater coherence between the EU’s climate objectives and its means to achieve them. While setting ambitious objectives for farmers and economic actors involved in the agrifood supply chain, the CAP should also be structured in a way that provides support along a credible, yet realistic, transition pathway. Only by aligning objectives, policy, and financial support will the EU be able to mobilise all actors along the chain to enact the transition and ensure that the transition is a just one. Table 2 provides recommendations for the realignment of the EU CAP with the EU’s climate objectives while Table 3 provides a list of recommendations to support transition in the agricultural sector beyond the CAP.

Table 2. Recommendations to align the CAP with the EU’s climate objectives

Recommendations	Description	Requires additional financing
Align the CAP to science-based criteria and transition pathway	Align subsidies with science. Structure the CAP, including payment structure incentives, with science-based criteria and transition pathways in line with the EU’s climate objectives.	No. Repurposing of existing funding.
Reform the CAP payment structure	Reward green practices. Align reward practices with the CAP’s objectives as well as science-based criteria and transition pathways. With the acknowledgement that encouraged practices should go beyond climate mitigation to include enhancement of carbon sequestration, protection of biodiversity, and improvement of soil health.	Can be done through repurposing of existing financing.
	Invest in sustainable practices. Fund research and development of agroecological methods, cover cropping, precision agriculture, and other solutions that reduce emissions and enhance sustainability. Encourage collaboration between public and private sectors to develop new technologies and improve sustainable farming practices.	No.
Knowledge sharing and innovation	Knowledge transfer. Foster knowledge sharing through training programmes, extension services, and digital platforms to equip farmers with the skills and tools needed to adopt sustainable practices.	May require additional funding.
	Evaluation of policy efficiency and data-driven decision-making. Support the development of data infrastructure to monitor progress, evaluate policy impact on climate mitigation, and make informed decisions regarding CAP reforms.	May require additional funding.
Collaboration and accountability	Engage stakeholders. Include farmers, civil society organisations, and other stakeholders in developing and implementing CAP reforms.	Repurpose existing processes, but may require additional funding.

Table 3. Recommendations to support agriculture transition through measures beyond the EU’s CAP

Recommendations	Description	Requires additional financing
Leverage market mechanisms	Ensure credible transitions through alignment with credible criteria. Policymakers can guide the transformation of the agrifood sector, defining credible practices by incorporating transition frameworks and science-based standards and criteria, such as Climate Bonds Criteria, that set clear pathways into their policies and implementation.	X
	Mobilise investments to 1.5°C through alignment with credible criteria. Investment in the sector’s transition needs rapid scaling, involving rerouting of private finance flows from high- to low-carbon activities, and the growth of overall agrifood investments based on credible standards and criteria, such as Climate Bonds Criteria, that assist both companies and issuers in identifying activities and processes compatible with net zero.	X
	Green procurement through alignment with credible criteria. Encourage public and private institutions to prioritise purchasing sustainably produced food, creating market demand for low-carbon agricultural products.	X
	Invest in sustainable infrastructure. Facilitate investments in renewable energy sources, efficient irrigation systems, and improved logistics to reduce the sector's reliance on fossil fuels.	X
Balancing economic viability and sustainability	Risk management tools. Offer financial assistance and insurance programmes to help farmers manage risks associated with adopting new technologies and transitioning to sustainable practices.	X
	Fair trade competition. Work towards fairer trade deals that ensure farmers receive adequate compensation for their efforts in adopting sustainable practices and contributing to climate goals, especially with a CBAM in the event of an agriculture carbon price.	X

Promoting policy coherence through a CBAM for agrifood products

Currently, the EU’s Carbon Border Adjustment Mechanism (CBAM) does not directly cover the agricultural sector, thereby risking creating a fragmented policy landscape. The CBAM aims to address carbon leakage and support the EU climate change mitigation goals. It is a system that will impose the same EU carbon price or tariff on certain imported goods, based on the carbon emissions associated with their production. This aims to create a level playing field for EU companies that are already subject to carbon pricing and encourage producers in non-EU countries to adopt cleaner production methods.

However, the agricultural sector may face stricter climate regulations in the EU than elsewhere, which could be equivalent to an implicit carbon price. Therefore, it could potentially benefit from being covered by the CBAM (or a separate CBAM-like policy). For example, Denmark’s government has recently announced its plan to introduce a world-first tax on GHG emissions from agriculture in 2030.⁵³ However, establishing the per-unit GHG price and appropriate level of embedded emissions would come with technical and data challenges.⁵⁴ In addition, there are concerns about how it might indirectly raise agricultural production costs due to its dependence on fossil fuel inputs (fertiliser, pesticides, fuel, and electricity). A major technical challenge in applying a CBAM to food is to determine the carbon emissions content of an import and to apply a tax that is commensurate with that content.⁵⁵ Another challenge lies in the likely negative effect on low- and middle-income countries exporting to the EU, which might lack financial and technical resources to rapidly transition to net zero. The EU could however find ways to mitigate some of these potentially negative effects, through

technical assistance and capacity building. The CBAM could strengthen information sharing and cooperation with exporting countries to encourage their decarbonisation efforts and could also include financial aid to facilitate the transition.

