



A EUROPEAN CLIMATE FUND

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EXECUTIVE SUMMARY

Member States of the European Union face contradictory objectives that the creation of a European Climate Fund would help mitigate, if not solve. On the one hand, they must make the necessary investments to meet their emission reduction targets and achieve net-zero greenhouse gas emissions by 2050. On the other hand, they are constrained by the European fiscal rules and rising interest rates, which limit their borrowing and financing capacities. Caught in this vice, governments have, until now, preferred to neglect their climate ambitions and prioritise fiscal sustainability. In France, the 2.1 billion euros cut of funds for environmental projects to meet the budgetary targets is a striking recent illustration. To address this dilemma that endangers our ability to meet the climate challenge, we propose the creation of a European Climate Fund. Initially tasked with financing the transition, it could also incorporate European sovereignty considerations and represent a step towards a united Europe around common challenges.

Estimates of the current investment deficit to reach our decarbonisation targets agree on the need for significant additional resources: a lower bound estimate of around 2 to 3% of EU GDP per year. These needs arise in a context marked by an agreement on new European fiscal rules just as restrictive as the previous ones, and the end of the financing linked to the Next Generation EU recovery plan by 2026. In total, these constraints would require Member States to cut their budgets by an additional 2.5% of GDP within four years, which seems hardly feasible.

The necessary investments for the transition are not all profitable, and some, by their very nature, have a supranational scope and are related to European public goods. The European Climate Fund could direct its financing towards these investments that are currently insufficiently covered by both the public and private sector. Joint EU financing would have numerous positive effects: it would enable economies of scale, respond to the concrete demand of European citizens to see projects financed at the European level, coordinate and plan the transition effort, and ensure that all necessary expenses are made while reducing the fiscal burden for Member States. For this, subsidies should be favoured. However, other tools could also be considered, such as concessional loans to Member States at rates lower than the market rate, and guaranteed loans (similar to those from the European Investment Bank).

To finance the European Climate Fund, it will be necessary to think about the EU's own resources as well as national contributions by Member States based on criteria adapted to the challenge. While new own resources for the European Union could be considered, they might not be sufficient or politically too costly to implement. Therefore, common financing by Member States will be necessary. A negotiation on the size of the contribution by Member States will then be needed to determine the criteria according to which the funds will be provided and

allocated. We analyse different criteria that could be considered, which would not merely reflect the economic weight or population of these different states. The Climate Fund could be primarily financed by Member States with the highest fiscal capacities and the largest historical greenhouse gas emissions; it could particularly benefit states whose capacities are too limited to adequately meet the challenge of the green transition and who have the most significant financing needs to achieve their emission reduction targets.

Initiating a discussion on a European Climate Fund will ultimately enable the establishment of an orderly and transparent financing strategy for the green transition that seeks to resolve the dilemma between planetary and fiscal exhaustion. Indeed, the distribution of the burden between the national and European level, between Member States, and between governments, businesses and households must be the result of a comprehensive dialogue. It must lead to the definition of a transparent financing strategy, avoiding systemic risks for Europe, whether from excessive budget deficits or climate inaction. This text also highlights the necessity to develop an estimate of financing needs for each European country with a harmonised methodology to ensure planning and develop a systemic vision.

Finally, given the current geopolitical context, the creation of this structure could serve to finance other expenses that could pose an existential risk to the European Union in the future. Defence and sovereignty issues will weigh on the EU's future. While this proposal focuses on climate investments, a European Climate Fund could integrate these objectives, which, in some respects (such as energy), go hand in hand with climate objectives.



How do we solve the dilemma between planetary and fiscal exhaustion, in which European countries find themselves? EU Member States are caught between the substantial investment need to meet their emission reduction targets, and their commitment to keeping balanced public budgets, as dictated by the Union's fiscal rules. Unless this dilemma is resolved, governments are likely to scale back their climate ambitions significantly.

There are two possible exit strategies: (i) allowing a more flexible application of European fiscal rules, and giving preferential treatment to climate-related spending, or (ii) accepting strict fiscal rules at the national level, in exchange for joint funding of climate-friendly investments at the European level.

The first strategy failed, as demonstrated by the outcome of the Stability and Growth Pact reform negotiations. In the [first policy proposal featured in this dossier](#), the Institut Avant-garde argues for the need to introduce symmetric rules to guarantee both climate and fiscal sustainability. But these rules can only be credible if Member States are given the means to comply with them. Meanwhile, the second strategy is partially pursued within the *Next Generation EU* programme, which is however due to end in 2026. While it is too early to draw definitive conclusions on the former, the worldwide dimension of resource depletion and climate risks argues in favour of a financing strategy at the European level.

To face these daunting challenges, it is essential to determine the overall costs of the transition; and agree on a coordinated funding effort at the European and national level. This would ensure the necessary investments and public expenditures to reach our transition targets. In this policy proposal, we look at ways of sharing the transition-financing costs and propose the implementation of a permanent European Climate Fund.

1. Estimating financing needs for the transition

1.1. At the European level

There are several available estimates of the climate investment gap at the European level. These are based on the Member States' commitments to reducing greenhouse gas emissions as part of the EU's Green Pact for Europe and its *Fit for 55* legislative package¹. They are summarised in Table 1 below.

¹ This package aims at reducing European greenhouse gas emissions by 55% in comparison to 1990 emission-levels by 2030, and to achieve carbon neutrality (*net zero*) by 2050.

Table 1 – Estimated annual investment gap in Europe

Estimation	Source
406 billion euros (2.6% of EU GDP)	I4CE (2024)
360 billion euros (2.3% of EU GDP)	Institut Rousseau (2024)
2% of GDP each year until 2030, then 1% until 2050.	Bruegel (2022)
The European Commission’s staff calculated a 416 billion euros investment gap until 2030 (2.6% of EU GDP). Then 205 billion euros between 2030 and 2050 (1.3% of EU GDP).	European Commission (2020) European Commission (2024)

Source: Institut Avant-garde

These estimations concur on an annual climate investment gap of around 2-3% of EU GDP. The analyses apply a bottom-up methodology: i.e. extrapolating the macroeconomic cost of *net-zero* technologies, based on sectoral analyses of decarbonisation technologies and their abatement costs. However, this approach relies on a set of assumptions that can lead to an **underestimation of actual investment and financing needs**. For instance, these estimates disregard the opportunity costs associated with switching to new technologies (see [our analysis on this matter](#)).

Additionally, these estimates do not consider a wide range of additional costs that are associated with the green transition. These include:

- (i) **Environmental protection costs.** In addition to the importance of protecting ecosystems and biodiversity, maintaining natural carbon sinks is an integral part of transition to carbon neutrality. According to estimates by the [European Commission](#) related to the Nature Restoration Act which was adopted in February 2024, protecting and restoring 20% of Europe's natural environments could cost around 150 billion euros¹.
- (ii) **The cost of damages resulting from the increasing number of extreme weather events.** For example, the 2021 floods in Germany cost €40 billion, and a report commissioned by the German federal government found that ever-increasing climate-related damages could reach €1,000 billion by 2050².
- (iii) **Research and innovation costs** to develop necessary technologies and innovations needed reduce greenhouse gas emissions.

