CAN YOUR MONEY DO BETTER?

REDIRECTING HARMFUL SUBSIDIES TO FOSTER NATURE & CLIMATE RESILIENCE

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The European Policy Office contributes to the achievement of WWF's global mission by leading the WWF network to shape EU policies impacting on the European and global environment.

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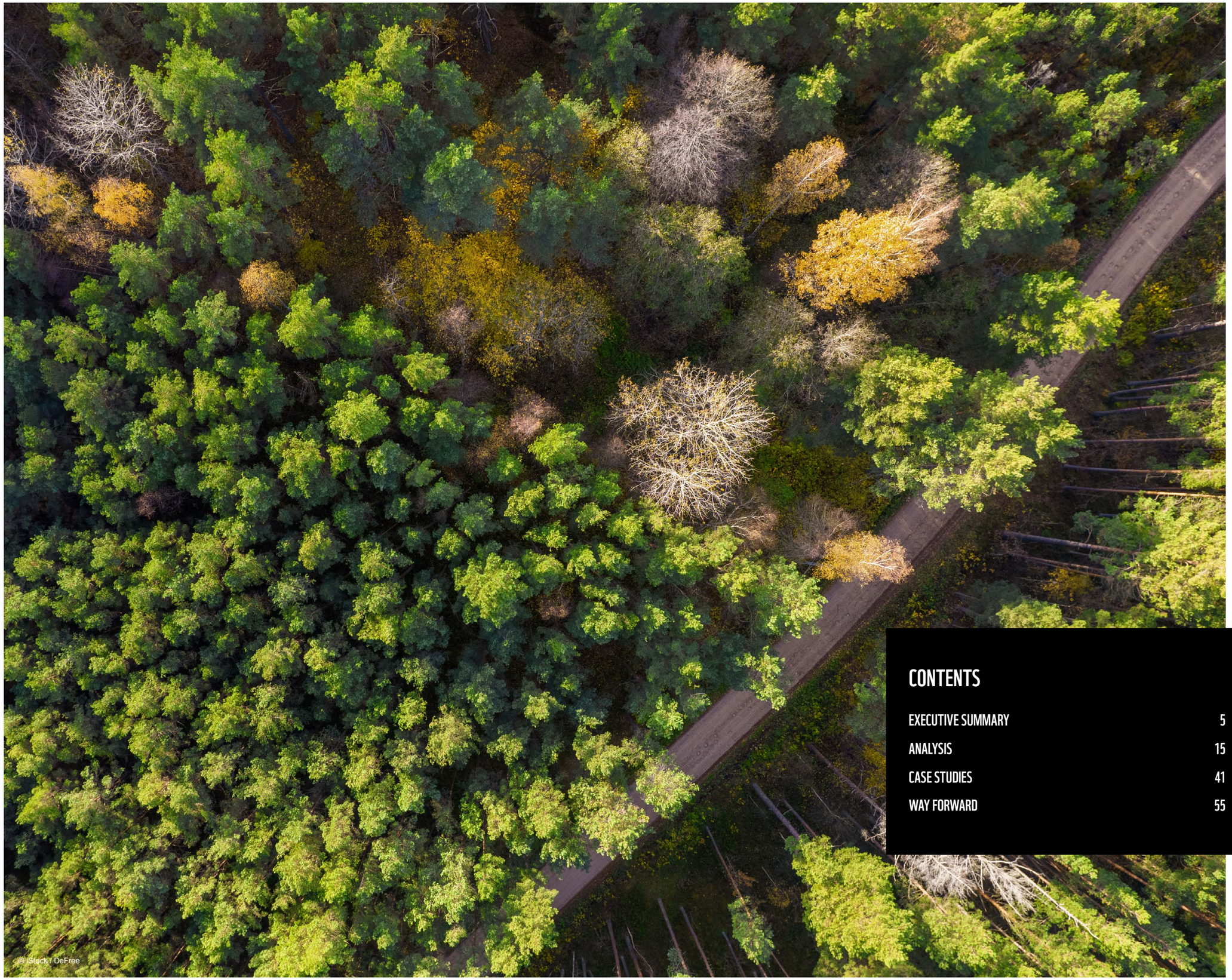

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KEY TAKEAWAYS

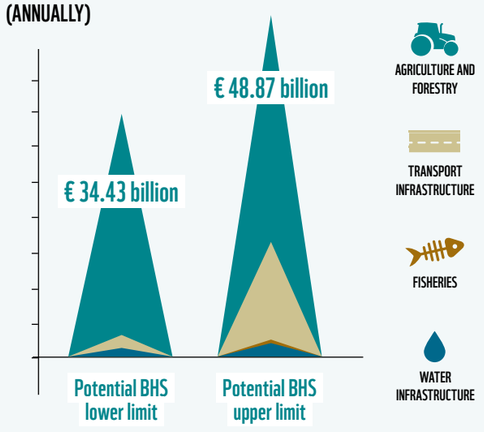
Member States are directing between €34 billion and €48 billion of EU subsidies per year into activities that harm biodiversity

At a time when citizens are suffering from the cost of living crisis, national governments are channelling taxpayers' money – in the form of EU subsidies – towards activities that harm nature. This is actively fuelling biodiversity loss, making Europe even more vulnerable to droughts, floods and heatwaves, with a negative impact on our economy.

These "biodiversity harmful subsidies" (BHS) – public funds that directly or indirectly harm nature – compromise the EU's ability to reach its biodiversity goals, undermining the positive steps it has taken to protect and restore nature.

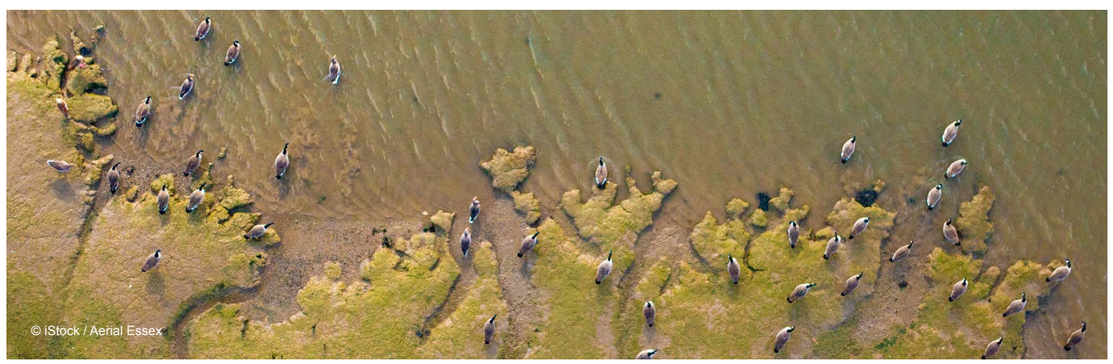
MEMBER STATES SPEND € 34 TO 48 BILLION PER YEAR ON ACTIONS THAT HARM NATURE.

COMPARISON OF POTENTIAL BHS ACROSS ANALYSED SECTORS (ANNUALLY)



Biodiversity harmful subsidies span all major sectors of the economy

Most of the EU subsidies that harm biodiversity come from the Common Agriculture Policy (CAP), and the way in which Member States are using these funds. This is partially due to the sheer amount of EU funds oriented towards agricultural production. But other funds, including for forestry, fisheries, transport and water infrastructure, also encourage nature-harming activities, sometimes at significant scale. More research is needed to establish more accurate figures, as for some sectors up-to-date data is lacking.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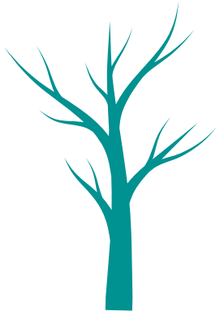
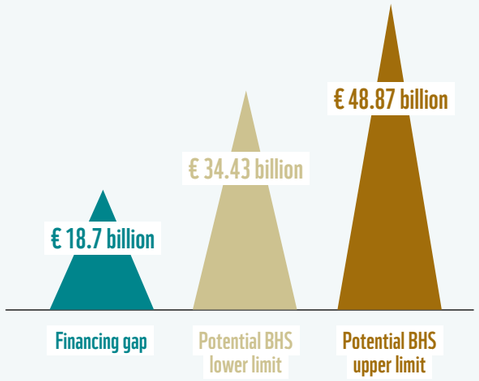
Direct investments in nature are necessary, but not enough

Simply investing in nature and nature-based solutions[1], though vital, is insufficient. It is equally important to mitigate the negative effects of infrastructure development, land use, resource consumption, business practices in natural resource-dependent sectors and other harmful activities. Otherwise, the efforts and resources dedicated to protecting and enhancing natural ecosystems risk being undermined.



HARMFUL SUBSIDIES UNDERMINE OUR EFFORTS TO PROTECT NATURE

COMPARISON OF BIODIVERSITY FINANCING GAP AND POTENTIAL BHS (LOWER AND UPPER END, ANNUALLY DURING 2021 – 2027 MULTIANNUAL FINANCIAL FRAMEWORK PERIOD)



Repurposing biodiversity harmful subsidies could completely close the financing gap to achieve the EU's biodiversity objectives by 2030

An estimated €48 billion euros annually – coming from EU and national budgets – is needed between 2021 and 2030 to achieve the 2030 EU Biodiversity Strategy.[2] This represents only 0.34% of total EU GDP.[3] However, governments and the EU are falling short of this target by more than €18 billion per year.[4] This is less than the total biodiversity harmful subsidies originating from the EU budget, so filling the gap is imperative and feasible.

Solutions can be implemented at EU level by harmonising and ensuring a socially fair phase-out of biodiversity harmful subsidies

While governments have significant flexibility in spending EU funds – and thus in avoiding financing nature-harming activities – loopholes can only be closed through EU action. Removing biodiversity harmful subsidies does not necessarily mean less overall support for the sectors concerned. By smartly reinvesting biodiversity harmful subsidies in nature-based solutions, with workers' and communities' interests at heart, governments can help tackle climate change and biodiversity loss, while also improving resilience and competitiveness, and reducing social inequalities.

REDIRECTING HARMFUL SUBSIDIES IS KEY TO ACHIEVING A GREEN AND SOCIALLY FAIR TRANSITION

SCOPE AND METHODOLOGY

"Biodiversity harmful subsidies" are defined as financial assistance provided by governments to individuals, businesses or industries that unintendedly contribute to the degradation of species and habitats, reinforcing drivers of biodiversity loss and impacting the environment.

In January 2024, WWF commissioned a study to investigate biodiversity harmful subsidies within the EU 2021 – 2027 Multiannual Financial Framework (MFF), specifically targeting direct financial support for the agriculture, forestry, fisheries, transport and water sectors. The study, conducted by environmental consultancy Trinomics, focuses on the effects that the identified subsidies have on biodiversity but does not consider their impact on climate change.[5]

Indirect subsidies that harm biodiversity also exist, but are only provided as examples in this report. These subsidies do not provide funding directly, but create conditions (e.g. tax breaks) that disproportionately benefit specific industries or regions, ultimately leading to biodiversity loss or degradation.

The research methodology relied on desktop research and literature review to identify direct biodiversity harmful subsidies, and analysis of EU funding programmes to quantify potentially harmful subsidies. In the absence of up-to-date information on EU spending and spending plans across all targeted sectors, the study analyses all the funding programmes at the level of their total allocated budgets in the 2021-2027 programming period, and then extrapolates those findings to the scale of one year.

Given the degree of uncertainty, the study also provides lower and upper limits. Lower limits indicate the smallest amount of funding beyond which we can be more certain that harmful impacts will occur; upper limits are identified where preliminary evidence suggests potential harm, but additional research is necessary to verify these negative effects.

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KEY FINDINGS

AGRICULTURE & FORESTRY

A number of funding streams under the EU's agricultural policy and funds allocate money in a way that encourages large-scale unsustainable farming or forestry practices. In particular, direct support – in the form of area-based income support – incentivises an increase in industrial livestock numbers and the expansion of crop production under conventional farming, both of which harm the environment.

- At least **58-60% of Common Agricultural Policy** (CAP) funding from the current EU budget, totalling **€31.4 billion to €32.1 billion annually**, can be considered harmful to biodiversity.
- Annual biodiversity harmful subsidies in agriculture and forestry roughly amount to the whole annual spending of national governments such as Croatia and Luxembourg.
- Outside the CAP framework, a number of agriculture- and forestry-related biodiversity harmful subsidies are also allocated by EU Member States. For example, in 2022, direct subsidies allocated by Member States to **biomass as an energy source** amounted to **€15 billion**.
- Indirect harmful subsidies, such as tax reductions or tax exemptions for fertilisers and pesticides, are also allocated to the agriculture and forestry sectors.

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FISHERIES

The European Maritime, Fisheries and Aquaculture Fund (EMFAF) supports the implementation of the EU's fisheries policy. While the fund excludes certain operations (e.g. building new fishing vessels, increasing the power of fishing vessels) and sets conditions to prevent harmful effects, the decentralised approach opens the door for Member States to fund activities harmful to biodiversity.

- **Between 5% and 12% of the EMFAF**, totalling **€59–138 million** per year, is channelled into biodiversity harmful subsidies. This is up to 2.5 times higher than the EMFAF funding dedicated to protecting and restoring biodiversity, amounting to €53 million per year.
- In addition to the EMFAF, with tax exemptions, fishers in the EU pay a lower price for fuel than the general public, reducing the costs of fishing and potentially leading to an increase of fishing capacity and overfishing. In 2023 alone, the fishing sector **avoided paying approximately €597 million in taxes for fuel consumption**.
- Considering that the overall aim of the EMFAF funding is to ensure long-term sustainability of a sector that depends on a healthy and thriving ecosystem, redistribution of funding towards protection and restoration may be needed.

TRANSPORT INFRASTRUCTURE

The construction of new transport infrastructure can lead to habitat and ecosystem fragmentation, especially when this new infrastructure is built in natural areas that have been intact so far.

Our analysis makes no assumptions regarding the climate impacts, whether positive or negative, of transport infrastructure.

- **Between €1.69 billion and €14.07 billion** of EU funds are spent every year by Member States on building and rehabilitating transport infrastructure in Europe, such as roads and railways, that could be harmful to biodiversity.
- It is **challenging to give an accurate estimate** here, so the upper limit should be treated with some caution. Due to a lack of granularity in data, it is challenging to determine precisely how much funding is allocated to new road and railway infrastructure, and no recent EU-level assessment exists on the impacts of transport infrastructure on biodiversity.

WATER INFRASTRUCTURE

The main threats to water resources and freshwater ecosystems in Europe come from pollution, modifications to riverine land (e.g. floodplain drainage) and to water bodies (e.g. channelisation, construction of river barriers such as dams), water abstraction, droughts and floods. This research focuses on infrastructure that directly alters water ecosystems, such as flood defence barriers, dams and reservoirs.

- **Between 7% and 11.5% of funding from the European Regional Development Fund** and the Cohesion Fund could harm biodiversity by supporting construction of infrastructure, such as flood control dams and reservoirs, or modifications to river channels. This means that at least €1.3 billion and as much as €2 billion a year is flowing into harmful subsidies.
- Indirect subsidies further exacerbate the degradation of water ecosystems, for example by financing the construction of hydropower plants. A total of **€1.5 billion was allocated to support hydropower in 2022** alone. The construction of hydropower plants severely degrades water ecosystems and leads to loss of biodiversity through destruction or fragmentation of habitats.


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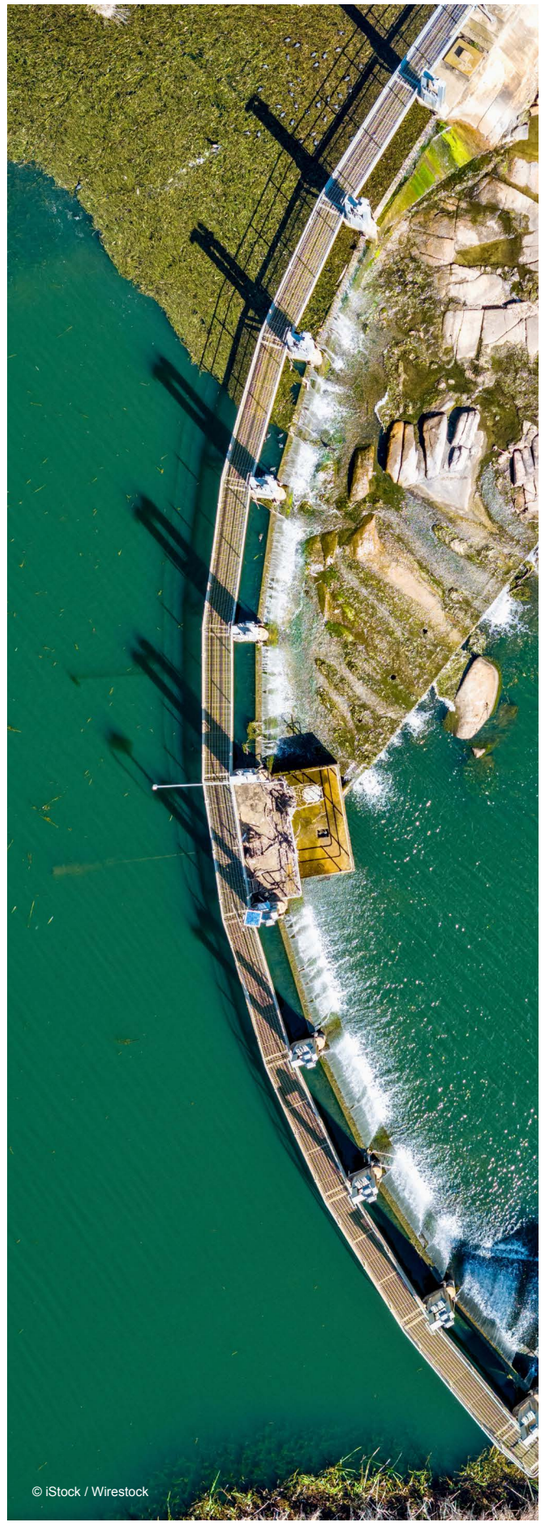
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POLICY RECOMMENDATIONS

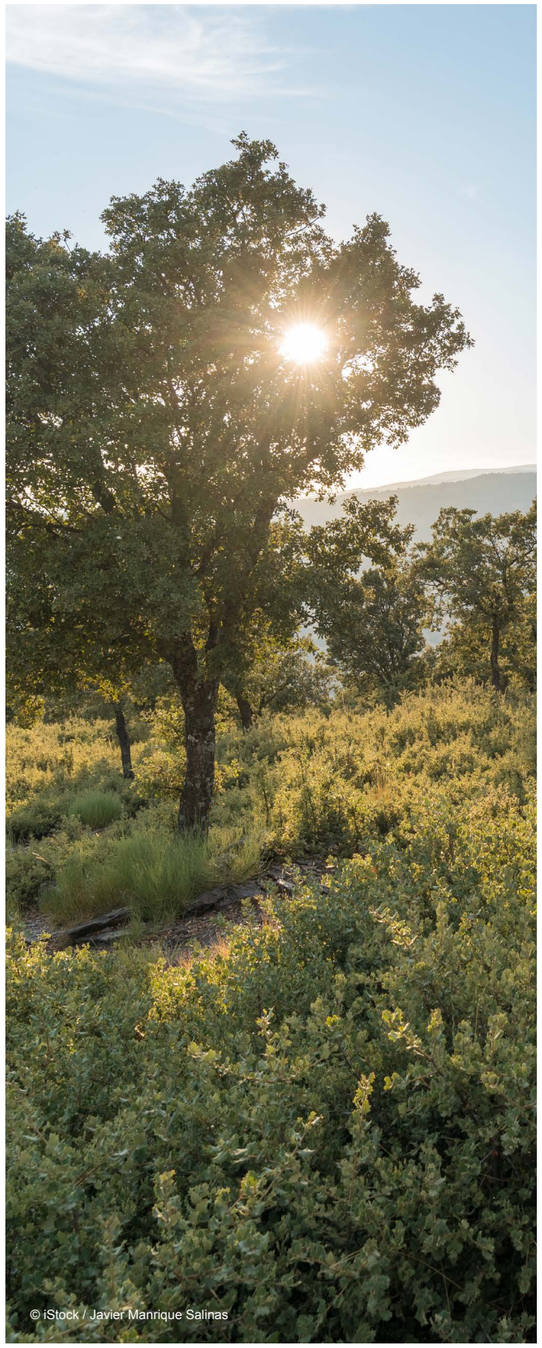
The convergence of multiple and often interconnected crises — including biodiversity loss and climate change, a war in Europe, and the aftermath of the Covid-19 pandemic — is placing unprecedented strain on public finances. At a moment when the Global Biodiversity Framework is guiding the international community, the imperative is to step up public investments in the green and just transition rather than revert to austerity measures. Ensuring responsible government expenditure has never been more crucial. This is true for both EU and national budgets.