If implemented, a CBAM for agrifood products should be seen as one tool within a broader strategy.

Promoting sustainable consumption habits within the EU and fostering international cooperation on sustainable agriculture are equally important elements in creating a sustainable food system. If the CAP adopts a greener approach and effectively subsidises the cost of the transition for agriculture, this could facilitate the inclusion of agriculture under the CBAM in the future. This would also allow actors in the agricultural sector to adopt more sustainable practices, reducing their carbon footprint, aligning with the EU's climate goals, and supporting non-EU countries achieve their climate goals.

The way forward: the EU Commission window of opportunity for change

The EU faces a crucial challenge in achieving its climate goals: reducing agricultural emissions effectively, and the bloc's transition to net zero can be massively accelerated through a structural transformation of the CAP. Supporting a just transition should be at the centre of the EU agricultural policy. This requires a clear shift, to repurpose the budget, instruments, and administrative systems of the CAP towards this new overarching objective and vision.

Now is the time to ensure this policy fully aligns with the EU climate targets, supporting farmers on their transition journey. The new EU Commission is already set to undertake a first performance review of each CAP strategic plan in 2025 and will also undertake performance reviews of each CAP Strategic Plan in 2026 and 2027. These reviews represent an opportunity to evaluate and measure the current gaps in the CAP alignment with the EU climate targets and to restructure the CAP.⁵⁶ Recently, the Strategic Dialogue report on the future of EU agriculture made a recommendation on this, calling for CAP subsidies to be repurposed, as well as the Just Transition Fund to be established outside the CAP to complement support for the sector's swift sustainability transition.⁵⁷

Policymakers have a critical role to play in transforming agrifood systems. Leveraging clear definitions of what is green, raising the level of ambition, and repurposing subsidies to incentivise practices that truly enhance environmental outcomes, human health, and well-being will lead to sustainable food production without compromising economic prosperity.

However, governments cannot achieve this transition alone. Private capital plays a pivotal role, and widespread adoption of relevant and aligned third-party voluntary standards such as the Climate Bonds Standard and Agrifood Sector Criteria are valuable tools that can be used to implement Paris-aligned measures for decarbonisation and nature to easily overcome the limitations and capacity gaps, enabling the agrifood sector transition to scale up.

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⁴ [CAP and the environment - European Commission \(europa.eu\)](https://www.eea.europa.eu/en/analysis/indicators/greenhouse-gas-emissions-from-agriculture?activeAccordion=546a7c35-9188-4d23-94ee-005d97c26f2b)

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- ⁸ [Overview - European Commission \(europa.eu\)](#)
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- ¹⁰ <https://openknowledge.worldbank.org/server/api/core/bitstreams/61d04aca-1b95-4c06-8199-3c4a423cb7fe/content>
- ¹¹ <https://openknowledge.worldbank.org/server/api/core/bitstreams/61d04aca-1b95-4c06-8199-3c4a423cb7fe/content>
- ¹² <https://openknowledge.worldbank.org/server/api/core/bitstreams/61d04aca-1b95-4c06-8199-3c4a423cb7fe/content>. Note that quantifying the total amount of subsidies in any sector, including agricultural, comes with difficulties, due to the multiple methodologies and definitions used to measure what counts as public support through both direct and indirect measures.
- ¹³ Note however, that due to the smaller size of low- and middle-income countries' budgets, these spend an even larger share on subsidies. See [Detox Development \(worldbank.org\)](#)
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- ²⁸ [Dutch farmers, climate activists stage protests in The Hague – POLITICO](#)
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- ³⁰ [CAP and the environment - European Commission \(europa.eu\)](#); [eu-cap-network-magazine-issue-2.pdf \(europa.eu\)](#)
- ³¹ [CAP expenditure - European Commission \(europa.eu\)](#)
- ³² [CAP 2023-27 - European Commission \(europa.eu\)](#)
- ³³ The common agricultural policy at a glance, https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/cap-glance_en, Agriculture Strategies, National strategic plans – multiple expectations and burdened governance for an uncertain achievement, 8 February 2021 <https://www.agriculture-strategies.eu/en/2021/02/national-strategic-plans-multiple-expectations-and-burdened-governance-for-an-uncertain-achievement/>
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- ³⁷ [CAP at a glance - European Commission \(europa.eu\)](#)
- ³⁸ [CAP 2023-27 - European Commission \(europa.eu\)](#)
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