

HOW MUCH WILL THE IMPLEMENTATION OF THE NATURE RESTORATION LAW COST AND HOW MUCH FUNDING IS AVAILABLE?

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Authors:

Gabrielle Aubert (IEEP), Hugh McDonald, Levin Scholl (Ecologic Institute)



Institute for
European
Environmental
Policy



HOW MUCH WILL IT COST?

The annual costs of restoring 30% of habitats listed in Annex I of the Habitats Directive by 2030 have been estimated at **€8.2 billion** (average annual costs over the 2022-2030 period). This estimate covers the costs of restoration, re-creation, maintenance and enabling measures [1]¹.

This amount underestimates overall funding needs as it does not include the costs for marine, urban ecosystems, and habitat areas not covered by the Habitats Directive. It includes the cost of enabling measures, also called administrative costs, which include costs for establishing methodologies and monitoring progress. Some are one-off costs and will be borne when the restoration takes place, while some are annual costs for maintenance of restored areas. In total, they amount to €538 million for the period 2022-2030 [1].

The Biodiversity Strategy to 2030 states that biodiversity actions will require at least €20 billion per year stemming from private and public funding at national and EU level [2]. Mobilising funding for restoration is therefore part of a wider effort to fund actions for biodiversity up to 2030.



Tulcea, Romania, Photo by Dedu Adrian

¹ Figures are based on the costs of the Impact Assessment accompanying the proposal for a Regulation on nature restoration (unpublished analysis by IEEP).

how much will the implementation of the nature restoration law cost and how much funding is available?

HOW MUCH FUNDING IS AVAILABLE?

EU FUNDING

EU funds have the scope to cover a large proportion of the funding needs. Under the 2021-2027 Multiannual Financial Framework (MFF), **estimates for allocations to biodiversity amount to nearly EUR 114 billion² (approximately EUR 16 billion annually)** [1]. **The €16 billion annual biodiversity spending available under the MFF could therefore cover a large part of the annual restoration costs of €8.2 billion** (see Annex 1).



Brussels, Belgium, Photo by Guillaume Périgois

DOMESTIC FUNDING

Total domestic biodiversity expenditure by Member States on biodiversity in 2019 is estimated at €10.4 billion (an average of approximately EUR 360 million per Member State)³, with an increasing trend between 2014-2019 [3]. This may be an over-estimate, as the data reported may include some EU funding. A significant proportion of domestic funding available for biodiversity should be channelled towards restoration once the NRL sets a clear incentive for Member States to scale up restoration.

PRIVATE FUNDING

Private funding can contribute – though primarily where restoration generates private benefits. A study based on 412 restoration projects found that private sources provided 8% of the funding, half from foundations and half from the private sector [4]. Between 2010 and 2020, this amounted to an average of **€6.5 million per year of private funding to restoration projects** in Europe. Although this amount is low compared to the overall funding needs, this estimate shows that private funding already contributes to restoration. Globally, private sources provide 14% of funding for nature-based solutions, primarily through supply chain payments for sustainable suppliers (e.g. of wood and food) or through voluntary carbon markets or biodiversity offsets [5]. This indicates that there may be scope to increase private contributions to restoration, so long as restoration generates private as well as public benefits.

² This estimate for total available MFF funds is larger than the figure quoted in the impact assessment, as it uses the latest budget estimate for 2023 published by the EC on 3 June 2022 [7]. The difference is mainly due to the addition of funding estimates from the Recovery and Resilience Facility, the EMFAF, and the full LIFE funding period.

³ Based on data reported by Member States to EUROSTAT and recorded in the 'Classification of the functions of Government' (COFOG) dataset.

how much will the implementation of the nature restoration law cost and how much funding is available?

HOW CAN MEMBER STATES MOBILISE FUNDING FOR NATURE RESTORATION?

There is no dedicated EU fund for nature restoration, and Member States face many competing funding priorities when channelling the appropriate funding streams to fund restoration measures. Therefore, the gap between the necessary and available funding must be bridged.

EU FUNDING

The EU has set a biodiversity spending target of 7.5% as of 2024 and 10% as of 2026 under the 2021-2027 MFF [6]. Estimates of biodiversity spending under the various relevant funds amount to €114 billion in total, an average of €16 billion annually (see **Annex 1**).