Decades of policy have allowed EU Member States significant leeway in the national allocation of EU funds, often leading to financing questionable practices and projects. Our study provides a glimpse of the extent of this flexibility and its harmful impacts on nature and people. While not the main subject of our analysis, evidence shows that biodiversity harmful subsidies also exist in national budgets.

With new leaders stepping up in the European Parliament and Commission after the 2024 EU elections, we have got a golden opportunity to correct these fiscal missteps and make sure taxpayers get their money's worth.

A recent survey by WWF among European and national political parties ahead of the EU elections shows broad support from parties to shifting public money away from activities detrimental to the environment towards those that advance the green transition.[6] However, many political parties still lack a clear plan to implement their commitment. Our recommendations aim to bridge this gap.

The below recommendations are specifically designed to eliminate biodiversity harmful subsidies. They do not explicitly cover fossil fuel subsidies, the climate impacts of other subsidies, or other environmentally harmful financial incentives. Halting climate change is just as essential to avoiding the human-driven biodiversity crisis, but is beyond the scope of this report.



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GENERAL RECOMMENDATIONS

1. Establish an EU legally binding framework to guarantee a timely and socially fair phase-out of EU and national biodiversity harmful subsidies. The transition to a nature-positive economy affects and concerns every community. Inclusiveness and social awareness need to be included in the phase-out of biodiversity harmful subsidies to avoid regions or industries being left behind or struggling with the transition.
2. Transition biodiversity harmful subsidies towards public investments in nature-based solutions that protect, restore and sustainably manage ecosystems while simultaneously addressing societal challenges.
3. Apply updated "Do No Significant Harm" EU taxonomy criteria across the entire EU budget and its associated policies, while excluding "Always Environmentally Harmful" sectors, companies or economic activities from receiving any EU funds or incentives in future.
4. Step up on transparency and immediate intervention in case of suspected misuse nationally of EU funds, including by – if necessary – suspending the disbursement of EU funds.
5. Adopt and implement ambitious National Biodiversity Strategies and Action plans (NBSAPs) ahead of COP16, including on biodiversity harmful incentives and subsidies phase-out (consistent with Target 18 of the Global Biodiversity Framework).

SECTOR-SPECIFIC RECOMMENDATIONS

1. Provide financial support to ensure a just transition for farmers and foresters towards sustainability – based on ensuring fair compensation for the environmental services they provide, and a rapid phase-out of area-based income-support payments and subsidies linked to production.
2. Revise the EU Renewable Energy Directive to incentivise sources of bioenergy only if they are biodiversity friendly (and deliver significant, near-term climate benefits compared to fossil fuels).
3. Ring fence at least 25% of the European Maritime, Fisheries and Aquaculture Fund (EMFAF) to support fishers, coastal communities and other stakeholders to protect and restore the marine environment, and phase out any financial support in the EMFAF that risks increasing the EU's fisheries fleet capacity, worsening overfishing.
4. Ensure transport infrastructure projects take into account biodiversity value at the earliest possible stage of planning, and redirect public subsidies for new high-carbon infrastructure, such as air and road traffic, towards low-carbon transport such as public transport that satisfies wider environmental and societal needs.
5. Redirect subsidies for grey flood protection infrastructure – structures such as dams, dykes and seawalls – to nature-based or hybrid solutions, and phase out subsidies for any new hydropower projects.

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ANALYSIS

CONDUCTED BY TRINOMICS

MAINSTREAMING BIODIVERSITY CONSERVATION IN THE EU

In December 2019, the European Commission unveiled the European Green Deal, a flagship initiative to create a climate-neutral European Union by 2050, which is resource-efficient and leaves no person and no place behind.[7] At its core lies a comprehensive plan to foster economic growth while addressing the pressing challenges of climate change, environmental degradation and biodiversity loss. Biodiversity conservation is a cornerstone of the European Green Deal. By mainstreaming biodiversity considerations into all relevant policy areas, including agriculture, fisheries, forestry and infrastructure development, the European Green Deal aims to ensure that biodiversity concerns are systematically addressed across sectors. This integration fosters consistency and synergy in efforts that go beyond protecting endangered species and ecosystems; it aims to restore nature, reduce pollution and stop the wasteful use of resources, ensuring the well-being of current and future generations.[8]


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EU BIODIVERSITY GOALS IN THE GLOBAL AGENDA

The Kunming–Montreal Global Biodiversity Framework (GBF) to 2030, endorsed in December 2022, represents a pivotal international effort to address the escalating biodiversity crisis and chart a course towards a more sustainable future. Building upon the Aichi Biodiversity Targets, the new framework sets ambitious goals and targets for biodiversity conservation, restoration and sustainable use over the next decade. Consolidated under four goals for 2050 and 23 targets for 2030, the GBF calls for urgent action to halt and reverse biodiversity loss, restore ecosystems and mainstream biodiversity considerations across sectors. This includes reducing harmful incentives by at least US$500 billion per year, and scaling up positive incentives for biodiversity (Target 18).

The EU, as a signatory to the Convention on Biological Diversity (CBD), is committed to supporting the implementation of the GBF. The European Green Deal, with its goals for climate neutrality and sustainability, provides a comprehensive framework for integrating biodiversity conservation into EU policies and actions. Similarly, the EU Biodiversity Strategy – a cornerstone of the European Green Deal – sets out clear objectives and measures to protect and restore biodiversity within the EU, aligning closely with the goals of the GBF. Phasing out environmentally harmful subsidies is a strategic commitment of the EU; the 8th Environment Action Programme foresees development of an EU-wide definition of and methodology for assessing environmentally harmful subsidies, with a view to develop programmes for their phase-out.


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Healthy ecosystems – in addition to climate benefits – provide essential services such as clean air and water, fertile soil, and pollination, upon which our economies and societies depend. However, the World Economic Forum sees the loss of biodiversity and ecosystem collapse as the third most significant risk on the 10-year horizon, with “severe consequences for the environment, humankind and economic activity due to destruction of natural capital stemming from a result of species extinction or reduction, spanning both terrestrial and marine ecosystems”.[9]

Preserving biodiversity is not just an environmental imperative; it is a matter of human survival and prosperity. Dedicated financial resources for biodiversity conservation are needed to achieve success in protecting and restoring nature, and making sure that it continues to enable thriving communities.

While direct investments in nature are necessary, they are not enough. The state of nature and biodiversity is also a reflection of decisions made in other socioeconomic sectors.[10] Development of infrastructure, land use, resource consumption and business practices in natural resource-dependent sectors[11] can – and often do – have significant negative impacts on nature.

Addressing these impacts is crucial. In addition to developing policies to promote sustainability, prevent loss of biodiversity and ensure resource sufficiency and circularity, these impacts can be mitigated by **curtailing and phasing out financial support to activities in other sectors that have a harmful effect on nature and biodiversity** (i.e., biodiversity harmful subsidies).

REFORMING SUBSIDIES – SOCIAL CONSIDERATIONS

At the same time as supporting specific sectors, subsidies also support people working in them. Any change in the subsidy will often result in immediate socioeconomic implications. Fear of losing jobs and future prospects, increased costs, reduced well-being and lower sense of security lead to strong push-backs against reforms of existing practice.

When considering how to adjust harmful activities, these views must be taken on board. Efforts should be expanded to inform awnd educate stakeholders on the negative impacts on nature these subsidies have. Policy tools should ensure that stakeholders are able to meaningfully participate in developing plans for reduction or removal of financial support, so as to integrate their well-being and offer alternative livelihood opportunities.

Such engagement would also help ensure that subsidies are allocated fairly and transparently, fostering confidence that initiatives to transition to sustainable and equitable economies are implemented with due care for nature and biodiversity while not leaving anyone behind.

FUNDING BIODIVERSITY CONSERVATION IN THE EU

The EU Biodiversity Strategy to 2030 provides a framework for protecting and restoring nature in the EU. Developed with a view of "bringing nature back into our lives", the strategy provides specific targets for nature restoration and protection that should be achieved by 2030. It also calls for unlocking at least €20 billion a year for spending on nature.

To facilitate this spending, the EU budget includes, for the first time, biodiversity financing targets, set as a percentage of the total budget that should be directed to nature-positive outcomes (e.g., nature restoration, nature-based solutions, sustainable management practices in sectors such as forestry, freshwater and marine ecosystems). In addition, the European Commission has implemented several non-binding initiatives to ensure that impacts on biodiversity are considered when developing budgets and spending plans (i.e., green budgeting to redirect public investment, consumption and taxation to green priorities and away from harmful subsidies).

Progress towards biodiversity financing targets was recently assessed within the framework of the mid-term review of the 8th Environment Action Programme.[12] This indicates that, while some progress has been made, overall the targets for biodiversity financing may be missed, and more investments in nature will be needed from both public and private sectors.[13]

At the same time, there is no uniformly agreed approach to determine which actions of other EU spending plans are harmful to biodiversity. This lack of understanding and agreement opens the door for funding actions across many sectors (e.g., agriculture, fisheries, transport) that could counteract nature restoration and conservation progress.

The structure of the EU financial system is complex, involving funding at both EU and member state level, diverse forms of support and interconnected sectors. This requires comprehensive analysis and expertise to accurately quantify biodiversity harmful subsidies. Nevertheless, this study endeavours to estimate the extent to which EU funding could contribute towards activities that are harmful to biodiversity, and how the scale of that funding compares to the funds required to achieve nature objectives outlined in the EU Biodiversity Strategy for 2030.

AT LEAST €20 BILLION A YEAR SHOULD BE UNLOCKED FOR SPENDING ON NATURE


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WHAT IS A BIODIVERSITY HARMFUL SUBSIDY?

A subsidy refers to financial assistance provided by the government to individuals, businesses or industries to support or promote certain activities or outcomes. As such, a subsidy is "a government action that confers an advantage on consumers or producers, in order to supplement their income or lower their costs."[14]

Two types of subsidies are usually distinguished: direct and indirect.

- Direct subsidies are funds given by the EU or member state governments to businesses, industries or people. They come in different forms, like grants, loans or direct payments.
- Indirect subsidies don't provide funding directly, but create conditions that help certain industries or activities. These can come from rules, tax breaks or infrastructure investments that disproportionately benefit specific industries or regions.

However, subsidies can have unintended effects. A subsidy distorts prices and how resources are used, changing the pattern of production and consumption in an economy. This can impact the environment in ways that we might not realise or pay attention to when making policies. When this happens and subsidies harm the environment, they are called environmentally harmful subsidies.

ENVIRONMENTALLY HARMFUL SUBSIDIES

There is still a lot of debate about what exactly counts as an environmentally harmful subsidy, but the OECD defines it as a government action that helps consumers or producers but goes against good environmental practices.[15] In practical terms, as explained by the OECD, this means that the scope of a harmful subsidy:

i) Includes subsidies that lead to significant environmental damage compared to what would have happened without the subsidy; and

ii) Excludes environmental damages that are a result of the lack of action on the side of the government to prevent or limit damaging practices (and thus implicitly support certain behaviours).

One type of environmentally harmful subsidies are those harming biodiversity.

Biodiversity harmful subsidies (BHS) contribute to the degradation of species and habitats, reinforcing drivers of biodiversity loss and impacting the environment in various sectors. Examples include subsidies that support unsustainable agricultural practices, land-use changes, river fragmentation, forest degradation or deforestation, leading to habitat loss, species extinction and ecosystem degradation. Usually, BHS increase how much we use natural resources, leading to, for example, waste, pollution, damage to nature and depletion of natural resources.

When identifying potential BHS, the net should be cast wide to include all sectors and activities likely to have an adverse effect on biodiversity.[16] Sectors such as agriculture, forestry, fisheries, transport and water are commonly considered when assessing BHS. These subsidies are identified based on a thorough analysis of the status of biodiversity, the main sources and drivers of degradation, and the impacts on biodiversity.

As with subsidies in general, BHS can be provided as direct and indirect subsidies. Direct BHS refer to financial incentives or support measures provided directly by the EU or member state governments that contribute to biodiversity loss or degradation. Taking various forms, these subsidies are typically aimed at promoting specific activities or outcomes that have negative impacts on biodiversity. Examples of direct BHS in the EU include certain agricultural subsidies that encourage unsustainable farming practices or forestry subsidies that incentivise unsustainable logging.

Indirect BHS are policies, regulations or investments that create conditions favouring certain industries or activities, ultimately leading to biodiversity loss or degradation. While these subsidies do not provide direct financial support, they indirectly contribute to negative impacts on biodiversity by influencing behaviour and decision-making. Examples of indirect BHS in the EU context include offering an additional premium on top of the market price for electricity generated from hydropower, which promotes hydropower development and can lead to degradation of freshwater ecosystems and loss of biodiversity.

WHERE DOES THE FUNDING FOR HARMFUL SUBSIDIES IN THE EU COME FROM?

The EU plans its budget over medium term with the Multiannual Financial Framework (MFF), colloquially known as the EU budget. The current MFF period is 2021-2027. The main legislative act that sets out the principles and procedures which govern the establishment, implementation and control of the EU budget is the EU Financial Regulation. As it was introduced before the European Green Deal announced the EU's course towards sustainability, several initiatives have followed to ensure that EU spending is aligned with the European Green Deal objectives, including biodiversity considerations:

- This 2021 – 2027 MFF is the first EU budget that includes biodiversity financing targets, and the European Commission has developed a methodology for **tracking biodiversity spending**.[17] Based on this methodology, all funding programmes are assessed to determine what portion of their budget will contribute to biodiversity-positive outcomes. This is called a biodiversity coefficient. There are three possible biodiversity coefficients determined so far: 0%, 40% and 100%. A 40% biodiversity coefficient, for example, indicates that at least 40% of the actions funded through the relevant programme need to be aligned with or contribute to biodiversity conservation goals.
- At the Member State level, governments are encouraged to implement or upgrade **green budgeting practices**, for which an EU Green Budgeting Reference Framework has been developed.[18] Green budgeting involves identifying and evaluating the environmental impacts of budgetary items and policies using specific performance indicators. The goal is to better align budgetary policies with environmental objectives, including biodiversity considerations. As of January 2023, 17 Member States have implemented or planned to implement green budgeting practices.[19] In 2021, the first year of the implementation of the current MFF, 62% of the EU budget was allocated to these 17 Member States.[20]
- For businesses and investors, the EU Taxonomy Regulation in 2020 introduced a classification system for sustainable economic activities. To qualify as such, an activity must contribute to at least one of the six environmental objectives listed in the Taxonomy[21] and "Do No Significant Harm" (DNSH) to any of the other objectives. The Taxonomy is further developed through technical screening criteria for each objective.

The EU budget is financed mainly by the contributions from Member States, import duties on products from outside the EU, and fines imposed when businesses fail to comply with EU rules.[22] The EU countries agree on the size of the EU budget and how it is to be financed several years in advance.

Spending of the EU budget is planned anew in each MFF period. The EU directs funding through a number of programmes, based on the priorities outlined in the MFF. Time horizons of the funding programmes are aligned with the MFF.

The EU funding programmes can either be sector-specific or have broader cross-sectoral goals. For example, the European Maritime, Fisheries and Aquaculture Fund (EMFAF) is a fisheries-specific funding programme, while the European Regional Development Fund (ERDF) is focused on ensuring EU cohesion across multiple sectors.

Following the Covid-19 pandemic's outbreak, the Commission proposed surge funding to top up the current MFF with a recovery instrument – NextGenerationEU. Among its objectives is to support Member States' investments and reforms for green and digital transitions, and resilience of national economies. The main financing facility for this support is the Recovery and Resilience Facility (RRF).[23] Accordingly, the current EU expenditure for the period 2021-2027 consists of both the MFF and NextGenerationEU.

The funding programmes and their activities are detailed in the next chapter, based on their potential to enable biodiversity harmful activities.

METHODOLOGY FOR ASSESSING POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES

This report focuses on investigating BHS within the 2021–2027 MFF, specifically targeting agriculture, forestry, fisheries, transport and water – sectors identified in the literature as most likely to give rise to BHS.[24] The primary objective is to identify whether subsidies within these sectors support activities leading to biodiversity loss or degradation. The study does not consider the impacts of identified subsidies on climate change. While climate impacts are beyond the scope of this study, a stable climate is essential to avoiding the mass extinction of species, and natural ecosystems in turn have a key role to play in reducing net emissions to the atmosphere and increasing resilience to the climate-related changes that are already inevitable.

The research methodology relied on desktop research and literature review to identify harmful subsidies in the relevant sectors, and analysis of EU funding programmes to quantify potentially harmful subsidies. The study primarily emphasised the identification of direct subsidies provided by EU funding programmes, with indirect subsidies considered where resources allowed.

This analysis faced several constraints, and required significant assumptions to be made in order to produce conclusions.

Main constraints included the lack of up-to-date research and reviews on EU spending and spending plans across all targeted sectors, which resulted in unequal information availability. To overcome this, a decision was made to analyse all the funding programmes at the level of their total allocated budgets in the 2021-2027 programming period, and then extrapolate those findings to the scale of one year. The volume of potential BHS in this study is reported on an annual level.

The absence of impact assessments of funding programmes made it impossible to determine whether financial measures indeed had harmful effects and to what extent. The resulting inability to precisely quantify BHS was overcome by defining a lower and an upper limit of possible harmful subsidies.

The **lower limit** constitutes the minimum funding that can be considered to lead to harmful impacts with a higher degree of certainty, based on specific actions to be funded under various programmes (as elaborated in the respective chapters of this report).

Where available information on planned actions was not sufficient to determine the extent of possible BHS, an assumption was applied to determine the lower limit. The assumption was based on the green budgeting initiative and its uptake across the EU Member States. Based on available information at the time of conducting this study, at least 10 Member States had not committed to green budgeting practices.[25] In other words, those Member States had not committed to prioritise environmental protection and biodiversity conservation in their funding, potentially enabling BHS. To determine how much impact that could have on the total EU budget, the share of the budget that these Member States hold compared to the total budget was determined, using the first year of the current MFF period as a reference. In 2021, the 10 Member States that did not apply green budgeting principles accounted for 38% of the total EU budget spend. This percentage was applied to the total available budget for activities in targeted sectors that could lead to harmful subsidies to determine the lower limit of potential BHS.

This estimation relies on several assumptions. Firstly, it assumed that only non-greened budgets lead to BHS, and secondly, it assumed that the total amounts of those subsidies were harmful. While those assumptions may not be entirely accurate, they provided a useful indicative metric for understanding the commitment of member states to align their spending with sustainability and environmental responsibility principles in the absence of concrete data.