¹ The Nature Restoration Act, adopted by the European Parliament on February 27, 2024, aims to restore 20% of the European Union's land and marine areas in poor condition by 2030. The estimated cost of this operation is around 150 billion euros, with a projected benefit of 1,800 billion euros.

² Again, this is a low estimate. See [La facture colossale que pourrait coûter le changement climatique à l'Allemagne](#) (in French).

- (iv) **The cost of a just transition**, which includes - but is not limited to – supporting households which are the most affected by climate policies, as well as maintaining our social protection systems. This aspect is essential to ensuring that the transition does not weigh disproportionately on poorer households, and thus the acceptability of climate measures. There are no precise estimations for these last two types of cost.

Thus, estimates of climate financing needs must be seen as **the lower bound of actual transition costs, below which achieving our climate objectives would be seriously compromised.**

1.2. At the national level

Estimations of transition financing needs are available for some European countries, but they are scarce and not based on a harmonised methodology (see Table 2).

Table 2 – Estimated annual investment gap in several European countries

Country	Estimation	Source
France	The additional financing needs range from €58 to 80 billion per year until 2030, i.e. 2.1-2.9% of GDP.	Rexecode (2022)
France	€66 billion, i.e. 2.3% of GDP, of additional investments needed per year.	Rapport Pisani-Ferry-Mahfouz (2023)
Italy	2.2% of GDP	Institut Rousseau (2024)
Spain	3.2% of GDP	
Poland	3.6% of GDP	
Germany	1.4% of GDP	
Netherlands	1.8% of GDP	
Sweden	1.7% of GDP	
Germany	€860 billion, i.e. 2.5% of GDP, of additional investments needed per year.	
Romania	The annual investment gap reaches €330 billion, i.e. 2.9% of GDP.	World Bank (2023)

Source: Institut Avant-garde

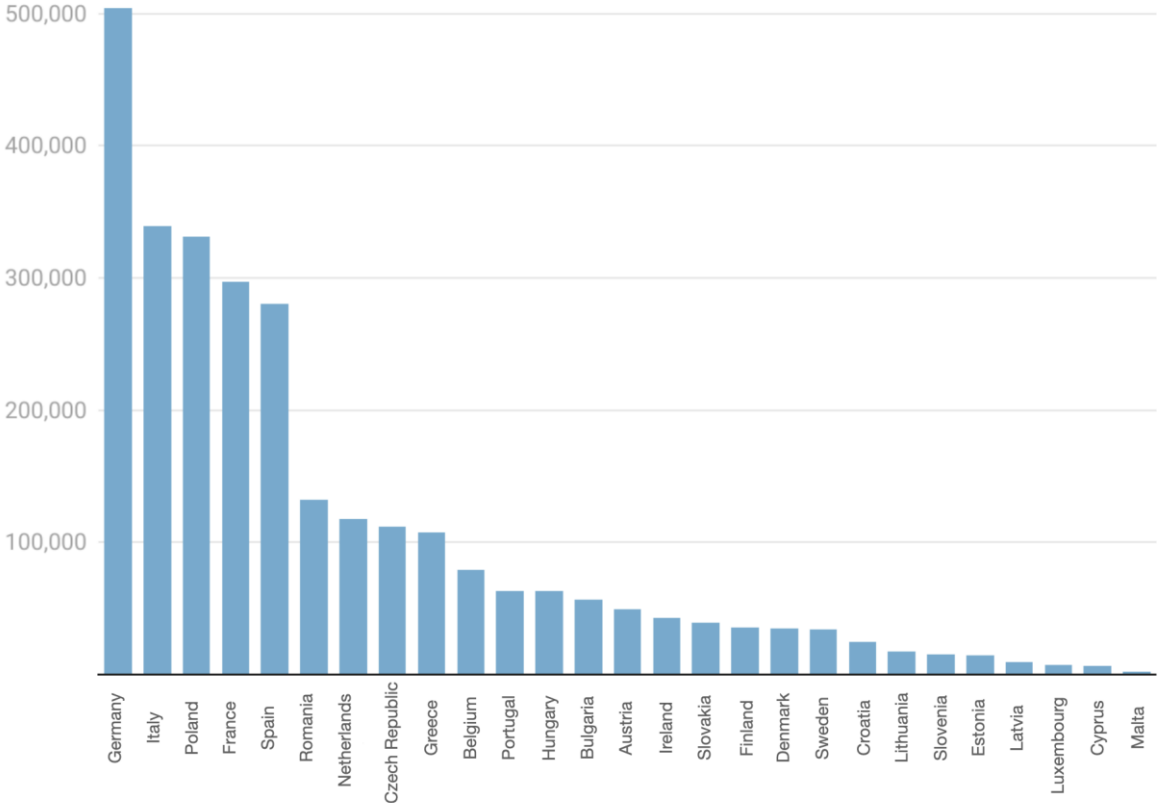
Under the *Fit for 55* plan, Member States have agreed on [country-specific emission reduction targets](#)¹. These can give us an estimate of the magnitude of each Member States' decarbonisation efforts, as well as associated financing needs. They also facilitate comparisons between Member States. As seen in Figure 1, Germany, Italy, Poland, France and Spain, in particular, face very

¹ With the aim of achieving an overall European reduction of 40% in non-ETS emissions, compared with 2005 levels.

ambitious emission reduction targets, which implies major investments and potentially high financing requirements.

Figure 1 – Greenhouse gas emission reduction targets for each European country

Volume of greenhouse gas emissions to be reduced by each Member State by 2030, based on their emission reduction targets and their 2005 emission levels



Source: European Commission and UNFCCC.

However, investment needs can vary greatly from one country to another, depending on the structure of their economy and already-existing funds. The lack of country-specific investment gaps estimations is a major obstacle to gaining an overall understanding of financing needs for each Member State. To push forward an initiative in favour of a Climate Fund, it is essential to develop precise investment needs estimations for each European country, based on a harmonised methodology. In France, the lack of data available data is often highlighted: in its [2024 Annual Public Report](#), for example, the *Cour des Comptes* pointed out that estimates of adaptation costs were still too scattered.

2. What would be the scope of the European Climate Fund

The creation of a European Climate Fund would be justified on several counts. First, European countries face contradictory objectives: they are asked to meet emission reduction targets, while at the same time having their hands tied with regards to their fiscal room-to-manoevre (see Box 1). A European Climate Fund would help resolve this dilemma by shifting parts of the financing to the European level. Furthermore, reducing emissions is a European public good¹ which justifies organising efforts on a European scale. Lastly, not all the investments needed to succeed the transition to low-carbon economies are profitable, and public financing tools must be devised to ensure this particular type of investment.

Box 1 – Estimation of the financing needs of European countries in the coming years

The investment and transition financing needs come at a time when Member States are subject to significant fiscal constraints related to the Stability and Growth Pact (SGP), which also coincides with the gradual end of the Next Generation EU (NGEU) recovery plan.

- According to [Bruegel \(2023\)](#), the recent reform of the SGP is expected to lead to an average fiscal adjustment of 1.7% of European GDP within 4 years.
- In parallel, the cuts in public expenditure needed to offset the effect of the end of the recovery plan and its environmental subsidies are estimated at around 28 billion euros, or 0.2% of EU GDP.