- The **two CAP funds (EAGF and EAFRD)** account for more than half (**€64.4 billion**). They are available as sources of funding for agroecosystems, and to some extent, forests, wetlands, heathlands, and scrub habitats, that are grazed or associated with farming activities in other ways.
- The **ERDF and Cohesion** fund make the third largest contribution to biodiversity (**€20 billion**). They are relevant for all ecosystem types but mainly cover capital costs of restoration rather than maintenance.

This level of EU funding is dependent on Member States' ability to seize the opportunities offered by each fund and to prioritise restoration among other competing priorities.

Restoration can benefit from climate funding under the MFF. Ecosystem restoration directly contributes to climate mitigation and adaptation objectives, and the EU Biodiversity Strategy to 2030 encourages the investment of a significant proportion of funds dedicated to climate action under the current MFF in biodiversity and nature-based solutions.

While EU funding has the scope to provide enough opportunities to cover restoration costs associated with the NRL, some gaps may remain, especially funding maintenance costs and some ecosystem types which do not fall within the scope of funding programmes. Moreover, as most EU funding programmes require co-financing, **it is essential that EU funding is complemented by both public and private sources.**

DOMESTIC FUNDING

Public funding at national and sub-national levels should be channelled towards nature restoration not only from environment budget lines, but also from those dedicated to other sectors, such as climate adaptation and mitigation, water management, disaster risk reduction, sustainable food, and public health as restoration brings many benefits to these sectors. **Several Member States have already set up dedicated funding for restoration:**

- **Spain** is allocating funds from the EU Recovery and Resilience Facility (RRF) to restoration through a dedicated 'Fund for Ecological Restoration and Resilience'.
- **Austria** has created a Biodiversity Fund to support the preservation and restoration of biological diversity, which is also partially funded through the RRF (complemented by national funds).

how much will the implementation of the nature restoration law cost and how much funding is available?

PRIVATE FUNDING

EU and national public funding should also be used to leverage further investments in restoration from the private sector using blended finance approaches.

There is high potential to attract private sector funding in cases where restoration provides direct benefits to businesses and private individuals. Several instruments already channel private sector funding into restoration, e.g. private-sector grants, donations, voluntary carbon markets and other Payments for Ecosystem Services schemes, user fees, and offsets, sometimes supported by dedicated financing instruments such as green loans. **Blended finance** - a mixture of private and public funding and finance – may be a solution: public funding can help attract private investors to revenue generating restoration by reducing the financial risks commonly associated with restoration and nature-based solutions.

EXPLAINING THE ‘EVERY 1 EURO INVESTED INTO NATURE RESTORATION ADDS €8 TO €38 IN BENEFITS’ STATEMENT

The European Commission stated that **“Investment into nature restoration adds €8 to €38 in economic value for every €1 spent, thanks to the ecosystem services that support food security, ecosystem and climate resilience and mitigation, and human health”**.

WHERE DOES THAT STATEMENT COME FROM AND WHAT DOES IT MEAN?

The EC conducted an impact assessment for each ecosystem type and have quantified in monetary terms the costs and benefits of meeting the NRL targets (as far as possible).

- **Cost analysis:** the area of each ecosystem requiring restoration, re-creation and maintenance were estimated and then multiplied by a unit cost per hectare (based on a review of ecosystem management costs). The estimates include opportunity costs relating to land management practices (e.g., reduced agricultural production due to restoration measures).
- **Benefits analysis:** the benefits were calculated based on a review of evidence of the benefits of restoration for each ecosystem type. Two values were identified: the value of carbon storage and sequestration benefits and the increase in the value of other ecosystem services including flood management and water purification. A best estimate of the median value of the benefits per hectare was then applied to the area of each ecosystem to be restored.

how much will the implementation of the nature restoration law cost and how much funding is available?

Costs and benefits estimated were then compared over the period 2022-2070, recognising that costs to restore and re-create nature would be faced up to 2050 but that the benefits would continue to accrue after 2050.