The **upper limit** represents the higher end of the funding that could reasonably lead to harmful subsidies, but which will require further research to confirm the harmful impacts. The determination of the upper limit was also based on specific actions planned under various funding programmes, but included a wider set of actions whose impact on biodiversity depends on the specifics of programme design (i.e., actions that have the potential to be negative, based on previous experiences). These are explained in the respective sectoral chapters of this report.

Where available information on planned actions was not sufficient to determine the extent of possible biodiversity harmful subsidies, an assumption was applied to determine the upper limit. This assumption was based on the biodiversity tracking methodology applied by the Commission to the EU budget. The biodiversity coefficient identified for various EU funding programmes indicates the percentage of that funding that needs to contribute to biodiversity positive outcomes. The remaining percentage of the funding, therefore, has no such requirement, and can be considered as harmful to biodiversity. Applying this percentage to the total available budget for activities that could lead to harmful subsidies yielded the upper limit of potential BHS. Depending on the funding programme, these percentages are either 0% or 60%, meaning that either the entire funding or 60% of it could lead to harmful subsidies. Specific application of these percentages is elaborated in relevant sectoral sections further in the report.

POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES IN SELECTED SECTORS

AGRICULTURE AND FORESTRY

Direct subsidies

The EU plays a key role in financially supporting European farmers and foresters via the **Common Agricultural Policy (CAP)**. Currently, **31% of total EU spending goes towards financing the CAP**, representing almost **€53.8 billion in 2024 alone**.[26] This significant financial contribution highlights the importance given to agriculture by the EU.

The CAP is a financial support instrument which provides various direct subsidies to agriculture and forestry. It has 10 objectives focused on social, environmental and economic goals. [27]

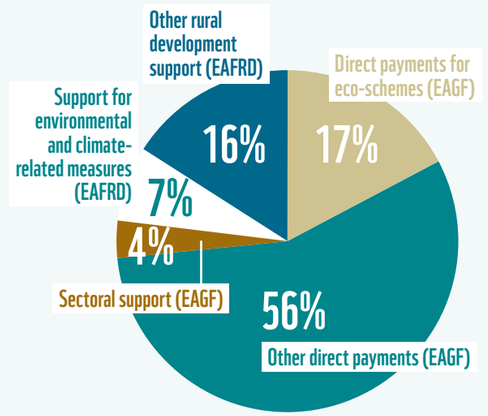
This funding is channelled via two funds:

- The European Agricultural Guarantee Fund (EAGF), which provides direct support and funds market measures in the agriculture sector (for example, payment per hectare of farmed land or number of animals, and sectoral support for certain crops).
- The European Agricultural Fund for Rural Development (EAFRD), which finances rural development in the agriculture and forestry sectors (support for farmers and foresters who operate in areas subject to Natura 2000 requirements, support for farmers exposed to natural or other specific constraints, etc.).

Both instruments also allocate funding to measures supporting environmental sustainability, notably eco-schemes under the EAGF and agri-environmental-climate schemes funded by the EAFRD. In addition, in order for farmers to be eligible for EU income support, they must respect a set of basic rules (called "conditionality") including good agricultural and environmental conditions (GAECs) that apply to farm holdings above certain sizes.

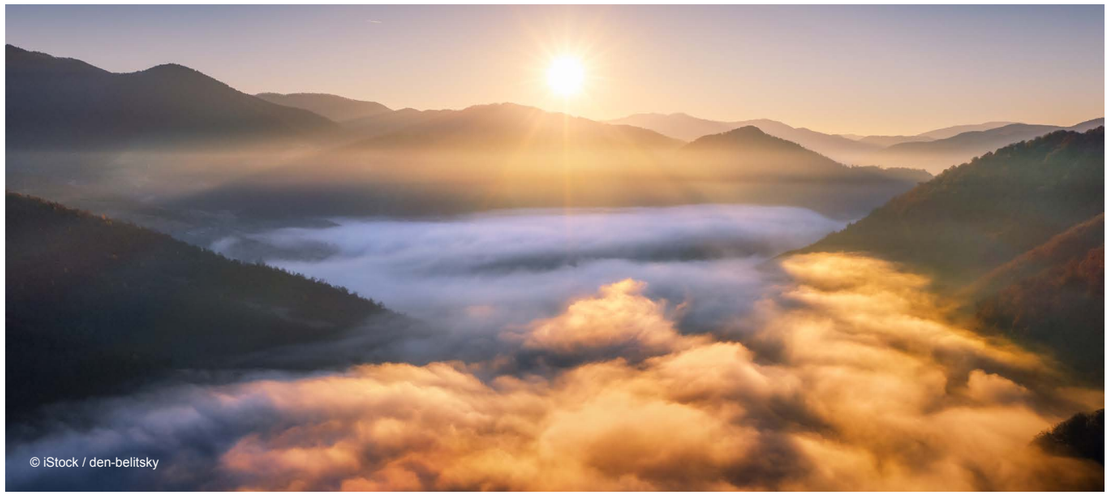
FIGURE 1

SHARE OF TOTAL CAP FUNDING, PER MAIN FUNDING STREAM[28,29]



Bearing in mind the large share of EU spending for the CAP, as well as the negative impacts that certain forms of intensive agriculture and productive forestry can have on biodiversity and the natural environment, the EU could exert a strong influence in diminishing the environmental harm caused by these activities.

Several European Court of Auditors reports found that the previous CAP (2014-2020) did not reach its environmental and climate ambitions: farmland emissions of greenhouse gases did not decrease,[30] farmland biodiversity is still declining,[31] and CAP subsidies are more likely to promote greater – rather than more efficient – water use.[32]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Even research funded by the European Commission acknowledges the limitations of the CAP, with its latest evaluation concluding that "the combined effects of the CAP have not been sufficient to counteract the pressures on biodiversity from agriculture, both in semi-natural habitats and in more intensively managed farmland." A similar, but less significant pattern, was observed for forest habitats and species.[33]

Worryingly, during the previous CAP period, 20% of EU farmers received approximately 80% of the agricultural support money, as area-based payments mean that the bigger a farm is, the more EU subsidies it can receive.[34] An issue of social fairness therefore also exists, and is evident in the difficult economic situation of small farms[35] and recent protests across Europe.

The revised CAP, which entered into force in 2023 and will be in place until at least 2027, has seen modest increases in its environmental sustainability ambitions compared to the previous iteration. Most importantly, green funding (for biodiversity and climate) has been increased, and the scope of GAECs has been extended. They include, for instance, mandatory crop rotation and requirements related to keeping a minimum soil cover.[36] However, in early 2024, the European Commission announced that it will relax CAP rules and controls, including by ending GAEC requirements for farms of at least 10 hectares to keep 4% of land for non-productive elements, and making other measures intended to make farming more sustainable voluntary. [37,38,39]

The CAP appears inadequate to prevent environmental harm in agriculture and forestry. Several of the funding streams under the CAP can be considered biodiversity harmful as they allocate funding that encourages large-scale unsustainable farming or forestry practices. In particular, as noted in several studies (e.g., from the OECD,[40] Wageningen University and the Dutch Environmental Assessment Agency[41]), direct support in the form of area-based income support incentivises an increase in industrial livestock numbers or the expansion of crop production under conventional farming, which can harm the environment by:

- Increasing greenhouse gas emissions (including by draining peatlands to expand agricultural areas);
- Worsening air quality;
- Contributing to an unsustainable use of natural resources (e.g., water use, increase in land area needed to grow crops used as cattle feed);
- Polluting the land and water bodies (e.g., via excessive nitrogen and phosphorus application and via pesticides);
- Adversely impacting biodiversity (via the declining surface area and fragmentation of natural habitats and the effects of pollution).

Based on this understanding of which type of subsidy is harmful within the CAP, the following were identified as BHS:

- All area-based direct income support under the EAGF and the EAFRD (see Box 5-1), excluding eco-schemes[42] and half of the funding to areas facing natural constraints.[43]
- Payment for cotton, which subsidises this water-demanding crop in arid regions of the EU, mainly Greece and Spain.

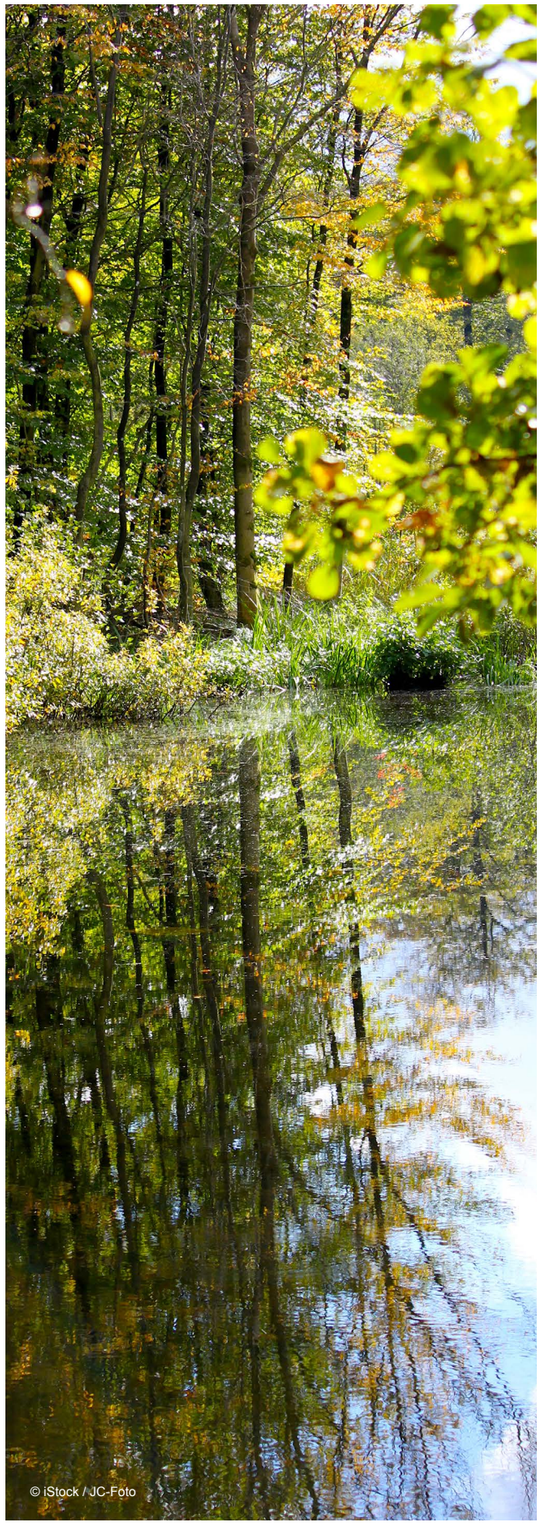
This approach is conservative, presenting a lower limit of potential BHS, considering that it does not include sectoral support under the EAFG[44] and investment support under the EAFRD,[45] both of which are likely to contain subsidies directed towards intensive conventional farming that harms biodiversity. It also does not take into account how eco-schemes are organised nationally.

WHAT ARE THE AREA-BASED DIRECT INCOME SUPPORT MEASURES INCLUDED IN THE CAP?

Some CAP subsidies are allocated to farmers and foresters in proportion to the size of productive land they have or to the number of animals they raise. This means that the larger their enterprise, the more CAP subsidies they can receive. The following CAP subsidies operate in this way:

- **Basic income support for sustainability (BISS)**: annual area-based decoupled payment paid for all eligible hectares.[46]
- **Coupled income support (CIS)**: support paid per animal or hectare, for specific sectors.[47] About 70% of CIS is allocated to ruminants and grazing livestock.[48]
- **Complementary income support for young farmers (CISYF)**: annual payment per eligible hectare or annual lump sum, specifically targeted at young farmers who are set up for the first time and who are entitled to basic income support.[49]
- **Complementary redistributive income support for sustainability (CRISS)**: annual decoupled payment per eligible hectare to farmers entitled to basic income support, specifically targeted at smaller or medium-sized farms.[50]
- **Support for areas facing natural constraints (ANC)**: annual payment per eligible hectare to compensate farmers for disadvantages to which their agricultural production is exposed due to natural or other specific constraints in their area.[51]

Support to specific groups, such as farmers operating in areas with natural constraints and young farmers that contribute to generational renewal, may still be warranted. What is important is to ensure that the mechanisms via which the subsidies are allocated achieve their desired social outcomes while not encouraging practices that are harmful to biodiversity. The design of current CAP rules fails to ensure there are no BHS in these mechanisms.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A higher, more uncertain estimate is also presented, to understand the range that BHS within the CAP may amount to. **This higher estimate, presenting an upper limit of potential BHS, includes:**

- All funding included in the lower limit estimate.
- 60% of investment support under the EAFRD[52] (i.e., funding that is not paired with any environmental and climate objectives of the Fund).[5354] This assumption is based on the biodiversity tracking methodology, which indicates that 40% of this Fund needs to contribute to biodiversity positive outcomes. An analysis of national CAP Strategic Plans found that interventions under EAFRD are mostly productive investments for farm modernisation to improve competitiveness, including, for example, in irrigation (which risks promoting overproduction of irrigated crops due to a lack of proper safeguards).[55] Hence, these are likely to uphold current agricultural practices that harm biodiversity.
- 60% of sectoral support under the EAGF (i.e., funding that is not allocated to eco-schemes), which has been determined based on the same assumption related to biodiversity tracking methodology. The same analysis of national plans found that sectoral support has mostly been designed to address economic objectives, whereas the focus on climate- or sustainability-related activities is very limited. It is therefore reasonable to assume that at least part of it will support conventional farming practices that are harmful to biodiversity.[56,57]

The upper and lower limits of potential BHS within the CAP are presented in the table below. An in-depth analysis of national CAP Strategic Plans specifically investigating harmful subsidies would be required to understand the full picture and obtain a more precise upper estimate of BHS.

TABLE 1

POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES IN THE CAP

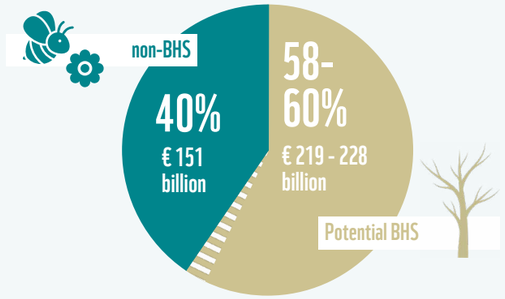
FUNDING STREAM	HARMFUL EFFECTS ON BIODIVERSITY	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
EAGF: DIRECT INCOME SUPPORT (EXCLUDING ECO-SCHEMES)	Direct support in the form of area-based income support incentivises an increase in industrial livestock numbers or the expansion of crop production under conventional farming, which harms the environment and biodiversity.	€ 30.06 BILLION	€ 30.06 BILLION
EAGF: PAYMENT FOR COTTON	This funding stream exclusively subsidises this water-demanding crop in arid regions of the EU, mainly Greece and Spain.	€278 MILLION	€278 MILLION
EAGF: SECTORAL SUPPORT	Sectoral support has mostly been designed to address economic objectives, whereas the focus on climate- or sustainability-related activities is very limited. It is therefore reasonable to assume that at least part of it will support conventional farming practices that are harmful to biodiversity. 60% of the funding that goes towards the specific objective under which direct income support is provided, while not being paired with any of the environmental and climate objectives at the same time, is counted as BHS.	€0	€1.12 BILLION
EAFRD: SUPPORT FOR AREAS FACING NATURAL CONSTRAINTS	Direct support in the form of area-based income support incentivises an increase in industrial livestock numbers or the expansion of crop production under conventional farming, which harms the environment and biodiversity. As 50% must be allocated to environmental and climate objectives, only 50% is counted as BHS.	€ 1.01 BILLION	€ 1.01 BILLION
EAFRD: INVESTMENT SUPPORT	An analysis of national CAP Strategic Plans found that these interventions are mostly productive investments for farm modernization to improve competitiveness (e.g. in irrigation) and are likely to uphold current agricultural practices that harm biodiversity. 60% is counted as BHS.	€0	€97 MILLION

We find that at least **58-60% of CAP funding under the current EU budget can be considered harmful to biodiversity**, which represents €219.4–225.1 billion for the period 2021-2027 (Figure 2) or **€31.35–32.67 billion annually**. Considering that forestry subsidies are only allocated via the EARFD, which contains less BHS, forestry subsidies are lower than those for agriculture. A more in-depth analysis of spending at Member State level would be required to give a separate estimate for these two sectors.

Annual BHS in agriculture and forestry roughly amount to the whole annual spending of national governments such as Croatia and Luxembourg.[58]

FIGURE 2

CAP FUNDING, SPLIT INTO BHS/NON-BHS, 2021-2027

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OTHER ADVERSE IMPACTS OF AREA-BASED INCOME SUPPORT

In addition to encouraging farming practices that are harmful to biodiversity, WWF and other NGOs conclude on the basis of available literature that direct support per hectare or number of animals is not an efficient tool to stabilise farming income.[59] Such support continues to favour the biggest farms and to feed into high land prices, which slows down the generational renewal the sector desperately needs.[60] This has been the case in the new CAP, as for almost half of the coupled income support interventions,[61] no mechanisms are applied to target support specifically to small farms.[62]

The view of WWF is that mass demonstrations by farmers across Europe testify to the difficulty that many in the sector experience in securing a decent income. EU-level policy development is also complicated by the differences between Member States. Discussions are only just beginning on what a just transition might look like for farmers and land managers.[63]

Outside the CAP framework, a number of agriculture- and forestry-related BHS are also allocated by EU Member States. One major sector related to agriculture and forestry is **bioenergy**. Currently the main source of renewable energy across the EU,[64] bioenergy is mostly used as a heat source (74.6%), but also for electricity generation (13.4%) and for producing biofuels (12%).[65]

Renewable energy means energy from renewable, non-fossil sources; as such, a source of energy being renewable does not mean that its environmental impacts are necessarily positive (or indeed beneficial in climate terms). On the contrary, many sources of bioenergy can be harmful to both nature and climate. Bioenergy is produced from solid biomass such as trees, crops, grass or food waste. Leaving aside climate impacts, bioenergy production can lead to land-use change, where natural habitats are converted to plantation forests or arable fields, with obvious detrimental effects for biodiversity. These plantations can themselves have harmful effects: reduction of water quantity and deterioration of its quality, increased use of harmful inputs (pesticides, fertilisers), and reduction in soil quality. Whether and to what extent negative impacts occur greatly depends on the biomass type, where the land is located, and management practices.[66] For example, the use of most forms of primary woody biomass, even including fine woody debris, if extracted at significant levels, can have seriously negative impacts on biodiversity.[67]

In 2022, direct subsidies allocated by Member States to biomass as an energy source amounted to €15 billion. Reporting from the European Commission did not indicate the type of biomass receiving support, so it is not possible to estimate how much of this total is likely to harm biodiversity. Malta was the only Member State that did not subsidise biomass at all. Conversely, several Member States heavily subsidised biomass compared to other sources of renewable energy, notably Latvia, Denmark and Sweden.[68]

Indirect subsidies

A number of indirect BHS are also allocated to the agriculture and forestry sectors at the national level. Notably, several Member States offer tax reductions or tax exemptions for fertilisers and pesticides.[69] While the research did not go into more detail, two examples are given in the textbox here on the side.