Finally, savings are needed to finance the increase in net public climate investments. As mentioned, the increase in gross public and private investment needs is estimated to be between 2 and 3 percentage points of GDP across Europe. To deduce the increase in net public investments, it is then necessary to (i) move from gross investments to net investments by subtracting brown investments, and (ii) make an assumption about the share borne by the public sector.

By using available estimates for Italy in both cases, we arrive at an additional net public investment of about 0.6 percentage points of GDP. This is likely an underestimation as well.

- In total, a country aiming to reconcile fiscal sustainability and climate sustainability will therefore need to cut spending in the range of 2.5% of GDP within 4 years, with one-third attributed to climate efforts. For a country like France, this amounts to around 75 billion euros.

This average obviously masks significant disparities between countries. For instance, the same calculation would result in an effort of 5.4% of GDP for Italy, which appears hardly sustainable.

¹ I.e. a non-exclusive and non-rival good, as its access and availability are not restricted. This can pose problems regarding the valuation, financing, and protection of these assets, generally referred to as the “tragedy of the commons”.

What should be the scope of the European Climate Fund? What types of investment should it finance? There are two ways of estimating this. The first approach involves a reasoning by types of investments that need to be made, and then estimating their costs and the corresponding budget. The second approach involves negotiating a general budget, which would represent a certain proportion of overall investment needs, and then allocating a part to each Member State to be spent according to agreed-upon conditions set out in a comprehensive transition programme (see [proposal on symmetric rules](#)).

2.1. An approach by investment type

2.1.1. Based on their profitability and temporality

The investments supported by the European Climate Fund could first be defined according to two key characteristics: their profitability and their temporality, although these remain difficult to measure.

According to the typology developed by Jézabel Couppey-Soubeyran¹ we can determine three types of green investments, based on their profitability:

- (i) **Profitable green investments** (e.g. solar energy, under certain conditions)²
- (ii) **Investments whose profitability is uncertain**, or will only materialise in the medium to long term. The Pisani-Ferry-Mahfouz report³ points out that some transition investments could indeed end up being *cost-effective*⁴, but only in the long term (electric vehicles or hydrogen, for example); it stresses that “we should not, however, expect a significant net revenue stream, at least by 2030, given the limited rate of return on investments and their slow ramp-up”.
- (iii) **Expenses that are inherently non-profitable** (such as infrastructure spending in rail or river freight, public expenditure related to the just transition, or to the protection, restoration, and expansion of carbon sinks).

Investments in category (i) can be tackled by the private sector, as they are able to generate profit. However, there would seem to be a case for tackling investment types (ii) and (iii) at the European level. This would avoid further deterioration of public finances for countries with limited fiscal space. It would also respond to their potential reluctance to undertake these investments, which would ultimately delay their green transition. Attention must also be paid to the timeframe of necessary investments: some require long-term, regular disbursements, without being immediately

¹ See [Comment financer la transition écologique et sociale](#) (in French).

² Higher carbon prices may also make some investments profitable when they were not at lower prices; however, this does not increase the ability of businesses and households to finance these projects.

³ Pisani-Ferry, J. & S. Mahfouz. 2023. [The economic implications of climate action](#). France Stratégie.

⁴ The report states: “In an economy characterized by a higher capital stock and lower operating costs, the government will benefit directly from the lower operating costs (in heating and cooling) made possible by its own investments.”

profitable. European funding through the Climate Fund would make it possible to ensure sustainable financing over time, while preventing such funding from falling victim to the electoral cycles of Member States. This is a decisive factor, as it is the stock of accumulated emissions that counts for the planet's future: it is therefore vital not to postpone the effort.

On the other hand, this approach by type of investment does not give us a reliable estimate of the total amount that would be covered by the European Climate Fund, as it is difficult to know *ex ante* what proportion of the investments required for the transition would be profitable, unprofitable or profitable in the long term¹.

2.1.2. Adopting a sector-based approach

A second approach would be to identify sectors for which European funding would be most justified.

Several criteria could be envisaged, such as (i) identifying sectors that are both essential to the transition and to European economic sovereignty (e.g. reducing dependence on foreign gas), (ii) those that have positive externalities for Europe as a whole but are dependent on national investment efforts (e.g. electric charging stations that promote mobility between European countries).

The expenses that would ultimately be funded are those falling within the definition of “European public goods”², which Member States cannot provide sufficiently; or those generating positive externalities³. While this paper focuses on the climate crisis, this fund could eventually be expanded to other European public goods such as defence or those related to economic sovereignty. Financing the provision of European public goods would enable concrete economies of scale, for example in infrastructure projects.

Furthermore, it is worth recalling that the preferences of EU citizens are relatively homogeneous within the Union, and there is a growing demand for certain needs to be addressed at the European level. For example, according to Eurobarometer 100, released in December 2023, 83% of the surveyed citizens believe that the EU should heavily invest in renewable energies. Additionally, 77% of them also support a common security and defence policy, while 69% endorse the need for Europe to strengthen its military capabilities. A European Climate

¹ A proxy could be to look at the abatement costs of the investments to be made. An estimate is available in the Pisani-Ferry-Mahfouz report (2023). But this approach has obvious limitations, due to the difficulty of quantifying and forecasting these costs, particularly for the least profitable investments.

² Broadly defined to include safety and environmental protection.

³ This definition would not be limited to simple infrastructure projects, whose investment amounts would be limited. An I4CE report (2024) refers mainly to trans-European interconnection of electricity and rail infrastructures, for which gross public and private investment requirements are estimated at 29 billion euros for rail (I4CE estimate) and 6 billion euros for electricity (European Commission estimate).

Fund would ultimately be justified in its capacity to “build Europe”, by enhancing its ability to act concretely while meeting the expectations of European citizens.

However, there are several difficulties in estimating the needs at the European level through a sectoral approach. Firstly, accurate estimates of sectoral investments that would be accounted for in this framework would be required, which could lead us back to the impasses that prevented the establishment of Green Golden Rules (the exclusion of green expenditures from the target of public deficit): disagreement over the exact definition of a green investment. Secondly, it should also be noted that European expenditures often already receive partial funding under existing programmes, which raises questions about how financing would be handled by the various already-existing European funds and which expenditures would specifically fall under the European Climate Fund.

2.2. An approach based on estimating a total budget

The approach we favour involves setting a total budget for the European Climate Fund, directly linked to the need to reduce the dilemma between climate sustainability and fiscal sustainability:

- A low scenario could involve compensating for the end of NGEU’s environmental subsidies, which are approximately **30 billion euros per year** (0.2 percentage points of annual GDP, see Box 1).
- A high scenario would aim to finance – in addition to the aforementioned – the entire additional public investment needs to meet our climate objectives in the scenario presented above; or approximately **130 billion euros annually** ($0.6 + 0.2 = 0.8$ percentage points of annual GDP, see Box 1).

To accommodate political constraints, an intermediate scenario could involve having the Fund cover half of financing needs from the high scenario, amounting to 65 billion euros per year. For comparison, the NGEU’s Recovery and Resilience Facility (RRF) is endowed with 723 billion euros over 6 years, including 338 billion euros of grants (averaging 120 billion euros per year, including 56 billion euros of grants annually)¹. This would result in a budget close to the annual grants of the NGEU programme².