Examples of benefits (ecosystem services) identified for specific ecosystem types

Ecosystem type	Associated benefits (ecosystem services)
Forests	Timber products and non-timber forest products, water and soil quality, flood prevention, increased resilience against natural disturbances (droughts, fires, pests, and diseases); cultural services.
Agroecosystems	Food and fibre; water quality; flood management; pollination; soil quality; erosion control; climate regulation; cultural services (recreation, landscape, aesthetic values).
Rivers, lakes and alluvial habitats	Fresh water; fisheries; genetic resources; waste treatment; water quality; flood management; soil quality; cultural services (landscape, aesthetic, inspirational and recreational).
Urban ecosystems	Health and wellbeing; cooling and insulation (e.g. against urban heat island effect); recreation; food- and fibre; flood risk reduction; water quality; air quality, noise reduction, property value.

There are some risks that the benefits will not be realised, such as failure to implement actions to achieve the targets, scientific uncertainties, adverse effects of climate, etc. They can be mitigated by careful implementation and compliance with best practices. The Impact Assessment estimates that the high benefit:cost ratios estimated for each ecosystem type (**ranging from 4/1 to 38/1**) leave a sufficient margin to ensure that ecosystem restoration will be efficient. Finally, the analysis assumes that 90% of degraded ecosystems could be restored by 2050.

Failing to restore 90% of degraded ecosystems by 2050 would reduce both the benefits and costs of ecosystem restoration.

What is the present value of the quantified benefits?

If 90% of ecosystems are restored	If 80% of ecosystems are restored	If 70% of ecosystems are restored
€ 1,418 billion	€ 1,260 billion	€ 1,102 billion

See **Annex 2** for estimated costs and benefits of ecosystem restoration and maintenance by Member States up to 2050.

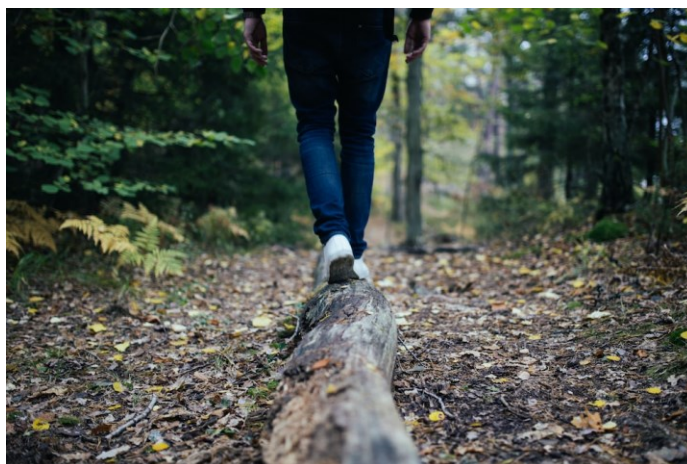


Photo by Jon Flobrant

how much will the implementation of the nature restoration law cost and how much funding is available?

ANNEX 1: MAIN EU FUNDING OPPORTUNITIES FOR RESTORATION IN 2021-2027⁴

EU financing source	Estimated funds available for biodiversity in 2021-2027 (M€)[7]	Type of actions that could be financed	Most relevant ecosystem types	Financing type (grants/ loans) and beneficiaries
European Agricultural Guarantee Fund (EAGF) under the CAP	37 885.2	Restoration of agroecosystems Suitable for financing maintenance and simple annual restoration actions.	Agro-ecosystems and grasslands	Grants (annual payments fully financed by the EU) Beneficiaries: farmers
European Agricultural Fund for Rural Development (EAFRD) under the CAP	26 513.2	Restoration of agro/forest ecosystems Capacity/knowledge building Knowledge exchange Cooperation Suitable for financing both capital costs and maintenance.	Agroecosystems and grasslands Forests; peatlands, marshlands, heathland, scrub and coastal wetlands, if grazed or associated with farmland.	Co-financing for EAFRD Beneficiaries: farmers, foresters and other landowners
European Regional Development Fund (ERDF) and Cohesion Fund (CF)	20 138.2	Restoration measures Capacity/knowledge building Cooperation (incl. cross-border, transnational) Suitable mainly for financing capital costs.	All ecosystem types	ERDF: grants/ financial instruments Beneficiaries: MS, private sector organisations, universities, associations, NGOs, civil organisations, etc.
Recovery and Resilience Facility (RRF)	11 067.1	Restoration projects Suitable for financing both capital costs and maintenance.	All ecosystem types	Combination of loans and grants Beneficiaries: MS
Programme for the Environment and Climate Action (LIFE)	2 529.89	Restoration projects Capacity/knowledge building. Suitable for financing both capital costs and maintenance (but time-limited funding so not entirely suitable for ongoing maintenance costs).	All ecosystem types	Grants, blending, prizes. Beneficiaries: Public and private sector bodies and civil society organisations
Horizon Europe	6 832	Suitable mainly for financing supporting measures (research, capacity-building, knowledge building), but can in some cases finance capital costs	All ecosystem types	Grants and procurement financing Beneficiaries: typically, consortia including universities, research institutes and businesses
European Maritime Fisheries and Aquaculture Fund (EMFAF)	790.43	Restoration projects (marine and rivers); Capacity/knowledge building Monitoring. Suitable for financing both capital costs and maintenance.	Marine and coastal ecosystems river ecosystems	Co-financing Beneficiaries: MS, Public and private sector bodies and civil society organisations Grants and tenders