EXAMPLES OF INDIRECT BHS IN THE AGRICULTURE SECTORS OF EU MEMBER STATES

Reduction of Value Added Tax (VAT) for imports of certain agricultural products, Spain. This VAT reduction applies to several products, including fertilisers and pesticides, for which the tax is reduced from 21% to 10%. This subsidy incentivises the production and use of these products, leading to adverse environmental impacts such as biodiversity loss, soil degradation and pollution. This runs counter to the polluter pays principle. In 2020, this BHS had a budgetary impact of €290 million. If the subsidy was abolished, the use of fertilisers and pesticides would decrease by 3.2% in the country.[70]

Reduction of VAT for pesticides, Romania. The VAT for pesticides and other plant protection products in Romania has been reduced from 19% to 9%, leading to an estimated tax revenue shortfall of €86 million in 2019 and €66 million in 2020. The removal of this BHS would reduce demand for these products by 2.93%, which amounts to a reduction of approximately 265 tonnes of pesticides per year.[71]

FISHERIES

Direct subsidies

The **Common Fisheries Policy (CFP)**[72] is the cornerstone of the EU approach to ensuring long-term sustainability of fisheries and a fair standard of living for the fishers. The main funding mechanism that supports implementation of the CFP is the **European Maritime, Fisheries and Aquaculture Fund (EMFAF)**.[73] The EMFAF covers the period from 2021 to 2027, and its total budget is €7.8 billion.[74] Aiming to support long-term environmental, economic and social sustainability promoted by the CFP, the EMFAF is designed around four priorities:

1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources.
2. Fostering sustainable aquaculture activities, and processing and marketing of fishery and aquaculture products, thus contributing to food security in the Union.
3. Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities.
4. Strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean and sustainably managed.

For each of the priorities, a set of specific objectives is defined, which are then further detailed as concrete types of interventions that can be supported through the fund. Specific interventions are designed and implemented at Member State level, on the basis of operational programmes negotiated between Member States and the European Commission; nevertheless the overall financial envelope of the EMFAF is allocated to each specific objective in a total eligible amount. While nominally the CFP and EMFAF seek to promote sustainability, the financial support extended to fishing or fishing-related activities can lead to outcomes that are harming the marine environment and depleting fish stocks.

A significant body of research exists aiming to classify financial support/subsidies provided in the fisheries sector as beneficial, ambiguous or harmful, based on their effect on the marine environment and the status of fish stocks.

- **Capacity enhancing subsidies** are those that incentivise overcapacity or overfishing. They support capital inputs and infrastructure investments that artificially reduce costs or enhance revenue (e.g., vessel construction, renewal and modernization.)[75]
- **Ambiguous subsidies** are those that may lead to positive or negative impacts on the environment depending on how the subsidy programmes are designed and implemented. These include fishers assistance (e.g., insurance programmes, insurance for loss of earnings, retraining, etc.) and income support programmes, which may lead to increased fishing capacity and fishing effort, resulting in overexploitation of the resources.[76] Vessel cessation programmes (permanent and temporary) are also ambiguous; in principle, these programmes lead to fewer vessels in operation or a reduction of certain fishing methods with a high environmental footprint, but they have a limited impact if aimed at fishing enterprises that have a comparatively small footprint. This can represent a lost opportunity to meaningfully contribute to sustainability and conservation. The prevailing approach in the literature is to consider ambiguous subsidies as negative until proven otherwise.[77]

The EMFAF *a priori* excludes certain operations (e.g. building new fishing vessels, increasing the power of fishing vessels) and sets conditions to prevent harmful effects, including indirect effects (e.g., certain investments can be supported only in segments of the fishing fleet without structural overcapacity). However, the true effects of subsidies can only be determined after the fact, and upfront management systems can never guarantee that harmful effects will be avoided. This is the case especially in framework programmes such as the EMFAF where specific measures are designed and implemented at Member State level; even if contributing to the same objective of the EMFAF, this decentralised approach opens the door for variations in measures designed and different standards in considering their "harmfulness". In addition, the EMFAF still contains a number of measures that could be harmful, such as fleet support measures for vessels up to 24 metres in length, first purchase of a second-hand vessel by young fishers and vessel engine modernisation.


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To estimate the scale of harmful subsidies within the EMFAF, we determined which funding objectives could support harmful activities by analysing the indicators used to monitor progress. Indicators provide a good signal as to what actions could be funded. For example, the indicator "new production capacity" points to a possible increase in fishing capacity and resource use.

Four objectives were identified where both capacity enhancing and ambiguous subsidies could occur, leading to adverse impacts on marine ecosystems and fish stocks: i) strengthening economically, socially and environmentally sustainable fishing activities; ii) support for permanent and temporary cessation; iii) promoting a level playing field in outermost regions; and iv) sustainable aquaculture production.

For each of the four objectives, indicators were classified as i) those that could lead to harmful effects, and ii) those that are likely to lead to harmful effects. The ratio of both types of indicators to the total number of indicators under the funding objective was used to set the upper and lower limits of the potential amounts of harmful subsidies:

- Ratio of indicators that are likely to lead to BHS to the total number of indicators is the lower limit.
- Ratio of indicators that could lead to BHS to the total number of indicators constitutes the upper limit.

The box below shows indicators used in the calculation, while findings are summarised in Table 2 below.

INDICATORS USED TO DETERMINE LOWER AND UPPER LIMITS OF POTENTIAL BHS

Indicators that are likely to lead to BHS (used for lower limit BHS assessment)

- Jobs created (fishing and aquaculture) – potential to increase the size of individual operations, increasing pressure and impacts on the marine ecosystems and fish stocks
- Businesses created (fishing and aquaculture) – potential to increase the number of operations, leading to increased impact on marine ecosystems and fish stocks
- Businesses with high turnover (fishing and aquaculture) – potential to selectively support larger enterprises with larger impacts on marine ecosystems and fish stocks
- Energy consumption leading to CO_2 emissions (fishing and aquaculture) – potential to maintain or increase required infrastructure (e.g., vessels to fish or maintain aquaculture farms) through measures designed to mitigate climate change impacts, but which may continue or increase pressure on marine ecosystems and fish stocks
- Jobs maintained (fishing and aquaculture) – potential to ensure continuation of businesses that would otherwise become unprofitable, maintaining the scale of impact on marine ecosystems and fish stocks
- New aquaculture production capacity – potential to increase the size of existing operations and their impact on marine ecosystems
- Aquaculture production maintained – potential to ensure continuation of businesses that would otherwise become unprofitable, maintaining the scale of impact on marine ecosystems
- Investments induced (aquaculture) – potential to enlarge individual businesses or increase the size of the sector as a whole, leading to increased pressures on marine ecosystems

Indicators that could lead to BHS (used for upper limit BHS assessment)

All indicators used for lower limit BHS assessment, plus:

- Persons benefitting – potential to increase attractiveness of the sector which could, if proper sustainability measures are not put in place, lead to further growth and increase overall pressure and impacts on marine ecosystems and fish stocks
- Entities benefitting from promotional and information activities – potential to increase attractiveness of the sector, which could lead to overall growth, potentially increasing impacts on marine ecosystems and fish stocks (if proper sustainability measures are not put into place)
- Vessels withdrawn – potential to remove smaller vessels with limited impacts on marine ecosystems and fish stocks, while larger enterprises remain (i.e., lost opportunity to drive meaningful change)

TABLE 2

POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES IN EMFAF

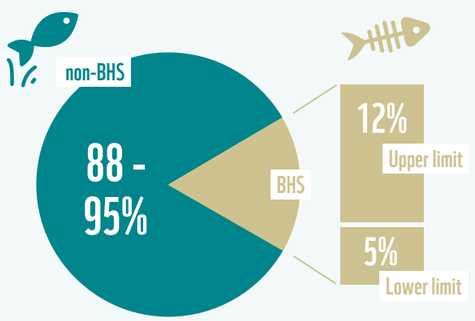
FUNDING OBJECTIVE	HARMFUL EFFECTS ON MARINE ENVIRONMENT AND FISH STOCKS	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
STRENGTHENING ECONOMICALLY, SOCIALLY AND ENVIRONMENTALLY SUSTAINABLE FISHING ACTIVITIES	Increase in capacity through investments in fishing vessels, and support programmes and similar for development of businesses. This can lead to an increase in fishing effort and numbers of vessels in operation, increasing the pressure on fish stocks and impacts on the marine environment.	€26 MILLION	€51 MILLION
SUPPORT FOR PERMANENT AND TEMPORARY CESSATION	Support may be provided for fishers with limited impact on overall fishing effort and specific stocks, leading to limited positive impact.	€1 MILLION	€40 MILLION
PROMOTING A LEVEL PLAYING FIELD IN OUTERMOST REGIONS	Supporting costs incurred by operators in fishing, farming, processing and marketing from the outermost regions may lead to overall increase in fishing effort and overcapacity.	€6 MILLION	€13 MILLION
SUSTAINABLE AQUACULTURE PRODUCTION	Support can include various capacity enhancing and development measures aimed at increasing aquaculture operations, some of which may generate overall negative effects on the marine environment.	€24 MILLION	€32 MILLION

The available funding in the EMFAF on an annual basis is €1.114 billion. **Between 5% and 12% of the fund (€59 million – €138 million) may be distributed as biodiversity harmful subsidies each year**.

Even the lower limit of potential BHS is higher than what the EMFAF plans to spend on protecting and restoring biodiversity (€53.4 million annually). The upper limit is 2.5 times larger. Considering that the overall aim of the EMFAF funding is to ensure long-term sustainability of a sector that depends on a healthy and thriving ecosystem, redistribution of funding towards protection and restoration may be needed.

FIGURE 3

EMFAF FUNDING, SPLIT INTO BHS / NON-BHS (ANNUALLY)



Indirect subsidies

In addition to direct subsidies stemming from the EMFAF, the fisheries sector in Europe also benefits from indirect support, with fuel tax exemption being the most significant indirect subsidy.[78]

According to the Energy Taxation Directive (ETD)[79] Member States are exempt from taxation on "fuel for the purposes of navigation within Community waters (including fishing)". The subsidising value of the tax exemption depends on the fuel duties applied by Member States and on the level of the (fluctuating) fuel prices. Due to tax exemptions, fishers pay a lower price for fuel than the general public. This reduces the costs of fishing, potentially leading to an increase of fishing capacity and contributing to overfishing. It also allows certain fisheries, particularly those with a high fuel consumption and carbon footprint, to remain profitable. In that regard, this tax exemption is considered a BHS.[80]

In 2023, the EU fishing fleet consumed 1.81 billion litres of fuel.81 Using the minimum level of taxation applicable to motor fuels,82 which is €0.33/l, the fishing sector avoided paying approximately €597 million in taxes.

The revision of the Energy Taxation Directive is ongoing, and one of the main changes proposed is the elimination of the fuel tax exemption for the fisheries sector.

TRANSPORT INFRASTRUCTURE

Direct subsidies

Transport policy is a cornerstone of European integration and a major contributor to the EU economy, as it allows for the free movement of individuals, services and goods. The key policy for transport infrastructure is the **Trans-European Transport Network (TEN-T)**, which is instrumental for the development of coherent and high-quality transport infrastructure across the EU. The TEN-T aims to create sustainable and efficient transport services across the EU. Infrastructure under the TEN-T includes railways, inland waterways, short sea shipping routes and roads linking urban nodes, maritime and inland ports, airports and terminals.

The construction of new roads and railways has a significant probability of leading to habitat and ecosystem fragmentation, especially when this new infrastructure is built in areas that have otherwise been intact.[83] Fragmentation of habitats and ecosystems can lead to loss of biodiversity and/or further habitat degradation, if hydrological disruption or polluted run-off occurs. Other damages resulting from building of new road and railway infrastructure include noise pollution once the infrastructure becomes operational, as well as climate impacts. It is critical to note that this analysis makes no assumptions regarding the climate impacts of transport infrastructure, in particular rail infrastructure. It is possible that transport infrastructure, depending on implementation and use, may have positive climate impacts, and trade-offs between biodiversity and climate impacts have to be considered on a project-by-project basis.

Funding in the transport sector focuses on various aspects, from infrastructure upgrades and expansion, to transport management and encouragement of modal shift. When it comes to BHS in the transport sector, new infrastructure, particularly new road and railway infrastructure, should primarily be considered harmful to biodiversity. The data available on how funds are spent does not allow to distinguish between new infrastructure and upgrades to infrastructure, so the amounts presented here will include funding for upgrades also. However, these amounts do not include the modernisation of infrastructure, which is likely to be linked with the implementation of new technologies and thus unlikely to be harmful to biodiversity.[84] Such actions are indeed funded separately from new infrastructure and upgrades and thus excluded from funding amount calculations in this analysis. **Due to this lack of granularity in data, it is challenging to precisely determine funding allocated to new road and railway infrastructure.** Moreover, no recent EU-level assessment exists on the impacts of transport infrastructure on biodiversity. This means the upper limit estimates of BHS are rather high level.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Transport infrastructure is directly funded at both Member State and EU level. Multiple EU funds provide funding for new road and railway infrastructure, which most often centres around TEN-T infrastructure implementation. These are detailed below.

Connecting Europe Facility

The **Connecting Europe Facility** (CEF) is one of the main funding programmes supporting TEN-T implementation. The CEF has a total budget (2021-2027) of €33.71 billion, out of which **€25.81 billion is dedicated to transport** (CEF-T instrument).

CEF-T aims to support the building of new infrastructure in Europe or rehabilitate and upgrade existing infrastructure. Funding under CEF-T can be spent on both infrastructure projects and related needs around infrastructure. The areas covered by CEF-T include:

- Transport infrastructure: railways, inland waterways, maritime and inland ports, roads, rail-road terminals and multimodal logistics platforms
- Road safety and safe and secure mobility
- Multimodal passenger hubs
- Smart and interoperable applications for transport
- Transport infrastructure resilience.

The funding available through CEF-T is focused not only on big infrastructure projects that are likely to be harmful to biodiversity, but also other activities in the transport sector, such as passenger safety. This makes it hard to precisely estimate how much of the funding provided through CEF-T would classify as BHS.

According to data from the European Climate, Infrastructure and Environment Executive Agency (CINEA), in the first two years of the current funding period, €13.40 billion (or just over half of available funding) from the CEF-T instrument has been allocated.[85] From this, €10.11 billion (or 75.4% of funding spent) has been allocated to transport infrastructure. Assuming that the rest of the CEF-T instrument funding is allocated in similar proportions, we

can extrapolate that **€19.46 billion of CEF-T funding (or €2.78 billion annually) will be allocated to TEN-T implementation/infrastructure that could be harmful to biodiversity.**

Since CEF-T is an infrastructure development fund, there is a clear risk that any infrastructure project supported has an adverse impact on biodiversity. These projects are unlikely to be biodiversity positive, though mitigation measures can be taken to minimise negative impacts. It is therefore reasonable to assume that the biodiversity coefficient is 0%[86] and we consequently assume that 100% of the funding allocated to infrastructure can lead to harmful activities. We use this assumption to determine the upper end of possible BHS rather than a precise figure.

The **lower limit** of potentially harmful subsidies is based on the number of Member States that did not apply green budgeting principles and their total share of the EU budget (38%), and applying this percentage to the CEF-T funding that can be assumed to be allocated to TEN-T implementation/infrastructure.

From this, the range of potential BHS is from 38% to 100% of the total available funding in the CEF-T for TEN-T implementation/infrastructure. Details are presented in Table 3 below.

European Regional Development Fund

The European Regional Development Fund (ERDF) aims to strengthen economic, social and territorial cohesion in the EU, and as such provides funding for a wide range of activities. The fund is designed around five objectives; for the transport sector, the objective "Connected Europe" is most relevant. Under this objective, there are two main types of interventions supported:

- Developing and enhancing sustainable transport
- Developing a sustainable TEN-T.

Funding under the ERDF can support a range of projects, from road and railway reconstruction to multimodal transport expansion. Some of the infrastructure measures supported could have beneficial effects on biodiversity, such as nature protection.

Currently, €14.32 billion has been earmarked for spending under sustainable transport interventions and €8.32 billion under sustainable TEN-T interventions between 2021 and 2027. The categorisation of transport funding under the ERDF groups new infrastructure with upgrades; accordingly, while it is possible to estimate the amount of EU funding spent on new road or railway infrastructure, the figures are very high estimates, as the new build to upgrade ratio within each category is not known.

For road infrastructure, mostly related to TEN-T, €6.49 billion has been earmarked under the ERDF, along with €2.40 billion for railway infrastructure, also mostly related to TEN-T. In total **€8.33 billion (or €1.19 billion annually) under the ERDF has been earmarked for either new or upgraded transport infrastructure.**

While the ERDF overall is expected to contribute at least 40% of its budget to biodiversity-positive outcomes, none of the funding included here has received a biodiversity weighting according to the Commission methodology for tracking biodiversity spending. As we cannot be sure that any of this funding is biodiversity positive, we assume that 100% of the funding under measures for new infrastructure can lead to harmful activities to determine the **upper end** of possible BHS. The **lower limit** of potentially harmful subsidies is based on the number of Member States that did not apply green budgeting principles and their total share of the EU budget (38%), and applying this percentage to the ERDF funding earmarked for either new or upgraded transport infrastructure.

The range of potential biodiversity harmful subsidies is from 38% to 100% of the total available funding in the ERDF for new or upgraded road and railway infrastructure. Details are presented in Table 4 below.

TABLE 3
POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES FOR TRANSPORT INFRASTRUCTURE IN CEF-T

MEASURE	HARMFUL EFFECTS ON THE ENVIRONMENT, INCLUDING HABITATS	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
PROJECTS ON THE CORE OR COMPREHENSIVE NETWORK	Construction of new roads and railways can adversely impact habitats and ecosystems due to fragmentation, especially when this new infrastructure occurs in previously intact landscapes. Fragmentation of habitats and ecosystems can also potentially lead to a loss of biodiversity.	€1.06 BILLION	€2.78 BILLION

TABLE 4
POTENTIAL BHS FOR TRANSPORT INFRASTRUCTURE IN ERDF

MEASURE	HARMFUL EFFECTS ON THE ENVIRONMENT, INCLUDING HABITATS	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
NEWLY BUILT OR UPGRADED ROAD OR RAILWAY INFRASTRUCTURE	Construction of new roads and railways can adversely impact habitats and ecosystems due to fragmentation, especially when this new infrastructure is built in new areas. Fragmentation of habitats and ecosystems can also potentially lead to a loss of biodiversity.	€0.63 BILLION	€1.19 BILLION

Recovery and Resilience Facility

One thematic pillar of the green transition under the Recovery and Resilience Facility (RRF) is Recharge and Refuel. This makes railway and road infrastructure under TEN-T eligible for funding. Analysis prepared in 2022 by the Commission indicates that **total spending of €70.7 billion is planned on sustainable mobility (2021-2027)**, including TEN-T development.[87]

RRF spending is determined by each Member State, through its Recovery and Resilience Plan. This prohibits a more granular assessment to determine how much of the total investment is planned specifically for transport infrastructure, as assessment of Member States' Recovery and Resilience Plans is beyond the scope of this report. Accordingly, 100% of the planned €70.7 billion is assumed to potentially lead to harmful activities.[88] We use this assumption to determine a **very high upper limit** of EU direct funding that could be harmful to biodiversity. It is likely that the amount is much lower, but due to a lack of data and analysis, it is not possible to provide a more accurate estimate.

The **lower limit** of potentially harmful subsidies is determined based on the assumption that Member States fully apply the DNSH principle to all transport infrastructure activities outlined in their Recovery and Resilience Plans. A comprehensive implementation of the DNSH principle would bring the lower limit to 0% of spending on BHS. This seems unlikely, as existing research from environmental NGOs has indicated that the simplified DNSH principles as outlined in the RRF technical guidance by the European Commission for Member States have not been sufficiently applied and are unlikely to effectively prevent harm.[89]

Subsequently, the range of potential biodiversity harmful subsidies is from 0% to 100% of the total available funding in the RRF for sustainable mobility. Details are presented in Table 5 below.