In this scenario, the Climate Fund would only cover part of the previously highlighted investment gap, which, as we have seen, underestimate real financing needs. If the Climate Fund’s scope were to be expanded, it would therefore be essential to consider a larger budget. This initial budget appears more politically feasible, but it would not address defence or European sovereignty issues, and it should not be diverted for those purposes.

¹ 2022 prices.

² [Heimberger and Lichtenberger \(2023\)](#) propose a Climate and Energy Investment Fund with a budget of at least 1% of European GDP.

2.3. What financing tools to disburse the Climate Fund?

The next step is to determine which tools can be implemented as part of the Climate Fund in order to allocate the available funds.

Loans and grants are the preferred tools of existing European financing funds and programmes. We can use the example of the NGEU recovery plan, a significant European investment programme. The RRF, its associated financing instrument, provides both loans (46% of the total envelope) and grants (53%) to European countries upon request (see Box 2 for an analysis of the effects of the recovery plan). The repayment terms of loans granted under the RRF will be subject to agreements between the Commission and the Member States.

However, financing through loans burdens national public finances and may impede meeting public deficit and debt targets as outlined in the Stability and Growth Pact. Moreover, the interest rate spreads between certain Member States and the EU are insufficient to alleviate the debt burden of countries with limited fiscal space. For instance, the financing cost spread between the EU and Italy is approximately 1 percentage point. Financing the entire fiscal surcharge of the transition within the framework of the Multiannual Financial Framework (MFF) ($0.8 * 7 \text{ years} = 5.6$ percentage points of GDP) would only save Italy's budget around 1 billion euros annually in interest¹.

Therefore, it would be more advisable to prioritise financing through grants within the Climate Fund. As mentioned earlier, the proposed budget of 65 billion euros per year is close to the number of annual subsidies currently granted under the RRF.

However, loans could still be considered if they are granted at significantly lower rates than those of the market. We have demonstrated that the preferential rates currently offered under European financing programmes such as NGEU are still too high to significantly improve debt conditions for countries with high financing needs. However, we could draw inspiration from so-called “concessional loans”, which are granted at very low rates by the International Monetary Fund in some of its financing programmes. By lending at low rates, the Climate Fund would thus subsidise a portion of the interest rates without having to bear the total amount of the loan granted.

Other complementary financing tools could be considered by dedicating a portion of the financing programme to guaranteed loans. These could be granted through certain European agencies such as the European Investment Bank (EIB). It would create leverage effects and increase Europe's capacity to finance its transition². The EIB would also benefit from these guarantees, as they would allow it to undertake green investments bearing uncertain profitability, which it would not have otherwise been able to do, due to its risk-taking and profitability constraints. There are

¹ According to the European Commission's AMECO database, the interest burden on Italian public debt will amount to 89 billion euros in 2024.

² See Mertens, D. and M. Thiemann. (2019). [Building a hidden investment state? The European Investment Bank, national development banks and European economic governance](#). *Journal of European Public Policy*, 26(1), 23-43.

already several programmes and mechanisms at the European Union level that allow European funds to guarantee or to co-finance loans granted by financial institutions such as the EIB (for example, the European Fund for Strategic Investments).

Box 2 – Results of NGEU and the RRF

NGEU is a one-off programme with a budget of 800 billion euros (at today's prices), with a gradual and capped amount for the 27 EU countries. It was developed at a time of accommodative monetary policy (the European Central Bank's policy rate was negative) and economic crisis. NGEU includes limited risk-sharing: the EU as a whole issued common debt which will be repaid by additional European own resources; and by all EU Member States based on their GDP weights, but only in the long term and for half of the funds, namely those consisting of grants. The loans provided must be repaid by the states that have received them.

Regarding the economic effects of NGEU, it is still early to quantify them precisely. Funds from the RRF only began to flow from 2021, with a peak in 2023, as Member States must apply for them and achieve objectives (such as launching a tender or signing a public procurement contract) before receiving disbursements. The expected investments have therefore not reached their full implementation.

However, the European Commission published a midterm evaluation of the NGEU programme in February 2024, based on extensive macroeconomic simulations. It illustrates the expected impact of the RRF and NGEU. However, there is no *ex-post* evaluation to date. The simulations suggest that the recovery plan could have significant positive effects with: (i) expected growth of 1.4% of EU GDP by 2026, (ii) significant cross-country spillover effects, amounting to between one fourth to one third of the total impact of RRF, and (iii) a reduction in interest rates spreads, as shown by an associated study commissioned to a group of experts¹.

3. How can the European Climate Fund be financed?

Apart from an intergovernmental agreement, there are two possible solutions for financing the European Climate Fund:

- (i) Financing from the European Union's own resources, i.e. compulsory levies, the revenue from which would be allocated to this fund.
- (ii) Financing by contributions from the Member States, allocated according to criteria to be specified.

¹ Corti F., D. Nigohosyan, C. Pancotti & S. Millard. 2023. [Study supporting the mid-term Evaluation of the Recovery and Resilience Facility](#), Final Report. European Commission.

3.1. Financing by own resources

The current European budget under the 2021-2027 Multiannual Financial Framework (MFF) is not sufficient to cover the financing needs of the transition (Table 3).

Table 3 – EU own resources for 2024 and expected new own resources

Own resources 2024 (in €bn)		Expected additional own resources (in €bn)	
Customs duties	24.6	Extension of ETS*	7-19
VAT	23.6	CBAM*	1.5
Contribution based on non-recycled plastic packaging waste	7.1	Contribution based on the profits of large companies	2.5-4
Direct contribution of Member States (GNI resources)	81.2	Statistical contribution based on corporate income*	16
Total: €143 bn (including miscellaneous revenue)			

Source: Estimations by the European Commission, Draft budget of the European Union 2024

Moreover, three of the proposed new own resources (marked with an * in Table 3) are part of a package of own resources reform that was agreed upon by the European institutions in 2020 and are already allocated. They are intended to repay the funds borrowed by the European Union, particularly those committed to financing the NGEU recovery plan. A part of the additional

Therefore, other resources should be considered. Several European taxes are currently being discussed in the public debate: a financial transaction tax or a tax on the capital of the wealthiest individuals, taking the form of taxation on capital income or on wealth holdings¹.

In France, for instance, the Pisani-Ferry/Mahfouz report propose the implementation of an "exceptional and explicitly temporary" flat-rate levy of 5% on the capital of the wealthiest 10% of households, which would raise 150 billion euros by 2050 (2022, 120)². Jakob Kapeller, Stuart Leitch, and Rafael Wildauer provide estimates of the amount generated by several models of European wealth taxes³. According to their study, a flat tax on households with wealth exceeding 1 million

¹ This is currently the subject of a [European Citizens' Initiative](#). This initiative aims to tax the top 1% of European households to fund the ecological and social transition. It must gather one million signatures in at least seven European countries by October 2024 to be discussed or proposed by the European Commission.

² Pisani-Ferry, J. & S. Mahfouz. 2023. [The economic implications of climate action](#). France Stratégie.