⁴ Source: Updated figure based on the latest budget estimates published by the European Commission on 3 June 2022 (COM(2022) 400 - June 2022).

how much will the implementation of the nature restoration law cost and how much funding is available?

Also not included in this table: European Social Fund (ESF)+, Just Transition Fund (JTF), InvestEU, European Solidarity Corps, Technical Support Instrument (TSI), Copernicus, Neighbourhood, Development and International Cooperation Instrument - Global Europe (NDICI - Global Europe), Interreg Pre-Accession Assistance (PA) III

ANNEX 2: ESTIMATED COSTS AND BENEFITS OF ECOSYSTEM RESTORATION AND MAINTENANCE BY MEMBER STATES, 2022-2050 (€MILLION) [1]⁵

MS	Estimated annual benefits	Estimated annual costs	Ratio
AT	774	64.5	8.33
BE	631	65.3	10.35
BG	630	69.4	11.02
CY	38	7.3	19.21
CZ	361	41.0	11.36
DE	2,595	189.6	7.31
DK	3,171	176.2	5.56
EE	449	38.0	8.46
ES	7,939	1 450.9	18.27
FI	9,694	931.2	9.61
FR	14,618	2 060.3	14.09
GR	541	34.0	6.28
HR	622	63.4	10.19
HU	1,392	133.4	9.58
IE	1,922	134.0	6.97
IT	2,424	261.1	10.77
LT	1,081	80.3	7.43
LU	32	4.5	14.06
LV	611	54.4	8.90
MT	2	0.4	20.00
NL	1,056	53.4	5.06
PL	5,981	545.3	9.12
PT	915	148.9	16.27
RO	-	-	-
SE	5,881	637.6	10.84
SI	415	63.6	15.33
SK	473	97.5	20.61
EU-27	64,249	7 405.0	11.52

How to read this table: the aggregated **estimated benefits** across 7 ecosystem types average **€64 billion per year for the EU**. The aggregated **estimated costs** average **€7.4 billion per year for the EU** (without the costs of enabling measures). The benefits:costs ratio is 11.52.

⁵ Ratios have been calculated based on the Impact Assessment figures.

References

1. European Commission, IMPACT ASSESSMENT Accompanying the proposal for a Regulation of the European Parliament and of the Council on nature restoration, in STAFF WORKING DOCUMENT. 2022, European Commission: Brussels.
2. European Commission, EU Biodiversity Strategy for 2030. 2020, European Commission: Brussels.
3. European Commission Directorate-General for Environment, et al., Biodiversity financing and tracking : final report. 2022.
4. UNEP-WCMC, FFI, and ELP, Funding Ecosystem Restoration in Europe: A summary of trends and recommendations to inform practitioners, policymakers and funders. 2020. p. 24pp.
5. UNEP, et al., State of Finance for Nature: Tripling investments in nature-based solutions by 2030. 2021, UN Environment Programme: Nairobi.
6. REGULATION (EU, Euratom) 2020/2092 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2020 on a general regime of conditionality for the protection of the Union budget. LI 433/1.
7. European Commission, Draft General Budget of the European Union: Working Document Part I, in Programme Statements of Operational Expenditure. 2022, Publications Office of the European Union: Luxembourg.



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