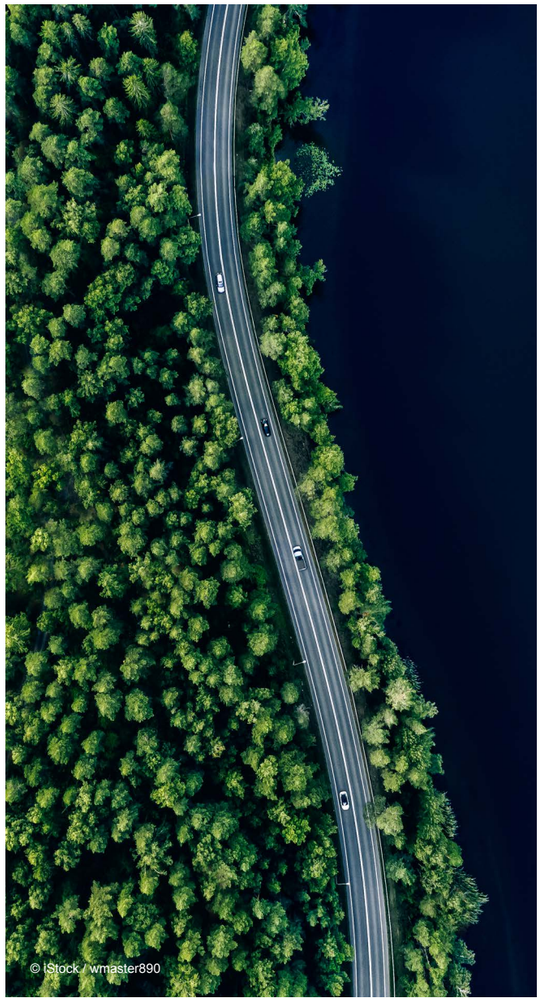
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TABLE 5
POTENTIAL BHS FOR TRANSPORT INFRASTRUCTURE IN RRF

MEASURE	HARMFUL EFFECTS ON THE ENVIRONMENT, INCLUDING HABITATS	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
SUSTAINABLE MOBILITY	Construction of new roads and railways can adversely impact habitats and ecosystems due to fragmentation, especially when this new infrastructure occurs in previously intact landscapes. Fragmentation of habitats and ecosystems can also potentially lead to a loss of biodiversity.	€0	€10.10 BILLION

WATER INFRASTRUCTURE: RIVER BARRIERS AND RESERVOIRS

The main threats to water resources and freshwater ecosystems in Europe come from water pollution, modifications to riverine land (e.g., floodplain drainage) and to water bodies (e.g., channelisation, construction of river barriers such as dams), water abstraction, droughts and floods.[90] Both surface and groundwater resources are affected by overexploitation, with significant volumes of water abstracted for irrigation in agriculture, industry and energy generation (including cooling of power plants and hydropower). Activities that lead to the pollution, degradation (e.g., dams, dredging, flood management infrastructure) or over-abstraction of water resources[91] can be considered as harmful, and funding allocated to such activities as biodiversity harmful subsidies.

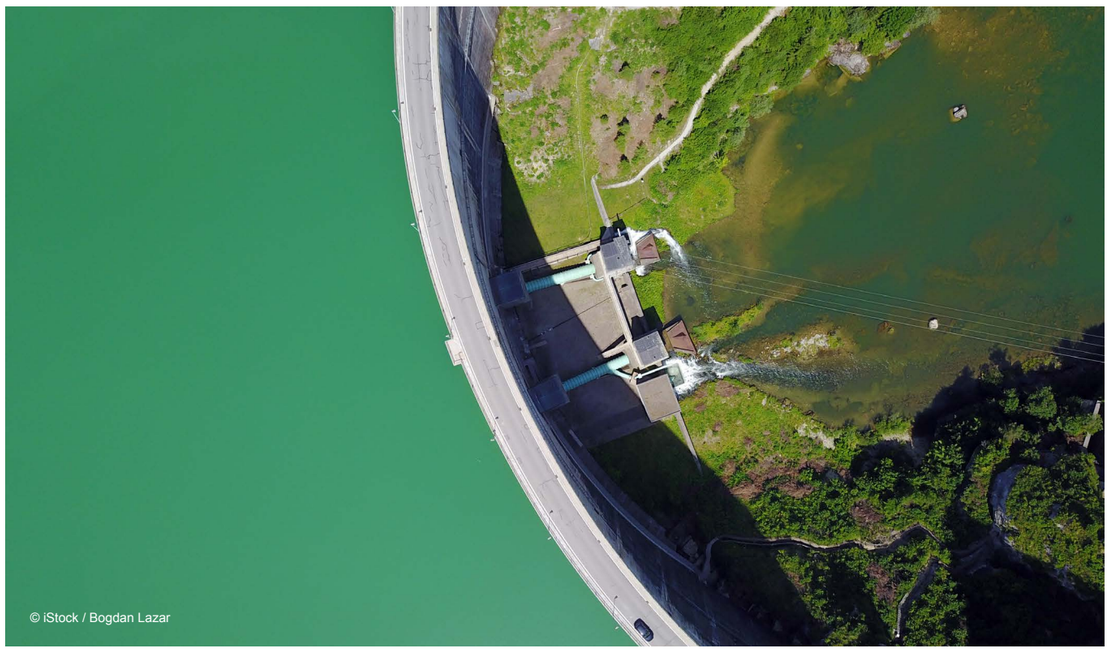
In this report, water pollution and use for irrigation are included in the analysis of CAP funding. This section focuses on other infrastructure whose construction directly alters freshwater ecosystems, such as flood defence barriers, dams and reservoirs.

Direct subsidies

Managing water resources in the European Union is governed by a well-developed set of directives that jointly aim to ensure that all water bodies in Europe (surface and groundwater) maintain or achieve good ecological status or potential. The Water Framework Directive (WFD) establishes a legal framework to protect and restore clean water in the EU and to ensure its long-term sustainable use. Its main implementation tools are the river basin management plans; developed at Member State level, these plans set out a comprehensive programme of measures that a country will implement to achieve WFD's objectives. The WFD is supported by more targeted directives including the Floods Directive.[92] The Floods Directive aims to reduce and manage the risks posed by floods to human health, the environment, infrastructure and property. It requires Member States, among other things, to prepare flood risk management plans focused on prevention, protection and preparedness. These need to be carried out in accordance with the WFD and the related river basin management plans.

While Member States are required to develop and implement measures to reach the objectives of EU water policy, there is no dedicated EU funding programme attached to water legislation; instead, these measures can be funded through programmes supporting other EU policy objectives, provided they are compatible with the measures relevant for water policy.

One such objective is "Greener Europe", set up under the EU's regional policy, which among other things enables financing for measures aimed at adapting to climate change and preventing climate-related risks (e.g., floods, droughts). The main funding programmes for this objective are the **European Regional Development Fund (ERDF)** and the **Cohesion Fund**.[93]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IN 2022,
€1.5 BILLION WAS ALLOCATED TO SUPPORT AND ENHANCE HYDROPOWER DEVELOPMENT

Climate mitigation, adaptation and risk-prevention measures traditionally include construction of infrastructure, such as flood control dams and reservoirs, or modifications to river channels like floodwalls, spillways, dykes and levees. This infrastructure can alter natural water flow patterns, disrupting ecosystems by changing habitats and reducing biodiversity, especially when it is not combined with mitigation measures. [94] Additionally, these structures may impede sediment transport and reduce the exchange of water with floodplains, altering ecosystems upstream and downstream (e.g., lowering the water table in floodplains, affecting biodiversity).[95]

To achieve the "Greener Europe" objectives, €18.4 billion annually is allocated through the ERDF and the Cohesion Fund. Out of this, €3.5 billion annually is allocated to measures aimed at mitigation and adaptation to climate change and prevention of climate-related risks. Some of this may be classified as biodiversity harmful subsidies.

Both ERDF and Cohesion Fund are expected to contribute at least 40% of their budgets to biodiversity-positive outcomes.[96] The remaining 60% of the funding may therefore lead to harmful activities, and we use that assumption to determine the upper end of possible BHS associated with water infrastructure. The lower limit of potentially harmful subsidies is determined based on the budget share of Member States that have not committed to the green budgeting principles compared to the total EU budget (i.e., 38%). The range of potential BHS is from 38% to 60% of the total available funding in the ERDF and the Cohesion Fund. Details are presented in Table 6 below.

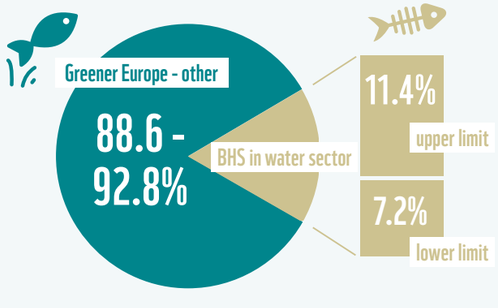
TABLE 6
POTENTIAL BHS IN WATER SECTOR

FUND	MEASURE	HARMFUL EFFECT ON BIODIVERSITY AND WATER	POTENTIAL BHS ANNUALLY – LOWER LIMIT	POTENTIAL BHS ANNUALLY – UPPER LIMIT
ERDF	PROMOTING CLIMATE CHANGE ADAPTATION AND DISASTER RISK PREVENTION AND RESILIENCE	Development of grey infrastructure to manage and mitigate these risks, which adversely affects ecosystems and biodiversity.	€1.21 BILLION	€1.91 BILLION
COHESION FUND	PROMOTING CLIMATE CHANGE ADAPTATION AND DISASTER RISK PREVENTION AND RESILIENCE		€117 MILLION	€185 MILLION

Considering the total annual budget of €18.404 billion available for the ERDF and Cohesion Fund, **anywhere between 7.2% and 11.4% of this funding could be directed to support activities in water infrastructure that are harmful for biodiversity. In monetary terms, this ranges from €1.329 billion to €2.098 billion on an annual basis.**

Even on the lower end, this significantly outweighs the funding allocated to the LIFE Programme – the only instrument in the EU exclusively dedicated to nature conservation. Annual LIFE funding is approximately €775 million, which is between 1.5 and 2.7 times less than the funding allocated to potentially harmful actions in the water sector.

FIGURE 4
POTENTIAL BHS (IN FRESHWATER ECOSYSTEMS) FUNDED THROUGH "GREENER EUROPE" OBJECTIVES



Indirect subsidies

The construction of hydropower plants severely degrades water ecosystems and leads to loss of biodiversity. Direct impacts include destruction or fragmentation of habitats, alteration of river flow, disruption of fish migration, and effects on sediment transport and erosion. Nevertheless, hydropower is eligible for support through indirect subsidies enabled through the Renewable Energy Directive. These subsidies can take the form of feed-in tariffs, feed-in premiums or tax exemptions.

Feed-in tariffs involve governments guaranteeing a fixed payment to hydropower producers for each unit of electricity they generate and supply to the grid. Feed-in premiums offer an additional premium on top of the market price for electricity generated from hydropower. Tax exemptions can involve waiving certain taxes or reducing tax liabilities for hydropower producers (e.g., exemptions from income taxes, property taxes, or VAT on equipment and materials used in hydropower projects).

While their mechanisms may be different, these subsidies have in common the aim to incentivise hydropower production through ensuring stable revenue, providing extra income to help offset the construction costs, or increasing the economic viability of hydropower projects through reduction of financial burden.

Specific support is decided at the Member State level, as well as any limits in its allocation. The latest report on energy subsidies in the EU estimates that a total of €1.5 billion was allocated to create favourable conditions for hydropower development in 2022 alone.[97]

PUTTING BIODIVERSITY HARMFUL SUBSIDIES INTO PERSPECTIVE

Biodiversity has plummeted by an alarming 69% between 1970 and 2018.[98] As mentioned at the beginning of this report, investing in biodiversity conservation is needed – but it is not enough to turn the tide of biodiversity loss and its consequences for people and the economy.[99] Activities in numerous sectors lead to ecosystem degradation, destruction and fragmentation of habitats, and loss of wildlife. Many of these activities receive financial support – subsidies in order promote development or maintain economic interests. Phasing out such harmful subsidies is crucial to ensure a level playing field between nature conservation and sectoral policies.

Between €34.43 billion and €48.87 billion annually may be classified as biodiversity harmful subsidies in the EU during the 2021–2027 Multiannual Financial Framework. Spanning sectors such as agriculture and forestry, fisheries, transport and water, these funds can potentially counteract biodiversity conservation efforts by enabling harmful practices to continue.

The range presented here should still be considered an estimate; constraints in available information on potentially harmful subsidies and data on relevant amounts did not allow precise quantifications. In that sense, both upper and lower limit figures present estimates that may not become a reality in 2027, at the end of the current EU budget cycle. The difference between the lower and upper limit reflects a degree of certainty that activities considered when determining either limit may be harmful to biodiversity; assessment of the upper limit includes also activities where additional research and field confirmation will be required to determine if they were indeed harmful.

FIGURE 5

COMPARISON OF POTENTIAL BHS ACROSS ANALYSED SECTORS (ANNUALLY)

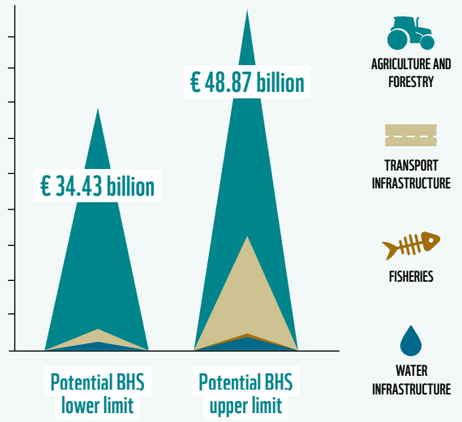


TABLE 7

OVERVIEW OF POTENTIAL BIODIVERSITY HARMFUL SUBSIDIES (DIRECT SUBSIDIES, ANNUALLY)

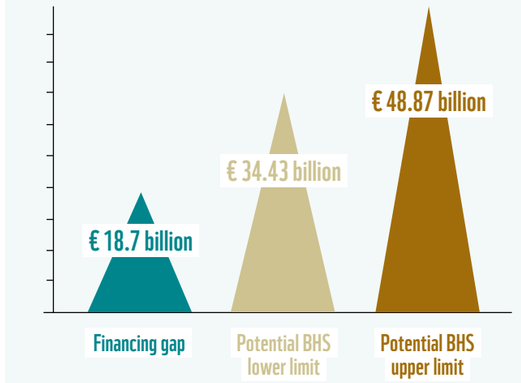
SECTOR	POTENTIAL BHS – LOWER LIMIT	POTENTIAL BHS – UPPER LIMIT	FUNDING PROGRAMME
AGRICULTURE & FORESTRY	€31.35 BILLION	€32.57 BILLION	CAP
FISHERIES	€60 MILLION	€140 MILLION	EMFAF
TRANSPORT INFRASTRUCTURE	€1.69 BILLION	€14.07 BILLION	CEF-T, ERDF AND RRF
WATER	€1.33 BILLION	€2.09 BILLION	ERDF AND COHESION FUND
TOTAL	**€34.43 BILLION**	**€48.87 BILLION**	

Nature conservation receives much less dedicated funding. The European Commission undertook a study to determine financing needs for achieving the EU Biodiversity Strategy to 2030. That study also estimated the financing gap – the difference between the total financing needs and total expenditures from the EU and Member States – at €18.7 billion per year from 2021 to 2030.[100]

Comparing this gap with potential biodiversity harmful subsidies, **the potential lower amount allocated towards biodiversity harmful subsidies is almost double the financing gap for nature conservation. The estimated upper amount of biodiversity harmful subsidies is more than two and a half times larger than the financing gap. In theory, repurposing funding allocated to potential biodiversity harmful subsidies is more than enough to cover the financing gap needed to meet the EU's nature objectives.**

FIGURE 6

COMPARISON OF BIODIVERSITY FINANCING GAP AND POTENTIAL BHS (LOWER AND UPPER END, ANNUALLY DURING 2021 – 2027 MFF PERIOD)



BIODIVERSITY FINANCING: NEEDS AND GAPS

Following the agreement of the EU Biodiversity Strategy to 2030, the European Commission undertook efforts to understand the total financing required to implement the strategy. More importantly, this work also sought to assess the current levels of funding allocated to biodiversity-related activities within the EU, and estimate the remaining financing gap. These findings were published in the report *Biodiversity financing and tracking*.[101] The EU Biodiversity Strategy to 2030 was costed based on the scope and components of the biodiversity targets, distinguishing between "baseline" biodiversity expenditure through to 2030, and additional expenditure needed to deliver the strategy. This yielded the total estimate of financing needed to successfully implement the strategy and achieve its goals at around €48.15 billion annually between 2021 and 2030.

Expenditure on biodiversity was assessed at EU and Member States, using targets/indicators identified as key milestones in various policies, strategies and programmes that are relevant for biodiversity. However, the effectiveness of expenditure in addressing biodiversity issues was not assessed in this analysis. Estimated expenditure on biodiversity averages €29.5 billion annually over 2021-2030, starting at €27 billion in 2021 and increasing to €32.5 billion in 2030. This estimate includes expenditure required at both the EU and Member State levels. The financing gap – the difference between needed investments and planned expenditures – was estimated at €18.7 billion per year from 2021 to 2030.

Since the preparation of this assessment, the EU has advanced towards the adoption of the Nature Restoration Law, which would set specific targets for restoration across many ecosystems (e.g., forests, wetlands, rivers, etc.). Achieving these targets by 2030 would likely require additional funding, so the assessed financing gap may also be an underestimate.

CASE STUDIES

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BELGIUM

SOWING THE SEEDS OF CHANGE: REVITALISING BELGIAN AGRICULTURE WITH NATURE-BASED SUBSIDIES

With approximately 45% of land dedicated to farming activities,[102] Belgium boasts a rich agricultural heritage. But this picturesque landscape is facing tough challenges, in particular when it comes to the subsidies that are meant to support our farmers. It's time to explore the environmental impacts of current subsidy practices, and shift towards more sustainable approaches.

Some countries have moved away from directly linking income support payments to specific agricultural products, but others continue to use this approach to support certain sectors. In Belgium, a portion of the direct payments made under the Common Agricultural Policy (CAP) goes specifically to beef farmers. In Flanders, around 11% of these payments are allocated to the beef sector, while in Wallonia it's more than 21%. This is because beef farming faces economic challenges in Belgium, and these payments are seen as crucial to support farmers and preserve grasslands.

This subsidy is paid per animal which incentivises increased livestock numbers. That benefits specialised beef cattle operations but excludes smaller or mixed farms that have fewer than 20 calves per year. Consequently, the subsidy inadvertently pushes farmers to maximise their production.

And it doesn't stop here. This approach has significant environmental consequences resulting in water and soil pollution from the nitrogen and phosphorus in manure. Additionally, methane emissions from ruminant digestion and nitrous oxide emissions from manure exacerbate the climate crisis. Added to this, Belgium's limited land availability and high land prices have pushed beef farms to prioritise efficiency above all else, leading to a greater reliance on feed crops and imported soy. This in turn contributes to deforestation and the conversion of natural land into vast soy fields overseas.


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A sustainable alternative lies in a nature-based subsidy system. While cattle farming can offer ecological benefits through grassland management and habitat preservation, these benefits only come to fruition when production is balanced with conservation. Instead of rewarding production alone, a nature-based subsidy would recognise farmers for providing ecosystem services and incentivise less intensive practices, reducing reliance on costly inputs like feed, artificial fertilisers and pesticides. By encouraging livestock reduction and extensive grassland management, this approach not only benefits biodiversity but also mitigates climate change impacts.