³ Kapeller, J., S. Leitch & R. Wildauer. 2023. [Can a European wealth tax close the green investment gap?](#) *Ecological Economics*, 209.

euros could generate annual revenue of 1.6% of GDP¹. A progressive tax starting from a threshold of 2 million euros, with differentiated rates up to 10% for wealth exceeding 500 billion euros, could yield up to 3% of annual GDP². They estimate that a progressive wealth tax at the EU level could generate up to 393 billion euros annually³, covering 83% of the investment deficit, which they estimate at 467 billion euros per year until 2050. As for a tax on financial transactions, it could bring in 57 billion euros per year, according to the European Commission.

But is it politically feasible? It should be noted there have been recent advances in European fiscal integration matters, such as the adoption of a 15% minimum tax on profits earned by large corporations in December 2022. However, adopting a tax of a similar scale to that described by Kapeller et al. seems politically challenging, especially since the envisaged marginal rates are much higher than those currently in force or that have existed at the Member State level. Indeed, at the European level, the subject of tax integration does not have a consensus, as it requires unanimity of the Member States⁴. Moreover, the French government has so far expressed opposition to the implementation of a national wealth tax to finance the green transition⁵.

It will therefore be challenging to create a new European tax that is not a substitute for national compulsory levies, in order to truly relieve Member States' public finances (and not just transfer financing from the national to the European level).

In conclusion, new own resources are certainly conceivable, but the existence of a Climate Fund cannot rely solely on these. Direct contributions from Member States will also be necessary.

3.2. Common financing by Member States based on specific distribution keys

The capital of the European Climate Fund should be partially financed by direct contributions from Member States. The aim of the European Climate Fund is to achieve a common goal: the transition *net-zero* emissions. Achieving this goal requires a form of solidarity among European countries. This solidarity needs to be organized by defining the most suitable criteria through which funding would be pooled and allocated.

Ultimately, financing the transition through a European Climate Fund would benefit all countries, not only because it would facilitate meeting their decarbonisation targets but also because it would generate significant positive externalities: increased demand, private investment, and numerous

¹ 2% rate on fortunes above one million euros, applicable to the wealthiest 3% of European households, for Euro22 households.

² Progressive rates ranging from 2% to 10%, with a threshold of 2 million euros in wealth for Euro22 households.

³ By rescaling the amounts based on the findings for the Euro22 countries.

⁴ Wasserfallen, F. 2013. [Political and Economic Integration in the EU: The Case of Failed Tax Harmonization](#), *Journal of Common Market Studies*, 52(2), p. 420-435.

⁵ See [Transition écologique : le gouvernement opposé à la création d'un "ISF vert"](#).

cross-border effects¹. Moreover, as mentioned in our [proposal dedicated to symmetric rules](#), the economic costs for Europe of falling behind on our emission reduction targets could be much more significant in the long term.

Currently, the distribution keys of most European funding programmes are primarily based on macro- or socio-economic criteria. For example, the Recovery and Resilience Facility within the NGEU recovery plan is allocated based on population, GDP per capita, pre-pandemic unemployment rate, and the observed impact of the pandemic on GDP and employment. While 37% of the RRF funds must be devoted to the environment and climate, climate objectives are not reflected in the distribution criteria. The Just Transition Fund, intended to address the social issues emerging in European regions most affected by the transition to climate neutrality, is distributed based on their dependence on polluting industries and fossil fuels. The allocation criteria are thus based on industrial greenhouse gas (GHG) emissions, employment in industry, the significance of extractive activities, and the economic development of the region. Although these criteria better reflect the climate issues related to the ecological transition, they are constrained to a regional perspective.

For a European Climate Fund, it seems appropriate to adopt allocation keys that combine both macroeconomic and climate perspectives. For example, Heimberger and Lichtenberger (2023) proposed the creation of their Climate and Energy Investment Fund, which would be allocated based on (i) greenhouse gas emissions per capita, (ii) population, and (iii) GDP per capita. Given recent developments regarding European budgetary rules and the limited fiscal room-to-manoeuve of some member states, we also propose adding criteria that would reflect issues related to financing the transition. The addition of these criteria would help address the dilemma between planetary exhaustion and budgetary constraints.

We therefore propose that the allocation keys for the European Climate Fund take into account the financing capacities of member states. Criteria such as (i) the interest rate on 10-year bonds, (ii) anticipated debt burden, or (iii) the interest-growth differential (to reflect a potential snowball effect) could be considered. Firstly, this would allow for Member States with strong financing capacities to contribute more to the Climate Fund. Secondly, this would support the financing efforts of Member States with limited fiscal leeway.

Regarding integrating a climate perspective into the distribution keys, GHG emission measures can be used. However, it is important to distinguish between criteria that determine funding contributions and criteria that determine funding allocation. We could indeed consider that the largest historical GHG emitters should particularly contribute to the capital of the European Climate Fund. Regarding funding allocations, we could turn to the delay accumulated by Member States in meeting their decarbonisation targets to better reflect their investment needs. This approach would ensure that funding is directed towards countries that require most support in transitioning to a low-carbon economy.

¹ See the paper by Zsolt Darvas for Bruegel [“Having the cake, but slicing it differently: how is the grand EU recovery fund allocated?”](#)

Table 4 - Criteria that could be used to define the allocation keys of the climate fund (beyond the classic macroeconomic criteria GDP per capita and population)

Criteria that could be prioritised to determine funding contributions	High historical emissions
	Financing capacity
Criteria that could be prioritised to determine funding allocation	Delay compared to emissions reduction targets
	High financing needs
	Limited fiscal space
	Weight of sectoral restructuring

Source: Institut Avant-garde

A more in-depth analysis of the effects of different criteria on the allocation keys is available in the Appendix.

Thus, we would ensure that funds are allocated to member states whose financing needs for the transition are the highest - either because their borrowing capacity is limited or because they have fallen behind on necessary investments.

Taking into account the differences in financing capacity between States is crucial but may provoke opposition from countries with more fiscal space, who might see this as an incentive for poor public finance management. A good way to address this criticism related to the moral hazard risk would be to **link the disbursements from the European Climate Fund to compliance with the Stability and Growth Pact**, similar to what was done for the NGEU. This approach would reconcile fiscal sustainability with climate sustainability, instead of setting them against each other.

4. What institutional form for the Climate Fund?

Beyond distribution issues, creating a permanent European Climate Fund raises several legal difficulties¹.

Indeed, there are few options for creating a central fiscal capacity within the current institutional framework. The treaties define a fiscal framework (centered on the Multiannual Financial Framework, MFF) for the EU that ties expenditures to the ability to raise funds: the European budget must therefore be balanced. The creation of special financial instruments and the decision to spend beyond the MFF ceilings are explicitly linked to exceptional circumstances and cannot constitute a solution for the permanent provision of public goods.

According to its legal basis (Article 122 TFEU), the NGEU is a crisis management tool whose activation is linked to the occurrence or risk of exceptional circumstances. By principle, European

¹ See notably Allemand, F., J. Creel, N. Leron, S. Lévassieur & F. Saraceno. 2023. [Making Next Generation EU a permanent tool](#), *Recovery Watch Policy Study* (FEPS, FES, IEV, OFCE).

legislation prohibits the EU from using funds borrowed on the capital markets to finance operational expenditures.