Redirecting subsidies towards a nature-based model is the only way to align economic incentives with environmental stewardship, ensuring a more sustainable future for Belgian agriculture. Public funds should serve public interests, supporting farmers in ways that safeguard our natural resources and contribute to the long-term health of our environment.

BULGARIA

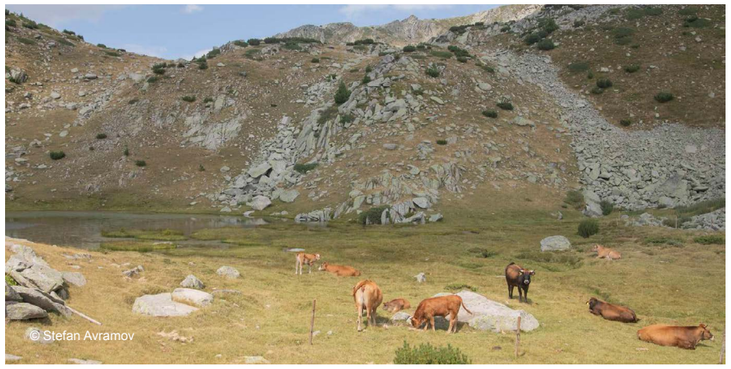
SENSITIVE GRASSLANDS IN BULGARIA THREATENED BY THE MISUSE OF PASTURE SUBSIDIES

Initially planned as a conservation measure for Bulgarian grasslands in national parks, pastoralism has become a prime example of the consequences of harmful subsidies. By stimulating farmers to bring ever larger herds of cattle up the mountains, the policy led to vegetation being trampled, water being polluted and wildlife being disturbed.

Bulgaria is home to three national parks: Pirin, Rila and Central Balkan. These parks, which encompass the country's highest mountains along with glacial lakes and diverse alpine and semi-alpine ecosystems, are a great source of national pride. The three parks are public land, dedicated to biodiversity conservation and research while supporting recreational activities and local livelihoods.

Historically, grazing areas were primarily opened up through managed fires. However, as numbers of Balkan chamois and livestock decreased, trees and shrubs started to overgrow previous pastures. Pastoralism, as part of the national EU-funded agricultural plan,[103] was intended to preserve open areas by grazing sheep and traditional cattle breeds. But the inclusion of heavy cattle, coupled with the challenges of controlling livestock in remote areas, has created a bigger problem instead of solving one.

National park directorates and researchers have extensively documented the adverse effects of heavy cattle on these delicate ecosystems, including pollution of lakes, erosion, damage to water sources, and a reduction in the richness of plant species. The local fauna is also impacted as competition for food and habitats with the Balkan chamois and conflicts with bears and wolves have risen. Furthermore, manure on mountain trails is disrupting the experience for the increasing number of visitors.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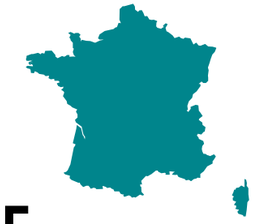
To mitigate the harmful effects of increased cattle, park administrations have requested €760,000[104] from the EU-funded Environment Programme.

While grazing is permitted in certain areas, the introduction of artificial stimuli for heavy cattle grazing in national parks has transformed a conservation initiative into a nature-harming subsidy. Following advocacy efforts by NGOs, the environmental ministry has decided to phase out support for grazing after 2025. Despite this decision, the agricultural ministry has not yet adjusted the agricultural plan accordingly.

Bulgaria must stop using EU subsidies to fund projects that harm nature. Instead, investments should be directed towards restoring the numbers of wild ungulates to maintain grasslands in national parks. In order to ensure that public money is used wisely to serve public interests, any new measure affecting these fragile ecosystems must be collaboratively designed with environmental experts, as well as closely monitored and continuously adapted.

FRANCE

CLEARCUTTING OUR WAY TO ENVIRONMENTAL CRISES: THE MISUSE OF EUROPEAN SUBSIDIES IN FRENCH FORESTS



All over France, vast clearcuts are destroying many diverse broadleaf forests adorned with ash, oak and spruce trees. Behind this reality lies the government's Forest Recovery Plan. Launched in 2020 and partially funded by the EU, it is currently a threat for both climate and nature.

Financed to the tune of 40% by the EU, the plan officially aims to protect forests, which are in decline. Nearly a quarter of all animal species in these woodlands are under threat,[105] while a mere fifth of French trees exceed the age of 100.[106]

But after only four years, the plan has already had numerous adverse effects on French forests, leading to 38% of plantation failure, the highest rate ever reported.[107] Nearly nine out of ten projects (88%) financed by the recovery plan in 2021 and 2022 involve clearcutting[108] – intensive operations that weaken ecosystems and result in an immediate release of carbon. Clearcutting brings risks such as soil compaction, decreased soil fertility and increased runoff carrying pollutants into nearby water bodies. It also contributes to flooding in downstream areas, posing risks to communities and infrastructure.[109]

The plantations established are mainly monocultures or have very low levels of diversity. The Douglas fir, an exotic species, is the most commonly planted tree with public subsidies of the French Recovery plan, despite not being particularly well suited to climate change.

In response to concerns raised by the Commission regarding the potential impact of the plan on habitats and biodiversity, France pledged to integrate biodiversity into private forest management plans by 2021.[110] However, as of 2024, this integration, facing a strong opposition of operators and private forest owners, has yet to be realised. Furthermore, no environmental impact assessment has been publicly conducted and 6,500 hectares of clearcuts directly imputable to the French Recovery plan were located in protected Natura 2000 reserves.[111]

In light of the concerning environmental impacts of the Forest Recovery Plan, France must urgently realign its forest management practices with conservation principles and European subsidy guidelines. Taxpayers' money should be used responsibly to foster resilient and thriving forests – one of our best allies in fighting climate change and the biodiversity crisis.

GERMANY

RIVERS AT RISK: THE IMPACT OF GERMANY'S SUBSIDIES FOR HYDROPOWER PLANTS ON BIODIVERSITY

Freshwater biodiversity is in crisis. This is especially true for migratory fishes, such as the Atlantic salmon. In Europe, migratory fish populations have declined on average by a staggering 93% since 1970.[112] Strongly contributing to this phenomenon are human-made barriers such as hydropower plants, which continue to benefit from public subsidies.

Like all EU member states, Germany committed to the objectives of the EU Water Framework Directive of bringing all surface waters to a good status by 2015, and at the latest by 2027. In reality, by 2021, only 8% of German rivers had reached a good or very good ecological state.[113] This lack of progress is primarily caused by extensive river regulation through dykes and dams, and pollution.

Hydropower harms fishes in many ways – by displacing and excluding them from critical habitats, and by injuring and killing them as they pass through the turbines. In Germany, around 8,300 hydropower plants[114] challenge conservation efforts.[115]

The vast majority of these plants – over 7,800 – are small-scale facilities (<1 MW) that contributed only 0.5% of the country's electricity generation in 2020[116]. Simply put, their role in advancing the energy transition is negligible, while their impact on ecosystems and biodiversity is massive. Yet German taxpayers' money contributes to keep them running: in 2019, more than 6,000 very small plants (≤ 500 kW) received subsidies[117] totalling around €143 million.[118]

In 2023, there was an attempt to change the system so future very small hydropower plants wouldn't receive subsidies. Germany's Renewable Energy Sources Act was amended, and its first draft was ecologically promising.[119] But due to aggressive lobbying efforts, the amendments were altered substantially. Today, old and new hydropower plants continue to be subsidised.

This creates conflicting goals that are difficult to resolve: Germany's Renewable Energy Sources Act hinders the country's progress towards meeting the objectives of the EU Water Framework Directive and other international biodiversity agreements. This logical contradiction is made possible by declaring hydropower operation of "overriding public interest".

To fulfil the objectives of the EU Water Framework Directive and protect our riverine ecosystems, Germany has to tackle this contradiction. Small hydropower operations should no longer be declared of "overriding public interest". Public interest for healthy rivers must prevail as taxpayers' money serves as a crucial resource to drive positive change. By redirecting nature-harming subsidies towards nature-positive projects, Germany can pave the way for a more sustainable and equitable future, where rivers teem with vibrant wildlife.

ITALY

FROM INTENSIVE LIVESTOCK FARMING TOWARDS GREENER A ND FAIRER SOLUTIONS IN ITALY

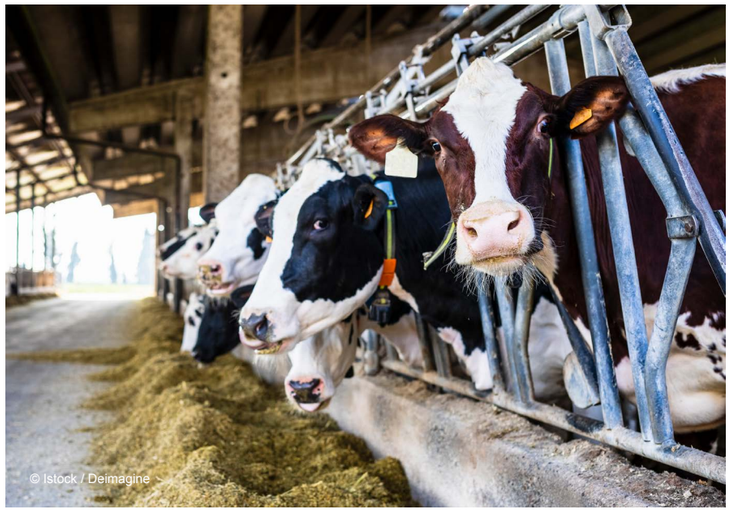
In Italy's lush landscapes, European farm subsidies can have undesirable consequences. Instead of helping local communities, EU money that has too few conditions attached is channelled by the Italian government to big farms and intensive livestock production. This is creating an unfair divide with smaller producers while harming the environment.

From 2023 to 2027, the EU will allocate €36.54 billion to Italian agriculture through the Common Agricultural Policy (CAP). Most of these funds will exacerbate inequalities within the sector and promote practices that are harmful for the environment and the climate – especially intensive livestock farming. In Italy, a staggering 80% of funds flow to just 20% of farms[120] – these are large agribusinesses that are often the most environmentally damaging. This includes two-thirds of intensive livestock operations concentrated in just three regions: Emilia-Romagna, Lombardy and Veneto.

On top of this, the Italian government is misusing eco-schemes[121] that are part of the CAP. The way it disburses these funds often ends up promoting livestock production, rather than actively fostering eco-friendly farming methods as was originally intended under the CAP.

For instance, a significant portion of the eco-scheme budget (42%) is allocated to improving animal welfare and reducing antibiotic use in livestock farming (eco-scheme 1),[122] but the actual decrease in antibiotic usage is expected to be minimal.[123] This scheme does little to encourage farms to reduce the number of animals they keep, which could help combat climate change. Similarly, the eco-scheme aimed at crop rotation (eco-scheme 4) has not selected the targeted crops with serious agronomic criteria, but instead encourages the production of feed for animals. It erroneously allows for the use of pesticides for corn and soy production,[124] detracting from potential environmental and biodiversity advantages.

Italy's challenge with the CAP lies in overcoming the tendency to favour large companies with its subsidies, and reducing the heavy focus on intensive livestock farming. Today, this approach is hugely undermining the path to sustainable agriculture. It is vital for the government to redirect taxpayers' money, shifting from supporting harmful practices to fostering genuine environmental improvements and providing equitable assistance to smaller farms. Such a strategic redirection will help the country achieve a healthier balance between agriculture and the natural environment.



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MEDITERRANEAN SEA

REELING IN THE DAMAGE: THE URGENT CASE FOR REDIRECTING EU FISHING SUBSIDIES

Though the Mediterranean Sea covers less than 1% of the global ocean surface, it is home to one in ten known marine species.[125] The region's economy depends heavily on these marine resources. Fishing is one of the most important socioeconomic activities in the Mediterranean, generating revenues of €6.6 billion and supporting more than 450,000 jobs.

But the Mediterranean is in peril. Climate change, pollution, overfishing and biodiversity collapse are some of the impacts of human activities putting its health in jeopardy, and with it, the resources the fisheries sector depends on. Fishing pressure, although lower than in the past, is still double what is considered sustainable.[126] The consequences ripple out across the entire sea basin. For example, over half of the shark and ray populations are at risk of extinction.[127] As key ecosystem regulators and vital carbon sinks,[128] the declining numbers of sharks serve as a critical indicator of the Mediterranean Sea's deteriorating health.

Behind this reality lies an absurd truth: public money in the Mediterranean is aggravating overfishing instead of solving it. Between 2014 and 2020, over €1,455 million was spent on fisheries subsidies in the EU Mediterranean.[129] The largest industrial fleets received the most subsidies, while small-scale vessels received just 3% of payments, despite making up 75% of the fleet.[130] The result is that governments incentivise fleet overcapacity and overfishing by artificially reducing costs or enhancing revenue for the fisheries sector. Up to 38% of the EU budget to support fisheries and maritime activities in the region could be harming the long-term health of the Mediterranean and of its fishing sector.[131]

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Not only is it an environmental catastrophe, but it's also socioeconomically preposterous: when fishers rely on subsidies in a depleted sea and struggle with fuel costs during an energy crisis, the industry's future is at risk. Simply put, to be viable, an industry should not depend more on subsidies than on the natural resources it uses.

Taxpayers' money must no longer be wastefully used to harm the Mediterranean Sea and those whose livelihoods depend on its health. Instead, EU subsidies must be invested in the effective management and conservation of our natural marine resources. This will ensure a viable future for coastal communities and put truly sustainable seafood on our plates, all while taking action to combat the climate and nature crises.

NETHERLANDS

BLACK-TAILED GODWIT RUNS INTO TROUBLE BECAUSE OF COMPETITION BETWEEN EU SUBSIDIES

The black-tailed godwit graces the Dutch landscape with its vibrant orange-red plumage during breeding season, as its distinctive calls resonate across the marshes. Every year, thousands return to the Netherlands from Africa, signalling the onset of spring and the renewal of life in the grasslands. But for how long?

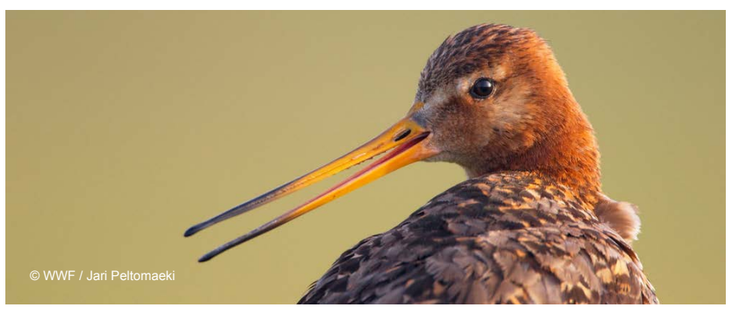
In the Netherlands, 60% of the land is dedicated to agriculture, which has a substantial environmental impact. Agricultural lands also serve as vital habitats for numerous species, such as the black-tailed godwit, our national bird.[132] Enhancing the quality of the agricultural landscape is crucial for protecting the habitats of these birds and our environment.

Under the EU's Common Agricultural Policy, farmers have long been compensated for landscape management activities, such as monitoring nests and making small pools on their land. This support comes from the Agricultural Nature and Landscape Management (ANLb) scheme, partially funded by European subsidies, with a budget of €120 million in 2024. Despite this large (and growing) budget, populations of wildlife depending on agricultural land, like the godwit, are still declining.[133]

As of 2023, farmers have an additional possibility to generate extra income to support eco-friendly landscape management. They can access a new EU-funded eco-scheme which allows them to select yearly eco-activities. The EU set aside €152 million for these subsidies in the Netherlands in 2023.

The purpose of both the ANLb and eco-schemes is biodiversity recovery within agricultural landscapes. However, farmers cannot receive subsidies from both schemes for the same plot of land. It is crucial that the two systems are complementary and additional, meaning that measures required from both systems add up to achieve a greater effect for biodiversity than either scheme could achieve alone.

Because of the Dutch government's failure to optimise interaction between the two subsidies, farmers often choose to apply measures from only one of the schemes for a plot of land.[134] ANLb is also restricted to specific areas, which further disadvantages some farmers. This fragmented approach leads to missed opportunities to make the most of the combined impact of both subsidies, which results in ineffective spending.



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While the EU funds mentioned here are not directly harmful to biodiversity, this case highlights the importance of sound implementation. If farmers are not properly rewarded for their ongoing efforts for sustainable landscape management, they might abandon these efforts altogether.

To encourage farmers to invest in maintaining biodiversity and other ecosystem services, financial compensation must be competitive compared to regular agricultural production, as providing ecosystem services often requires significant changes. The Dutch government must optimise the ANLb and the eco-scheme, ensuring farmers can make the most of the subsidies available and offering them clear, long-term support for protecting nature.

POLAND

DESTRUCTION OF POLISH RIVERS ON A MASSIVE SCALE: THE UNKNOWN CONSEQUENCE OF MISUSED EU FUNDS

As a result of anachronistic "grey infrastructure" projects funded by the European Rural Development Programme, such as unnecessary river channel regulation and damming, the ecosystems of the last natural rivers and streams of Poland are being massively degraded.

In Poland, few rivers have been preserved in their natural, intact state. Indeed, more than 80% of Polish rivers urgently need restoration[135] to achieve good ecological status, as required by the EU Water Framework Directive. Unfortunately, instead of rivers being restored and "green infrastructure" becoming the norm, the degradation of river ecosystems caused by civil engineering works has rapidly accelerated.

In the years following Poland's accession to the EU in 2003, the last fragments of picturesque meandering riverbeds were straightened, while riparian tree stands that hugely contributed to ecosystem health were cut down and riverbanks were strengthened with rocks. These projects also increased the risk of droughts and floods for the local population, as they were designed to speed up the drainage of water from small catchment areas. In total, about 1,000km of small Polish rivers were degraded,[136] a catastrophic endeavour for which the Polish government spent PLN 1 billion (€250 million) from the Rural Development Programme (RDP) for 2007-2013.

The deterioration of Polish rivers on a massive scale has continued, with an additional PLN 1 billion granted to Polish water management authorities from the funds of the RDP 2014-2020.

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In total, 195 investments with a likely negative impact on the environment will be funded.[137] If these projects are implemented, ecological continuity will be interrupted on hundreds of kilometres of rivers, unnecessary dam reservoirs will be created on beautiful natural rivers and sections of natural riverbeds will be turned into canals.

It is not too late to stop the massive destruction of rivers and the waste of public money from RDP 2014-2020. The implementation of all these 195 projects on rivers should be suspended until a transparent impact assessment is carried out. Civil engineering projects harmful to the environment should be replaced with alternative solutions in the fields of natural retention and green infrastructure. In the future, public funds for infrastructure should only be used for projects that serve both nature and people. Such projects improve the ecological status of waters, help prevent the risk of droughts and floods, and safeguard the habitats and species protected by Polish and European law.

PORTUGAL

EUROPEAN FUNDS MISALLOCATED: THE PISÃO DAM'S TOLL ON PORTUGAL'S ENVIRONMENT

In the Alto Alentejo region of Portugal, a rural area historically dedicated to agriculture and livestock farming, people face the challenges of desertification, water scarcity and the need to diversify economic activities. The Pisão dam project in the Tagus river basin aims to address these issues – but without a proper assessment of its environmental and social impacts, it risks creating greater problems.