Yet, there are other legal arrangements that could contribute to the financing of public goods, but regardless of the legal basis chosen:

- The EU does not have a general-purpose financial instrument that it could activate, in addition to the general budget, to finance long-term actions and projects;
- The EU cannot provide funds to finance actions outside its area of competence, i.e., it cannot replace Member States in areas where they retain policy competence.

Therefore, if a central fiscal capacity were to be created, it would be necessary to revise the treaties or establish new intergovernmental agreements (following the model of the European Stability Mechanism). An exceptional intergovernmental agreement could specifically allow this fund to have borrowing capacity if the previously mentioned resources are insufficient.

Finally, another avenue worth exploring is proposed in the study by Allemand et al., which suggests the **creation of a European public investment agency as a first step towards creating a central fiscal capacity**. This agency would be responsible for planning and implementing investment projects, in cooperation with the Member States. Under European legislation, the agency would not have complete control over policy choices but would primarily act within the limits set by the EU institutions' roadmaps. However, it would have the administrative capacity to design public investment projects that the Commission currently lacks, and it could be entrusted with control over grant allocation, development of technical guidelines, control of conditionality, etc. The European Climate Fund could be inspired, in its institutional dimension and within the limits of its assigned competencies (investments in the green transition), by the European public investment agency.

Nevertheless, substantial progress in the development of a central fiscal capacity at the European level must not obscure the need to implement national fiscal policies, acting in close collaboration with each other. While increasing powers are already being transferred to the European level in the climate-action domain – and would be even more so with the creation of a Climate Fund –, it is necessary to coordinate national policies with each other and with policies implemented at the European level.

Coordinating fiscal policies, necessarily limits the autonomy of national parliaments and raises the question of the democratic legitimacy of EU policies. This can lead to a form of depoliticization of fiscal policy. To avoid dissociating the strengthening of European macroeconomic policy from its democratic dimension, nothing less than the creation of a political Europe, with two democratic levels, is necessary. Indeed, we need a true European democracy – associated with fiscal competences based on the legitimacy of the Parliament and the preferences of the European electorate – but at the same time fully articulated with national democracies.

A European democracy would open a new space for collective action at the continental scale and create added value for Europeans *as* Europeans (and not as an aggregate of national citizens), by

providing citizens with genuinely European public goods. This could be done without undermining national democracies. Indeed, democracy is not exclusive: a European democracy does not clash with national democracies, as long as the source of sovereignty remains clearly established as originating from the nation-state. Unlike multi-level European governance, which indiscriminately amalgamates local, regional, national, and European levels, this approach to double European democracy focuses on the articulation between the national level – as the seat of sovereignty and primary public power – and the European level – as the place of a supranational and non-sovereign European public power.

Conclusion

The establishment of a sustained European Climate Fund is justified both from an economic and climate perspective. This Climate Fund, targeting essential but unprofitable investments, would respond to citizens' calls for action at the EU level and allow for coordinated and efficient resource management. It could also contribute to “making Europe” by strengthening the Union’s fiscal capacity, as called for by European citizens. While it would avoid increasing national fiscal risks, it would also require in-depth negotiations regarding Member States’ contributions and could rely on new EU-specific financial resources. Negotiating a European Climate Fund is essential to make climate rules, and more broadly our emission reduction goals, feasible and enforceable.



APPENDIX – THE DISTRIBUTION KEYS OF THE EUROPEAN CLIMATE FUND

This Appendix provides a detailed presentation of distribution keys that could be considered to determine contributions and allocations of fundings as part of the European Climate Fund. A summary table is also available at the end of this document (see Table A).

A. Existing distribution keys

In this first part, we closely review in detail the existing distribution keys within the framework of the funding programmes of the RRF and NGEU as well as the Just Transition Fund.

First, let us start with the recovery plan **NGEU and the RRF**. The RRF's total budget is €723 billion (at 2022 prices) until 2026. Each Member State is allocated a partially predefined envelope based on macroeconomic criteria. 70% of the funding is distributed based on the population, the inverse of GDP per capita, and the average unemployment rate between 2015 and 2019. These were allocated to Member States between 2021 and 2023. The remaining 30% have begun to be allocated in 2023. They are distributed based on the impact of the COVID-19 pandemic, which are estimated using the observed decreases in GDP and employment in 2020. Once each Member State's share had been determined, they were able to apply for grants and loans. The following countries are the ones that benefit most from the RRF's subsidies: Spain (€77.2 billion), Italy (€69 billion), France (€37.4 billion), Germany (€28 billion), and Poland (€22 billion). However, it should be noted that France and Germany will contribute a larger share to the repayment of the joint European loan that was contracted to finance the recovery plan, and will ultimately become net contributors.

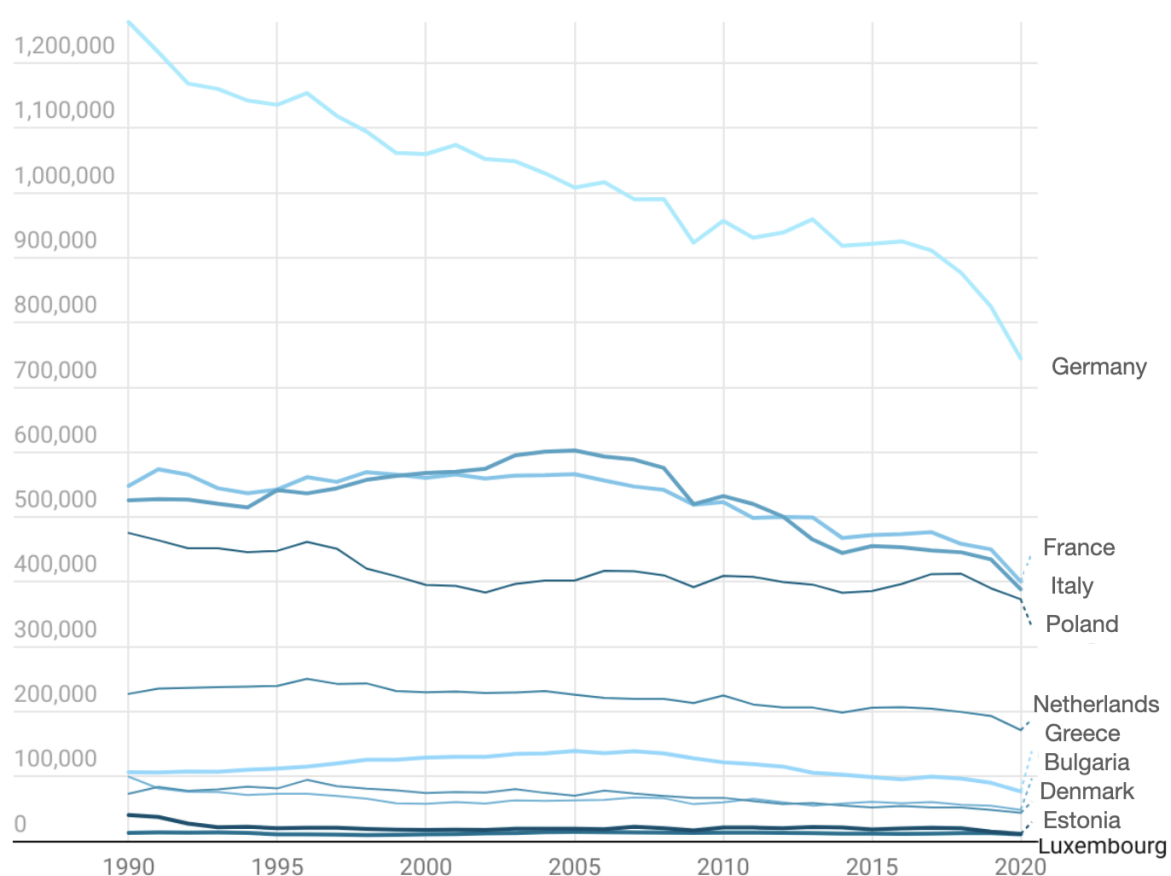
The **Just Transition Fund**, which is a regional fund, was created to address the social issues related to decarbonisation efforts in regions most dependent on greenhouse gas (GHG) emitting industries or mining activities. It operates with a total capital of €17.5 billion between 2021 and 2027. The criteria for allocating funds are as follows: industrial GHG emissions (with a weight of 49%), employment rates in coal and lignite mines (25%), employment rates in carbon-dependent industries (25%), peat production (0.95%), and shale oil production (0.05%). Although funding is allocated to regions and not to states, it is still possible to determine its main beneficiaries. Accordingly, Poland, Germany, and Romania receive nearly half of the funds. They are followed by the Czech Republic and Bulgaria.