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The project is spearheaded by the Portuguese government, which secured €120 million in European subsidies through the European Recovery and Resilience Facility. It aims to replicate the neighbouring Alqueva dam, which created the largest artificial lake in Europe. While the Alqueva dam succeeded in developing an intensive market-oriented agriculture, it has left significant environmental and social footprints, such as water and soil contamination, biodiversity reduction, landscape impoverishment, illegal labour and workforce exploitation.[138]

These potential impacts were not considered when evaluating the sustainability of the Pisão dam project. The primary goal of the project is to transition the region's traditional Mediterranean dry farming to intensified irrigated agriculture, but there has been a lack of adequate planning and scrutiny. First, the project has not undergone a proper "Do No Significant Harm" assessment, mandated by EU legislation. Second, the Environmental Impact Assessment (EIA) lacks sufficient analysis of various impacts, including water and soil quality, availability, scarcity and drought risks.

Today, there are mounting concerns about the potential environmental repercussions of the Pisão dam. These include reduced nutrient, sediment and water flow downstream which negatively impact biodiversity and ecosystem health, and the degradation of water and soil quality through diffuse pollution from the new irrigation systems. These issues emphasise the delicate balance between economic development and environmental conservation.

Mounting evidence shows that nature-based solutions are cheaper, more effective and more resilient when it comes to adapting to climate change. The construction of infrastructure for water supply, such as the Pisão dam, will create new water demands and make local farmers more dependent on irrigated agriculture, exposing them – and the entire population – to even greater risk of drought and water scarcity.

To better fight and adapt to climate change, and to continue to provide clean drinking water for local people, we must redirect nature-harming subsidies. It is urgent to use EU public funding to support alternatives that guarantee safe drinking water supply and the sustainability of existing irrigation systems, instead of financing projects that harm both nature and people.

ROMANIA

DELTA IN DISTRESS: HOW SUBSIDIES ARE CHANGING THE FACE OF THE DANUBE

In the heart of Romania lies a natural treasure: the majestic Danube Delta. Recognised as a UNESCO Biosphere Reserve since 1998, this immense wetland is a sanctuary for an array of bird and fish species, boasting a biodiversity unlike any other in Europe. The Delta also serves as a crucial lifeline, purifying water and sustaining local communities for generations.

Yet this haven is not immune to the ravages of time. During the communist era, vast agricultural projects reshaped the landscape, draining wetlands and converting them into farmland. This transformation was later consolidated through legislation forbidding the conversion of agricultural land into other uses, as well as by the subsidy system introduced along with Romania's EU accession in 2007. Over the years, the Danube Delta suffered the loss of thousands of hectares to agriculture, leading to a cascade of environmental and socioeconomic consequences. Soil fertility dwindled, fish populations declined and traditional ways of life were threatened.

Today, five agricultural areas cover nearly 40,000 hectares of land in the delta. Although managed by local councils, these lands are often leased to private companies for up to 30 years. These companies make huge profits, but little of this wealth reaches local communities. For example, in Carasuhat, the farming companies make over €1.8 million annually but the fees paid to the local council amounted to around €80,000.

The environmental devastation caused by converting the delta to agriculture is exacerbated by a careless allocation of European subsidies by the Romanian government. For example, one subsidy program, DR-11[139], provides payments based on land area, which favours large farms and intensified agriculture, rather than promoting sustainability and conservation. Other subsidies favour expansion, with the Romanian government planning to give €4.5 million of EU subsidies to farmers for transforming 36,000 hectares of reeds into farmland in 2023.[140] This is a disaster for local delta communities, who are strongly in favour (83% to 97% of respondents[141]) of returning farmland to its natural state of wetland, according to surveys.

Looking ahead, climate models predict a higher risk of desertification in the years 2071-2100 compared to 1981-2010, especially in the Danube Delta.[142] The current agricultural approach, which heavily relies on harmful subsidies, will worsen climate change, widen social gaps and fuel land takeovers. To protect this unique ecosystem and local communities, taxpayers' money should not fund any more destructive initiatives. Instead, it should support projects that restore wetlands and natural habitats, prioritise public benefits, and help local small-scale farms and traditional jobs unique to the Danube Delta.


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SPAIN

THIRSTY AGRICULTURE: HOW MISUSED EU FUNDS ARE DRYING UP SPANISH WETLANDS

In Castilla La Mancha, vital wetlands are under siege due to agricultural intensification spurred by the misuse of EU subsidies. As the consequences of this transformation begin to bite, the region needs to change course.

In the heart of the Iberian Peninsula's Castilla–La Mancha region, the upper basin of the Guadiana River is a treasure trove of natural beauty, boasting iconic wetlands such as the Tablas de Daimiel national park and the lagoons of Ruidera, both recognised as Ramsar sites and part of the Natura 2000 network.

Historically, this land was shaped by the sustainable practices of Mediterranean agriculture, with dry vineyards painting the landscape. However, the influx of funds from the EU's Common Agricultural Policy (CAP), particularly the rural development funds allocated for vineyard restructuring in Castilla–La Mancha between 2009 and 2020, has deeply impacted the region.[143] In total, over €465 million of public money was used by the Spanish government to convert more than 140,000 hectares of dry vineyard to irrigated vineyard, aiming to boost the production and export capacity of the wine sector.[144]

This shift towards more demanding agricultural methods has taken a toll on the region's ecosystems, particularly its water bodies, already affected by climate change and irregular rainfall. The wetlands, which serve as crucial sanctuaries for waterfowl and biodiversity hotspots, are in a precarious state. The situation at Las Tablas de Daimiel is particularly dire, with spontaneous peatland fires erupting due to the severe lack of water.

In an ironic twist, the CAP has had to introduce emergency support measures to help the sector recover from the very problems its subsidies created. But emergency measures to save the national park and maintain a minimum water area, such as well pumping and water transfers from other basins, have altered the nutrient cycles in the lagoons, favouring invasive species over native ones.

The local farming community is also affected. The surge in grape production has led to a market glut, driving down prices and disproportionately affecting those who adhere to traditional dry farming practices. The shift towards mechanised production has stifled alternative economic ventures like tourism, and further reduced labour demand during harvests, tearing the social fabric of rural areas.

The unfolding environmental crisis in the Guadiana River underscores a pressing need to rethink agricultural subsidies. The CAP's support has inadvertently precipitated ecological and social challenges. To tackle climate change and biodiversity loss, and better protect local communities, national governments must redirect these harmful subsidies towards activities that nurture the land and work together with nature.

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SWEDEN

FROM STABLES TO PASTURES: THE URGENT NEED FOR BIODIVERSITY MEASURES IN SWEDISH AGRICULTURE

Sweden's natural pastures, vibrant with wild bees, butterflies and a myriad of flowering plants, are facing a critical threat due to the decline in traditional grazing practices. Weak agricultural policies have for a long time inadvertently promoted intensive indoor cattle rearing over natural pasture-based grazing.

Over the last century, the shift towards intensive cattle rearing and the abandonment of less productive lands has led to a staggering loss of over 95% of semi-natural grasslands in Sweden.[145] Today, nearly half of all bulls on Swedish farms are confined to cattle sheds, while around 110,000 of them are slaughtered every year without ever having grazed. If all these young bulls were raised on pastures, they could manage up to 300,000 hectares of natural grasslands, nearly doubling Sweden's current pasture area.[146] This practice of intensive livestock rearing is detrimental to both animal welfare and nature.

Today, the lack of grazing has profound implications for ecosystem services, particularly pollination, which is essential for the reproduction of many crops, fruits and berries. Semi-natural grasslands are now considered the most threatened habitat under the EU Species and Habitat Directive,[147] with over 1,300 species listed on the Swedish Red List.[148] Natural pastures can also make the food system more resilient and better adapted to climate change. During dry years, when feed is scarce, some forage can often be found in wooded pastures, increasing food security. And since semi-natural grasslands cannot be used for growing crops,[149] pasture-based systems entail less competition for arable land, leaving more room to produce food for humans.

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Despite the benefits to nature being widely understood,[150] current policies continue to fund practices that are harmful to the environment. In the Swedish Strategic Plan for the European Common Agricultural Policy 2023-2027, around €84 million annually is paid to farmers as coupled support for livestock, regardless of whether the animals have been allowed to graze or not.[151] This money can go to supporting bulls that are kept in barns for their entire life,[152] meaning that public money is spent in a way that harms animals and biodiversity.

A change in the allocation of taxpayer funds is crucial. Investing more in the upkeep, restoration and necessary infrastructure, such as fencing and winter shelters, for semi-natural grasslands can significantly help farmers, improve animal welfare and protect nature. Shifting the focus of current subsidies away from practices that damage the environment towards the enhancement of these grasslands will lead to richer biodiversity, healthier ecosystems, and a farming sector that is more eco-friendly and animal-friendly.

WAY FORWARD

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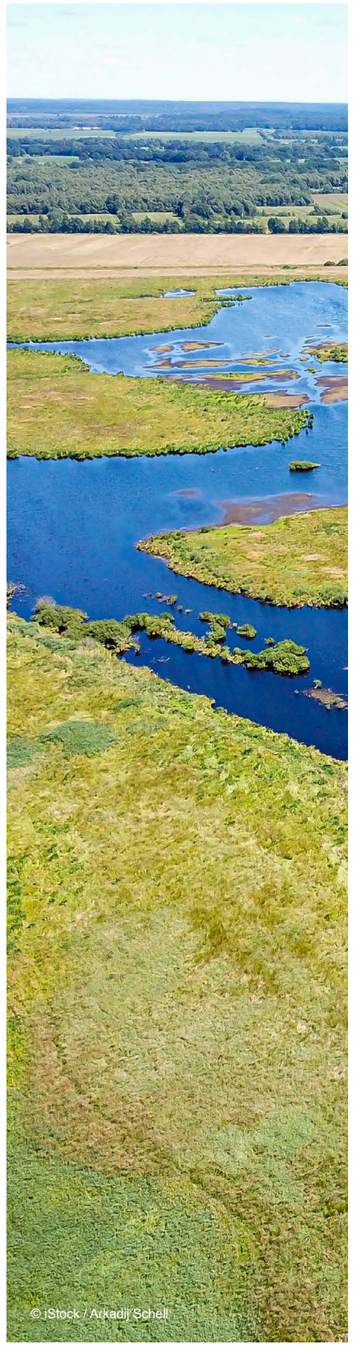
GENERAL RECOMMENDATIONS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1. Establish a legally binding framework to guarantee a socially fair phase-out of EU and national biodiversity harmful subsidies

Despite countless political commitments over the past decade and more to eliminate harmful subsidies, only a limited number of countries have undertaken any form of national-level analytical study to identify and assess incentives, including subsidies, harmful to biodiversity. Considering the urgency of the biodiversity crisis, bolder action is now necessary.

A new legally binding framework should be adopted to ensure a coherent methodology for Member States to identify biodiversity harmful subsidies and their associated policies from EU to local level. As part of the framework, Member States should assess the social impacts of eliminating biodiversity harmful subsidies, take measures to reduce the socioeconomic inequalities and fairly spread the cost associated with their phase-out, and guarantee meaningful participation of all stakeholders in the process, including local communities, workers and civil society organisations. An EU-level process and timeline for Member States to report progress should be provided, in line with the commitments of the Global Biodiversity Framework (see recommendation 5) and the 8th EU Environment Action Programme.[153]

2. Transition biodiversity harmful subsidies towards public investments in nature-based solutions

Removing biodiversity harmful subsidies does not necessarily entail a reduction in overall support for the sector concerned. By smartly reinvesting biodiversity harmful subsidies in nature-based solutions, governments can help tackle climate change and biodiversity loss, while also improving resilience and competitiveness and reducing social inequalities. Nature restoration is the best investment we can make, as every €1 invested in nature restoration adds between €8 to €38 in economic value.[154]

EU and national investments in nature should be doubled immediately to at least €50 billion annually, in order to fill the financing gap that has been identified by the European Commission to achieve the EU 2030 Biodiversity Strategy.[155] This represents only 0.34% of total EU GDP.[156] At EU level a dedicated nature restoration fund must be created in the next life cycle of the EU budget to complement existing efforts and support farmers, foresters, landowners, fishers and local communities in protecting and restoring nature, as set out by the EU Nature Restoration Law.

3. Apply updated "Do No Significant Harm" EU taxonomy criteria across the entire EU budget and its associated policies

The investments associated with the next life cycle of the EU budget will be critical in setting the environmental pathway for the next decade, which is crucial for global efforts to avoid biodiversity collapse.

In future, economic activities listed in the EU taxonomy should only receive EU funds or incentives if they respect the taxonomy criteria. As various taxonomy criteria have become inconsistent and obsolete given the increased environmental ambition of recent years, the criteria should be rapidly updated to ensure they are science-based and cover all relevant activities.

The EU must also exclude "always environmentally harmful" sectors, companies or economic activities from receiving any EU funds or incentives (e.g. new airport infrastructure or new hydropower plants).

4. Step up on transparency and immediate intervention in case of suspected misuse nationally of EU funds

Minimum information on all national, regional and local investments and reforms financed by the EU needs to be publicly available, and easily accessible through open datasets. The European Commission should receive the authority to suspend the disbursement of EU funds when it suspects not only breaches of the rule of law, but also violations of EU environmental law. Insufficient transparency, undue use of fast-track procedures, or weak implementation of the "Do No Significant Harm" taxonomy criteria (see recommendation 4) should also be considered.

5. Adopt and implement ambitious National Biodiversity Strategies and Action Plans (NBSAPs), including on biodiversity harmful subsidies phase-out

In line with the commitments made through the Global Biodiversity Framework (GBF), countries must submit revised NBSAPs ahead of COP16 taking place in autumn 2024. WWF recommendations for countries updating their NBSAPs are available here.

Consistent with targets 14, 15 and 18 of the GBF, in their revised plans governments should commit how they will gradually eliminate, phase out or reform biodiversity harmful incentives, including subsidies, and ensure public and private financial flows are aligned to the targets of their NBSAPs. Target 18 calls for the identification of incentives that are harmful to biodiversity by 2025.


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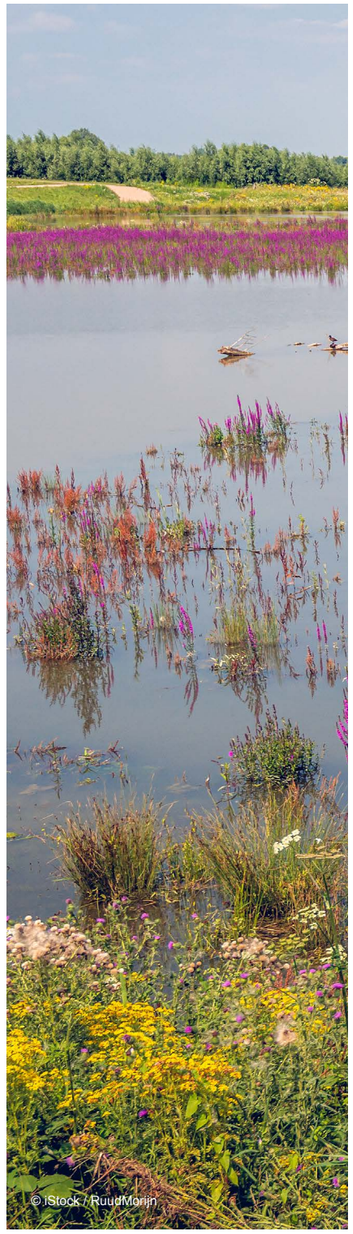
SECTOR-SPECIFIC RECOMMENDATIONS



1. Agriculture and forestry

The EU's Common Agricultural Policy (CAP) has largely failed several of its objectives, and a structural change is needed.

The EU should provide financial support to ensure a just transition for farmers and foresters towards sustainability – based on ensuring fair compensation for the environmental services they provide, and a rapid phase-out of area-based income-support payments and subsidies linked to production. These direct payments not only negatively impact the environment[157] but also do little to influence farm productivity, or even have a negative effect.[158]

In parallel, the "polluter pays" principle must be consistently applied by calling a halt to artificially low taxes set by governments for pollutants such as pesticides and fertilisers. Instead, taxes on plant-based products should be lowered to promote the uptake of more sustainable diets.

The EU should also strengthen sustainability criteria in public food procurement, which entails the purchase by government bodies of food and food-related services (e.g. for schools and hospitals) to ensure public funds further reward sustainable food production practices and diets.

2. Bioenergy

The EU Renewable Energy Directive should be revised to incentivise sources of bioenergy only if they are climate and biodiversity friendly.

Subsidies and other incentives for bioenergy are typically justified on the basis of supposed climate benefits, but in practice encourage the use of sources that are counterproductive in climate terms. Indeed, as hundreds of eminent climate scientists have warned,[159] and as the European Commission's Joint Research Centre (JRC) has made clear,[160] burning trees for example can increase emissions for decades or even centuries compared to fossil fuels. Furthermore, the production of bioenergy can have serious impacts on nature, food security and air pollution.

Public subsidies for the use of primary woody biomass (meaning tree trunks, stumps and other wood taken straight from the forest) should be banned and limits imposed on the amount of primary woody biomass that can be counted as zero-carbon renewable energy. All public incentives for bioenergy produced from dedicated crops, including their counting as zero-carbon renewable energy, regardless of which sector they are used in, should also be ended.

3. Fisheries

Over 20 years ago, the EU prohibited harmful subsidies to support the construction of new fishing vessels as part of its efforts to curb overfishing. Regrettably, via the European Maritime, Fisheries and Aquaculture Fund (EMFAF) for 2021-2027, the EU reintroduced financial commitments that may once again increase the fleet's capacity and intensify overfishing.

In line with international targets and commitments, the EU must immediately halt any financial support under the EMFAF that risks enhancing its fishing fleet capacity or fishing effort beyond sustainable levels. Instead, the EU should ring fence at least 25% of the EMFAF to support fishers, coastal communities and other stakeholders to protect and restore the marine environment.

Internationally, at the World Trade Organization (WTO), the EU should champion the conclusion of the crucial second wave of fisheries subsidies negotiations towards a WTO agreement at the earliest possible opportunity, targeting harmful subsidies contributing to overcapacity and overfishing.

4. Transport infrastructure

Transport infrastructure on land and water is mobilising major and growing investments. However, through fossil emissions and the harm they cause through land-use change and ecosystem fragmentation, they are one of the main causes of climate change and biodiversity decline.

The EU should stop public subsidies for new high-carbon infrastructure such as air and road traffic, and instead provide support for low-carbon transport that satisfies wider environmental needs, avoids environmental damage through habitat fragmentation, and includes public transport and intelligent transport. Infrastructure projects must take into account biodiversity value at the earliest possible stage of planning, by first fully evaluating the environmental impact and cost of all options before shovelling.

5. Water infrastructure

European rivers are the most fragmented in the world, contributing to the rapid decline in freshwater biodiversity. Damming, rectification of and channelling rivers, destruction of watersheds, and wetland and landscape drainage are among the primary causes of Europe's inability to meet the objectives set by the Water Framework Directive,[161] together with pollution. As a result, a drastic halt in the construction of new river barriers and a speedy restoration of free-flowing rivers are urgently needed.

Subsidies for grey flood protection infrastructure – structures such as dams, dykes and seawalls – should be redirected to nature-based solutions, or hybrid solutions. As well as effectively reducing flood risks, these have a myriad of co-benefits for drought prevention, ecosystem conservation, carbon storage, health and recreation, to name a few. In parallel, subsidies for any new hydropower projects should be phased out, and investments redirected towards the ecological improvement of existing hydropower plants (provided that they are in line with the minimum ecological requirements imposed by EU law) or their decommissioning.

ENDNOTES

1 | Efforts that protect, restore and sustainably manage land, freshwater and ocean ecosystems while simultaneously addressing societal challenges.

2 | European Commission (n.d.) Biodiversity financing.

3 | The total value of all goods and services produced (gross domestic product or GDP) in the EU in 2021 was € 14.5 trillion.

4 | European Commission Directorate-General for Environment, Institute for European Environmental Policy, Trinomics. 2022. Biodiversity financing and tracking – Final report.

5 | This report is based on research conducted by Trinomics and commissioned by WWF. All recommendations and views reflected in this report should be attributed to WWF.

6 | WWF EPO, 2024. WWF's EU elections check.

7 | European Commission. 2019. The European Green Deal.

8 | For example, EU Biodiversity Strategy for 2030, Farm to Fork Strategy, Zero pollution action plan

9 | World Economic Forum. 2024. The Global Risks Report 2024.

10 | All other sectors beyond nature and biodiversity where decisions are made concerning building infrastructure (transport, energy, disaster risk management) and supporting development (tourism, agriculture, energy facilities, industry).

11 | For example, use of pesticides, lack of/low recycling, unsustainable extraction/use of natural resources.

12 | The 8th Environment Action Programme sets a legal framework to ensure that EU climate and environment laws are effectively implemented by putting forward enabling conditions and setting up monitoring to measure economic performance and societal progress "beyond GDP", and moving toward a well-being economy. It forms the EU's basis for achieving the United Nations' 2030 Agenda and its Sustainable Development Goals.

13 | European Commission. 2024. Report on the 8th Environment Action Programme Mid-term Review.

14 | OECD. 1998. Improving the Environment through Reducing Subsidies Part I: Summary and Conclusions – Part II: Analysis and Overview of Studies.

15 | OECD. 2005. Environmentally Harmful Subsidies: Challenges for Reform. Environmentally harmful subsidies are "a result of a government action that confers an advantage on consumers or producers, in order to supplement their income or lower their costs, but in doing so, discriminates against sound environmental practices".

16 | Matthews, A. and Karousakis, K. 2022. Identifying and assessing subsidies and other incentives harmful to biodiversity: A comparative review of existing national-level assessments and insights for good practice.

17 | European Commission (n.d.) Biodiversity financing

18 | European Commission (n.d.) Green budgeting in the EU

19 | European Commission Directorate General Economic and Financial Affairs. 2023. Green Budgeting in the EU: Key insights from the 2023 European Commission survey of green budgeting practices.

20 | European Commission (n.d.) EU spending and revenue 2021-2027.

21 | The six objectives are (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) pollution prevention and control, and (6) protection and restoration of biodiversity and ecosystems.

22 | Starting in 2021, a new contribution based on the amount of non-recycled plastic packaging waste in each Member States adds to the EU budget as well.

23 | The RRF is worth €723.8 billion

24 | Matthews, A. and Karousakis, K. 2022. Identifying and assessing subsidies and other incentives harmful to biodiversity: A comparative review of existing national-level assessments and insights for good practice.

25 | European Commission Directorate General Economic and Financial Affairs. 2023. Green Budgeting in the EU: Key insights from the 2023 European Commission survey of green budgeting practices.

26 | Proportion of CAP spending compared to the total EU budget for 2024, as well as 2021-2027. Source: Multiannual financial framework 2021-2027 (in commitments) – Current price

27 | European Commission (n.d.) Key policy objectives of the CAP 2023-27.

28 | European Commission (n.d.) Common Agricultural Policy – Performance.

29 | European Commission. 2023. Mid-term revision of the multiannual financial framework 2021-2027 {COM(2023) 336 final}.

30 | European Court of Auditors. 2021. Common Agricultural Policy and climate: Half of EU climate spending but farm emissions are not decreasing. Special report 16/2021.

31 | European Court of Auditors. 2020. Biodiversity on farmland: CAP contribution has not halted the decline. Special Report 13/2020.

32 | European Court of Auditors. 2021. Sustainable water use in agriculture: CAP funds more likely to promote greater rather than more efficient water use. Special Report 20/2021.

33 | Alliance Environment. 2019. Impact of the CAP on habitats, landscapes, biodiversity.

34 | European Journalism Training Association/EUfactcheck. 2019. True: "80 percent of the European money for agriculture goes to the 20 percent largest farmers".

35 | In 2020, average agricultural income across the EU27 reached only 49% of the average wages in the whole economy. Agricultural income (€/ annual work unit) is lowest in smaller farms. Source : European Commission. 2023. Mapping and analysis of CAP strategic plans: Assessment of joint efforts for 2023-2027.

36 | European Commission (n.d.) Conditionality.

37 | Farmers would no longer be required to comply with this obligation in 2024.

38 | European Commission. 2024. Commission proposes to allow EU farmers to derogate for one year from certain agricultural rules.

39 | WWF-EU. 2024. Joint letter to the EU Commission to reconsider the loosening of the CAP's green architecture.

40 | OECD. 2019. Evaluating the environmental impact of agricultural policies. Available here.

41 | Wageningen University and the Dutch Environmental Assessment Agency. 2023. The economic and financial stability repercussions of nature degradation for the Netherlands: Exploring scenarios with transition shocks.

42 | Schemes for the climate, environment and animal welfare: funding stream that exclusively funds measures that do not have adverse environmental impacts

43 | This subsidy is also an area-based direct income support instrument. As 50% must be allocated to environmental and climate objectives, only 50% is counted as BHS.

44 | Sectoral support under the EAGF is split between the following sectors: apiculture, olive, wine, hops, fruits and vegetables, and other sectors.

45 | This includes investment support interventions that can contribute to any of the 10 CAP specific objectives.

46 | See more information on this subsidy here.

47 | See more information on this subsidy here.

48 | European Commission. 2023. Approved 28 CAP Strategic Plans (2023-2027): Summary overview for 27 Member States.

49 | See more information on this subsidy here.

50 | See more information on this subsidy here.

51 | See more information on this subsidy here.

52 | Following the Rio Markers approach, but applying it to potentially harmful activities.

53 | That is, SO4 on climate action, SO5 on fostering sustainable development and efficient management of natural resources, and SO6 on protecting biodiversity, enhancing ecosystem services and preserving habitats and landscapes.

54 | Following the Rio Markers approach, but applying it to potentially harmful activities.

55 | European Commission. 2023. Mapping and analysis of CAP strategic plans: Assessment of joint efforts for 2023-2027.

56 | European Commission. 2023. Mapping and analysis of CAP strategic plans: Assessment of joint efforts for 2023-2027.

57 | Here, 30% of the overall funding to sectoral support is taken, rather than 30% of the funding excluding that going to SO4, 5 or 6, as this data is not available yet in the CAP funding database.

58 | Eurostat. 2024. Government revenue, expenditure and main aggregates.

59 | This conclusion stems from a study on the income of a sample of Italian farmers over 10 years. Severini, S., Tantari, A. and Di Tomasso, G. 2016. Do CAP direct payments stabilise farm income? Empirical evidences from a constant sample of Italian farms. Agricultural and Food Economics 4:6.

60 | BirdLife Europe, EEB and WWF. 2023. A brighter future for EU food and farming.

61 | One of the area-based support instruments, which represents €44 billion for 2021-2027.

62 | European Commission. 2023. Mapping and analysis of CAP strategic plans: Assessment of joint efforts for 2023-2027.

63 | WWF-EU. 2024. The Fair Way Forward: Opportunities for all through an EU Just Transition.

64 | European Commission (n.d.) Biomass.

65 | European Commission. 2019. Brief on biomass for energy in the European Union.

66 | Wu et al. 2018. Bioenergy production and environmental impacts. Geoscience Letters 4: 14.

67 | JRC. 2020. The use of woody biomass for energy production in the EU.

68 | European Commission. 2023. Report on Energy Subsidies in the EU. COM(2023) 651 final.

69 | European Commission (n.d.) Phasing out Environmentally Harmful Subsidies.

70 | European Commission (n.d.) Spain – EHS Candidate for Reform.

71 | European Commission (n.d.) Romania – EHS Candidate for Reform..

72 | Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC

73 | Regulation (EU) 2021/1139 establishing the European Maritime, Fisheries and Aquaculture Fund

74 | European Commission. 2024. Cohesion Open Data Platform – European Maritime, Fisheries and Aquaculture Fund.

75 | Skerritt, D. et al. 2020. A 20-year retrospective on the provision of fisheries subsidies in the European Union. ICES Journal of Marine Science, 77: 2741–2752

76 | Sumalia, R. et al. 2019. Updated estimates and analysis of global fisheries subsidies. Marine Policy 109: 103695.

77 | Ibid.

78 | Villasante, S. et al. 2022. Strengthening European Union fisheries by removing harmful subsidies. Marine Policy 136.

79 | Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity

80 | Carvalho, N. and Guillen, J.. 2021. Economic impact of eliminating the fuel tax exemption in the EU fishing fleet. Sustainability 13(5): 2719.

81 | Scientific, Technical and Economic Committee for Fisheries. 2023. The 2023 Annual Economic Report on the EU Fishing Fleet

82 | Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity

83 | Institute for European Environmental Policy. 2014. Common Framework for Biodiversity-Proofing the EU Budget: Guidance for the Connecting Europe Facility

84 | Modernisation of infrastructure is likely to include activities such as road safety, electric vehicles or electrification of rail (i.e. decarbonisation of rail).

85 | CINEA Project Portfolio database

86 | EC (n.d.) Biodiversity financing

87 | European Commission. 2022. Recovery and Resilience Scoreboard: Thematic Analysis "Sustainable Mobility".

88 | Under the RRF a simplified DNSH methodology was applied, and the quality of data provided by Member States determined the effectiveness of the principle. Green 10 and Euronatur. 2021. EU funds should never harm nature, climate or the environment: Statement of the Green 10 on the 'do no significant harm' principle.

89 | Green 10 and Euronatur. 2021. EU funds should never harm nature, climate or the environment: Statement of the Green 10 on the 'do no significant harm' principle.

90 | European Environment Agency. 2023. Water use and environmental pressures.

91 | One indication is provided by the concept of ecological flows, which describes the water regime (quantity, timing and quality) that is required to sustain the health of aquatic ecosystems and the provision of their ecosystem services for human well-being.

92 | In addition to the Floods Directive, these include the Groundwater Directive, the Drinking Water Directive, the Bathing Water Directive, the Nitrates Directive, the Urban Waste Water Treatment Directive, the Environmental Quality Standards Directive.

93 | ERDF is a programme open to all EU Member States, while the Cohesion Fund targets Member States with a gross national income (GNI) per capita below 90% EU-27 (i.e., 15 Member States at this time).

94 | Peter, A. and Fatuki, A. 2018. Structural flood defence measures and effects on the surroundings. EPH - International Journal of Applied Science 4: 1-7.

95 | Ibid.

96 | Based on the biodiversity tracking methodology (see page 19).

97 | European Commission. 2023. Report on Energy Subsidies in the EU. COM(2023) 651 final.

98 | WWF. 2022. WWF's Living Planet Report 2022

99 | Isbell, F. et al. 2022. Expert perspectives on global biodiversity loss and its drivers and impacts on people. Frontiers in Ecology and the Environment.

100 | European Commission Directorate-General for Environment, Institute for European Environmental Policy, Trinomics. 2022. Biodiversity financing and tracking – Final report,

101 | Ibid.

102 | Land use. Statbel. (2023, September 15). https://statbel.fgov.be/en/themes/environment/land-cover-and-use/land-use

103 | The measure is part of the Bulgarian CAP Strategic Plan, Rural Development Interventions. The full name of the measure is "II.A.7 Traditional practices for seasonal grazing (pastoralism)".

104 | Extracted data from the Information Platform on the EU-funded Environment Operational Programme 2014 - 2020: Rila National Park, Central Balkan National Park, Pirin National Park.

105 | Gigot, G. 2020. Indicateurs de gestion durable des forêts françaises.

106 | IGN. 2018. La forêt française: état des lieux et évolutions récentes - Panorama des résultats de l'inventaire forestier

107 | Ministère français de l'agriculture et de la souveraineté alimentaire. 2023. Bilan de la réussite des plantations forestières de l'année

108 | Presentation of the final assessment of the French recovery plan by the Ministry of Agriculture, meeting of the 27 march 2024 (*press release to be published while this document is written*).

109 | GIP ECOFOR. 2022. Coupes rases et renouvellement des peuplements forestiers en contexte de changement climatique.

110 | Ministère de l'Agriculture et de la Souveraineté alimentaire. 2020. Feuille de route pour l'adaptation des forêts au changement climatique (Action 3.1, p.20).

111 | Presentation of the final assessment of the French recovery plan by the Ministry of Agriculture, meeting of the 27 march 2024 (*press release to be published while this document is written*); no evidence of environmental assessments in Natura 2000 sites has been produced, despite repeated demands from the WWF and other French NGOs since May 2022.

112 | Deinet, S. et al. 2020. *The Living Planet Index (LPI) for migratory freshwater fish - Technical Report*. World Fish Migration Foundation, The Netherlands.

113 | Umwelt Bundesamt. 2022. Ökologischer Zustand der Fließgewässer.

114 | Geidel, T. et al. 2021. *Ausgewählte Fachinformationen Zur Nationalen Wasserstrategie.*

115 | Mehl, D., Iwanowski, J., Hoffmann, T.G. and Pusch, M. (2023). *Einfuss von Wasserkraftanlagen Auf Den Ökologischen Zustand von Fließgewässern in Deutschland.*

116 | (2021). Memorandum deutscher Fachwissenschaftler:innen zum politischen Zielkonflikt Klimaschutz versus Biodiversitätsschutz bei der Wasserkraft.

117 | In the form of feed-in tariffs of 12.40 Eurocent per kWh. Source: EEG. 2017 (Stand: 17.12.2018) www.clearingstelle-eeg-kwkg.de/sites/default/files/EEG_2017_0.pdf

118 | Politische Einflussnahme auf das EEG 2021. 2021. Antwort der Bundesregierung auf die Kleine Anfrage.

119 | Germany's Renewable Energy Sources Act, or Erneuerbare-Energien-Gesetz (EEG), is a German law that, in its current form, hinders progress towards meeting the objectives of the EU's Water Framework Directive (and other international biodiversity agreements) by declaring that hydropower operation are "overriding public interest"

120 | Cagliero, R et al. 2022. Pac 2023-27, il sostegno al reddito per la Resilienza delle Aziende agricole. Pianeta PSR.

121 | Eco-schemes are voluntary commitments by farmers to protect the climate and the environment.

122 | At least 25% of direct payments, amounting to about €888 million, must be allocated to this type of payment, of which 42% to ECO1, 19% to ECO4, 17% to both ECO2 and ECO3, and 5% to ECO5. Source: Piano Strategico PAC 2023-2027. Rete Rurale Nazionale. (n.d.).

123 | Ministerial Decree amending ECO1

124 | Piano Strategico PAC 2023-2027. Rete Rurale Nazionale. (n.d.).

125 | UNEP. 2020. *Biological diversity in the Mediterranean*.

126 | Ibid.

127 | Dulvy, N.K., Allen, D.J., Ralph, G.M. and Walls, R.H.L. 2016. The conservation status of Sharks, Rays and Chimaeras in the Mediterranean Sea. IUCN, Malaga, Spain.

128 | https://saveourseas.com/why-are-sharks-important/

129 | Gomei M. and Costanitini M. 2024. Rethinking fisheries subsidies - *An analysis of Mediterranean public fisheries funds.* WWF Mediterranean. 12 pp.

130 | Gambino, M. et al. 2022. Analysis of the available funds supporting marine activities in some key European Mediterranean countries. Frontiers in Research Metrics and Analytics, 7.

131 | Ibid.

132 | Wereld Natuur Fonds. 2023. Living Planet Report Nederland. Kiezen voor natuurherstel. WWF-NL, Zeist.

133 | Melman, D. and H. Sierdsema. 2017. Weidevogelscenario's: Mogelijkheden voor aanpak van verbetering van de weidevogelstand in Nederland. Wageningen Environmental Research rapport 2769; Sovon-rapport 2017/22. Wageningen Environmental Research, Wageningen.

134 | Ekoland. 2022, April 26. Onze Weidevogels: Botsen eco-regeling en het anlb? 'Nee, Het Kan Elkaar Juist Versterken'

135 | Biedroń I. et al. 2020. *Renaturyzacja wód. Projekt Krajowego programu renaturyzacji wód powierzchniowych* [*Restoration of waters. Draft of the National Surface Water Restoration Programme*]. Multiconsult Polska, Kraków.

136 | WWF-Poland's own estimation and Nawrocki, P. 2016. *Nierozwiązywalne problemy ochrony rzek? [Insoluble problems of river conservation?*] Infos, no 12. Wydawnictwo Sejmowe dla Biura Analiz Sejmowych.

137 | Save the Rivers Coalition. 2023. *Preliminary assessment of the environmental impact of planned civil engineering projects, the financing of which will come from the funds of the Rural Development Programme 2014–2020*

138 | WWF-EU. 2022. Keeping the bar high on green recovery The EU's "do no significant harm" principle in practice.

139 | DR-11 is for Areas of specific natural constraints

140 | Two firms have applied for subsidies worth €4.5 million from the CAP through the Agency for Payments and Intervention for Agriculture (APIA), which sits under the Ministry of Agriculture. The file has been taken up by the European Chief Prosecutor and the investigation is still ongoing. It is not clear at the moment of writing this report if the payment was indeed processed by the payment agency (APIA).

141 | In a survey conducted in Mahmudia, Chilia Veche and Murighiol communes in 2023.

142 | European court of auditors. 2018. Special report n°33/2018: Combating desertification in the EU: a growing threat in need of more action

143 | Sanjuan, Y. 2013. The Common Agricultural Policy in the Upper Guadiana: Evolution of water resources and crops. *Cuadernos de Investigación Geográfica* 39(2): 359-389.

144 | MAP. 2022. Report on the implementation of the vineyard restructuring and conversion measure.

145 | Tunón, H. and Sandell, K. 2021. *Biologisk Mångfald, Naturnyttor Och Ekosystemtjänster. Svenska Perspektiv På Livsviktiga Framtidsfrågor*. CBM:S Skriftserie 121. SLU Centrum För Biologisk Mångfald, Uppsala & Naturvårdsverket, Stockholm.

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147 | Westling, A. and others, 2020. Sveriges Arter Och Naturtyper i EU:S Artoch Habitatdirektiv.

148 | Eide, W. et al. 2020. Tillstånd Och Trender För Arter Och Deras Livsmiljöer – Rödlistade Arter i Sverige 2020.

149 | As it is too stoney and wet, and has too many trees and bushes

150 | Hessle, A. and Danielsson, R. (2024). Cattle population required for favorable conservation status of management-dependent semi-natural grasslands and forests, and associated increase in enteric methane emissions. Journal for Nature Conservation 78: 126571.

151 | European Commission. 2024. Sweden – CAP Strategic Plan.

152 | Ibid.

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154 | European Commission. 2022. Green Deal: pioneering proposals to restore Europe's nature by 2050 and halve pesticide use by 2030.

155 | European Commission (n.d.) Biodiversity financing.

156 | The total value of all goods and services produced (gross domestic product or GDP) in the EU in 2021 was €14.5 trillion.

157 | Volkov, A. and Melnikienė, R. 2017. CAP direct payments system's linkage with environmental sustainability indicators. *Public Policy and Administration* 16(2): 231–244.

158 | Biagini, L., Antonioli, F. and Severini, S. 2023. The impact of CAP subsidies on the productivity of cereal farms in six European countries: A historical perspective (2008–2018). Food Policy 119: 102473.

159 | Letter from scientists to the EU Parliament regarding forest biomass

160 | JRC. 2020. The use of woody biomass for energy production in the EU.

161 | European Environment Agency. 2018. European waters: Assessment of status and pressures 2018