B. Historical greenhouse gas (GHG) emissions

In addition to these traditional macroeconomic criteria that would appear in the calculation of distribution keys, one approach to determining the funding contributions could be to **offset the Member States' historical GHG emissions**. Thus, the emissions of the Member States would be used to determine their capital contributions to the European Climate Fund: those whose emissions have been historically highest would have increased contributions.

A funding contributions criterion would therefore be the volume of GHG emissions of each Member State. Graph A.1 presents these figures for a selection of European countries.

Graph A.1 – Evolution of GHG emission volumes by country and by year between 1990 and 2020



Source: UNFCCC.

Germany, by far the largest gross emitter within the European Union, would thus become the leading contributor to the European Climate Fund due to its past emissions, followed by Italy, France, and Poland. Conversely, the contributions from Luxembourg, Estonia, and Bulgaria would be smaller.

C. Financing capacities for necessary investments

The European Climate Fund is designed to address the central problem of **Member States' ability to finance the necessary investments** to achieve their transition goals. Therefore, the financing capacity should be at the heart of the distribution keys for the European Climate Fund. This distribution key can be used to determine both contributions and allocations. Thus, the contribution to the European Climate Fund could depend on countries that have higher financing capacities, while the funds would be allocated to those whose financing capabilities for their transition are limited.

Several criteria are possible to represent the financing capacities of Member States in the distribution keys. Among these criteria, we prioritise those that reflect their ability to incur debt to finance their transition. Thus, countries with high debt capacities will find it easier to finance the necessary investments to achieve their decarbonisation goals, while some European countries have a much more limited ability to incur debt without affecting the sustainability of their public finances or their Maastricht indicators.

We review below three possible indicators to estimate the financing capacities of Member States.

1. 10-year government bond yields

Firstly, the borrowing capacity of Member States can be inferred from the borrowing cost, based on the interest rates associated with their bonds. Here, we also choose to compare capacities with financing needs, to determine which countries have the highest investment needs and the lowest borrowing capacities.

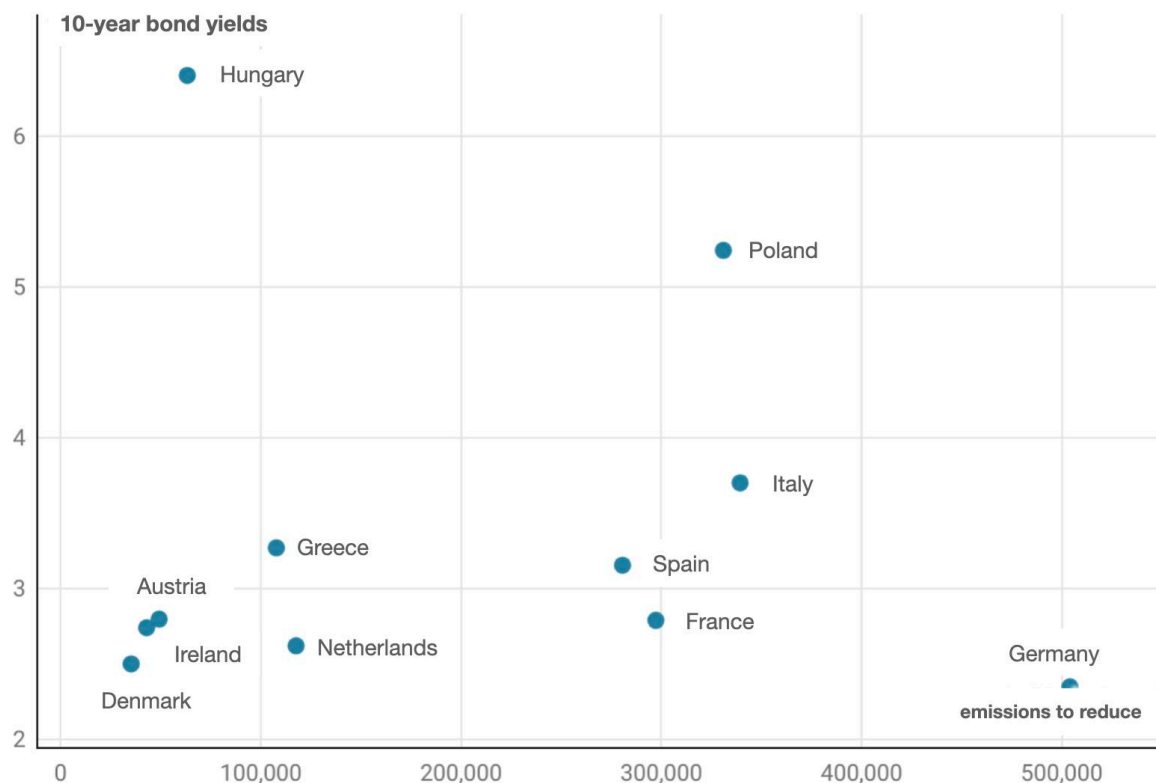
The financing capacities are represented by the interest rates associated with 10-year sovereign bonds, while the financing needs are proxied by the volume of GHG emissions to be reduced according to the commitments of the Member States in the *Fit for 55* plan.

Graph A.2 highlights the dilemma between climate sustainability and fiscal sustainability that some Member States are facing: countries with high emission reduction targets also have, in some cases, limited borrowing capacities. Italy, for example, is the Member State with the second highest volume of GHG emissions to reduce, but at the same time the interest rates on its 10-year sovereign bonds are close to 4%. This greatly limits Italy's ability to borrow today to finance the necessary investments for its green transition. Conversely, Germany, which has high financing needs, benefits from the lowest interest rates in Europe.

Thus, Germany, Ireland, the Netherlands, and Denmark, which have low borrowing costs, could be significant contributors to the Climate Fund. Conversely, Hungary and Poland, but also Italy, Greece, or Spain, could benefit from the Climate Fund.

Graph A.2 – Financing capacities for the transition through debt and estimated financing needs

10-year government bond interest rate for a selection of European countries plotted against the volume of GHG emissions they have committed to reduce by 2030



Source: UNFCCC, European Commission and World Government Bonds.

2. Debt burden

Another criterion for determining the financing capacity of Member States is to consider the debt burden they will face by 2030. A high burden would indeed weigh on public finances and reduce the funding that could be dedicated to transition investments. We are interested in the anticipated debt burden, expressed as a percentage of GDP, for two intermediate dates by 2030: 2025 and 2028.

The anticipated debt burden of some European countries is particularly high. In Hungary, it is 6.6% of GDP in 2025; in Italy, 5.4% in 2025 and 4.1% in 2028. France, Germany, and Poland, on the contrary, face lower anticipated burdens, ranging from 2.3% of GDP for Poland in 2025 to 2.7% of GDP for France and Germany. In Germany, however, they fall to 1% of GDP by 2028. However, some European countries have a very low expected debt burden in 2025, relative to the previously mentioned states: Luxembourg (0.5% of GDP), Denmark (0.6%), the Netherlands (0.9%), Bulgaria (1%).

3. The interest-growth differential

The differential between interest rates and growth rates ($r - g$) reflects the future accumulation of public debt. The more debt accumulates, the more it weighs on debt indicators, and the more resources will have to be allocated by Member States to repaying or reducing their debt rather than investing in their green transition. Conversely, for countries with a low interest-growth differential, growth would allow them to repay (part of) the debt without having to tap into resources that could, for example, be used to finance the transition. This interest-growth differential is calculated from the interest rates on 10-year sovereign bonds as of February 2024 and the potential growth rate.

All European countries are on a trajectory of debt accumulation. But some countries stand out with a particularly high interest-growth differential. It peaks at 3 for Poland. It is also high for Italy, Spain, France, and Germany. Among the Member States for which this differential is (much) lower, Denmark (0.2), the Netherlands, and Luxembourg can be mentioned.

D. Specific financing needs

Another criterion for determining how the European Climate Fund would be allocated is to consider each Member State's **specific financing needs for the transition**. These specific needs can arise for several reasons unique to the different Member States, which is why we have already advocated for the importance of harmoniously reporting these needs across the Union (see Part 1.2). Including them in the allocation distribution keys would address the specific financing needs of Member States – for example, because they have fallen behind on their transition trajectory, or because they face specific sectoral structures or social issues¹.

Here, we take the example of the indicator for lagging behind on decarbonisation trajectories (see Graph A.3). We describe this through projections of Member States' decarbonisation trajectories, focusing on the expected gaps compared to their 2030 and 2050 emission targets.

The projections show significant emission gaps for most European countries relative to their net-zero targets by 2050, as well as significant gaps for France, Italy, and Poland compared to their 2030 targets. These countries would therefore particularly benefit from additional funding from the Climate Fund to catch up on their transition trajectory.

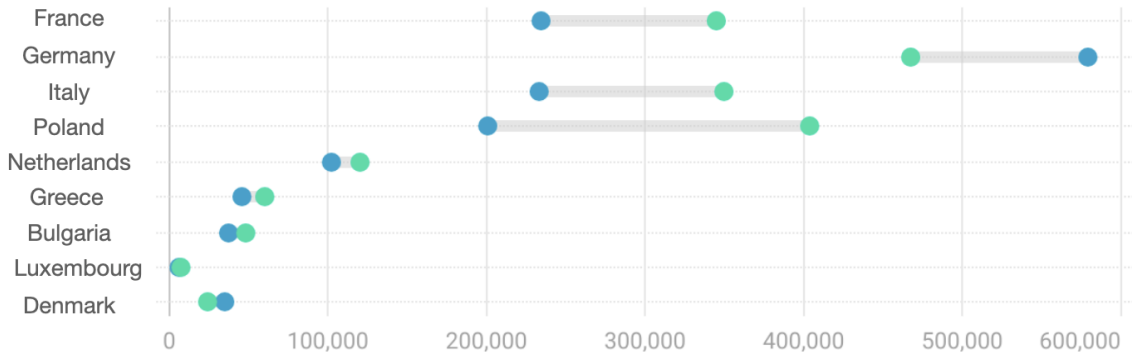
Gaps between GHG emission targets (represented in blue) and emission projections (represented in green) in 2030 and 2050.

¹ For instance, a structural dependency of the economy on sectors that are particularly high in greenhouse gas (GHG) emissions. This could lead to specific social needs related to the downsizing or even disappearance of these sectors during the transition to carbon neutrality.

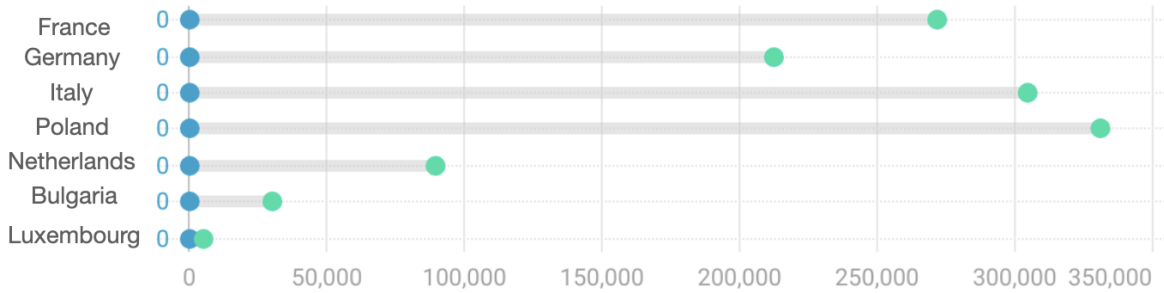
Graph A.3 – Expected gaps in GHG emission projections to targets for 2030 and 2050

Gaps between GHG emission targets (in blue) and emission projections (in green) in 2030 and 2050.

a) 2030



b) 2050



Source: Projections communicated to the European Commission by each Member State.

E. Summary table of possible distribution keys

Table A - Criteria that could be used to define the distribution keys for the Climate Fund (beyond the traditional macroeconomic criteria of GDP per capita and population)

Distribution criterion	Contribution or allocation	Main contributors	Main beneficiaries
<i>Macroeconomic criteria</i>			
GDP / capita	Both	Luxembourg, Ireland, Denmark, Netherlands	Bulgaria, Greece, Slovakia, Croatia
Population	Both	Germany, France, Italy, Spain, Poland	Malta, Luxembourg, Cyprus, Estonia
<i>Financing capacity</i>			
10-year interest rate	Both	Germany, Denmark, Ireland, Austria	Hungary, Poland, Italy, Spain
Debt burden	Both	Luxembourg, Netherlands, Denmark, Ireland	Hungary, Spain, Italy
Interest-growth differential (r-g)	Both	Denmark, Netherlands, Luxembourg	Poland, Italy, Spain, France, Germany
<i>GHG emissions</i>			
Historical emissions	Contribution	Germany, France, Italy, Poland	/
<i>Specific financing needs</i>			
Delay of decarbonisation trajectory	Allocation	/	France, Italy, Poland
(Social) needs due to sectorial restructuring		Not shown here	

Source: Institut Avant-garde



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