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How to turn the ETS2 implementation into a success

Frontloading the Social Climate Fund, and other measures to ensure preparedness for the new EU carbon price on road transport and heating fuels (ETS2)

T&E

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Executive summary

In 2027, the European Union (EU) is introducing a new emissions trading system, the so-called ETS2, which will levy a carbon price on diesel, petrol and heating fuels. **The ETS2 is essential to meet the EU's climate objective,** which cannot be achieved without putting a price on carbon emissions.

However, the scheme is contentious, as oil and gas companies will likely pass on the carbon price to car drivers and families heating their homes. There is a legitimate concern that this could disproportionately and negatively impact low-income people, as well as small businesses that heavily rely on transport.

It is up to Member States whether the ETS2 becomes regressive or progressive in their country.

T&E recommends the following **five measures for a successful ETS2 implementation:**

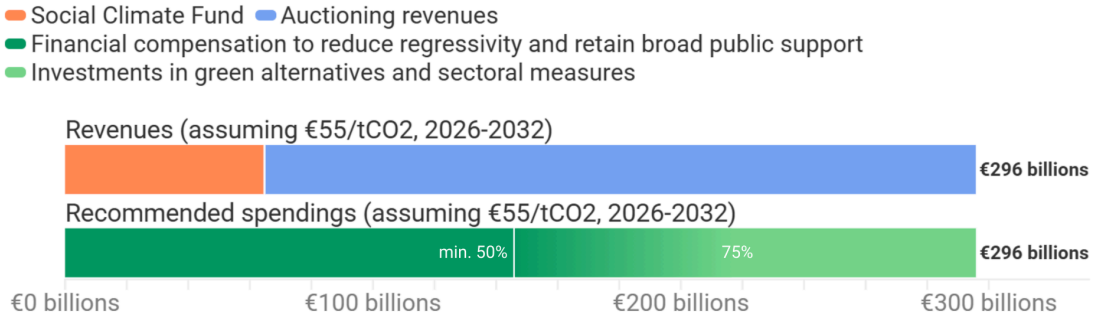
1 Put all ETS2 revenues to work for a green and just transition, and return at least half as financial support

The ETS2 will raise hundreds of billions of euros across the EU. If spent wisely, it would present a major opportunity to help fund a green and just transition.

Even with enormous investments in the next few years, the majority of people will still be driving and heating with fossil fuels. **Financially compensating low- and lower-middle income, while green investments make alternatives available for all, is therefore essential to a green and just transition.**

Hundreds of billions of euros raised for a green and just transition

Targeted investments will allow the transition to green alternatives while financial compensation can shield those who are still exposed to carbon tax during the transition.



Source: T&E calculations, based on Öko-Institut (2024)

T&E recommends returning at least 50% of the revenues as financial support.

There is no one-size-fits-all solution: targeted direct compensation is efficient for the most vulnerable but administratively complex and less appealing to the middle class. Climate dividends are fair, visible and politically popular, benefiting low-income groups though less targeted. Tax reductions (e.g., electricity tax) support clean energy but primarily benefit wealthier households and can lack visibility.

In terms of investments and sectoral measures, T&E recommends spending around half of the budget available on the transport sector - as at EU level, road transport represents 58% of total ETS2 emissions.

- With car usage making up the lion share of road transport emission (59%), specific measures to help people who have to rely on cars should be rolled out, such as low-cost electric vehicle (EV) leasing as successfully done in France.

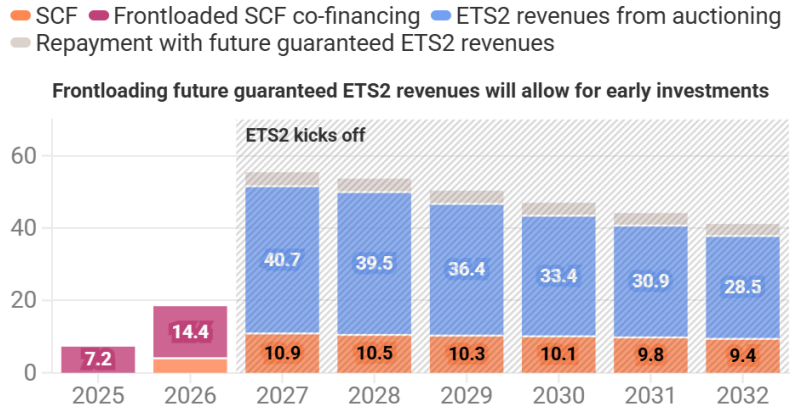
Beyond that, key social transport measures are:

- Subsidies or leasing schemes for (e-)bikes or upgrading of cycling infrastructure;
- Measures aimed to improve the capacity and quality of public transport services;
- Mobility on demand and shared mobility services;
- Mobility credits and scrappage schemes;
- Targeted roll-out of charging infrastructure for electric vehicles, especially among citizens that are unable or cannot afford to install charge points at home.

Targeted schemes should prioritise small enterprises operating in rural, low-income or industrial regions where the economic case for electrification is often harder to make in investing in clean transport and energy solutions.

2 Frontloading the Social Climate Fund to ensure investments start at scale before the ETS2 kicks in

Investments in zero-emission alternatives (e.g., renovation, public transport) take time to show results.



Source: T&E based on Öko-Institut (2024) • Assuming a constant carbon price of €55/tCO2.

The European **Commission and/or the European Investment Bank (EIB) should therefore extend loans directly to Member States as of 2025 for early investments** in the road transport and buildings sectors that benefit lower and middle incomes.

These loans would then be **recouped from future ETS2 revenues**.

The Commission could use the undersubscribed loan compartment of the Recovery and Resilience Facility (RRF) to provide these loans. An alternative option is to frontload the revenues using an intermediary such as the EIB or another public institution.

3 Improve national energy and climate plans (NECPs) and propose new EU measures

ETS2 works as a gap-closer between the emission path resulting from policies and our climate targets. If measures like EU vehicle standards or national zero-emission zones do not cut enough emissions, ETS2 prices will rise to make up the difference.

Effective price control starts with ambitious complementary policies.

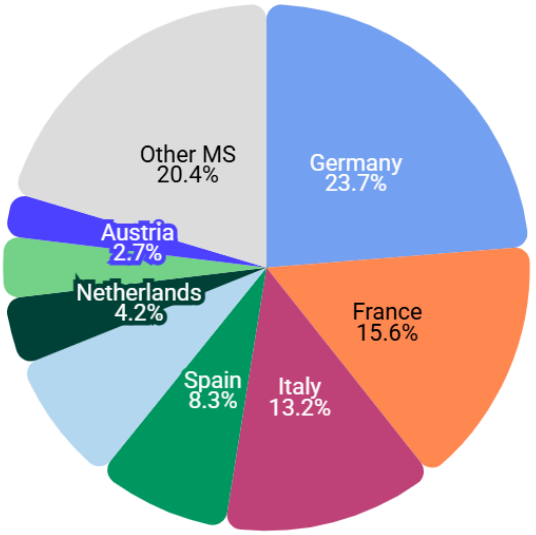
The Commission should **swiftly act on the following:**

- **propose the announced Greening Corporate Fleets legislation and introduce electrification targets for large fleets, as they offer immense potential to reduce emissions and keep ETS2 prices down**;
- launch an EU Platform for low-cost EV leasing to support Member States in setting up national social leasing policies;
- keep 2030 and 2035 car CO_2 targets in place: while the weakening of the 2025 car CO_2 targets will have an upward pressure on ETS2 prices, it is important to keep the 2030-2035 car CO_2 targets to avoid further pushing up ETS2 prices.

With over half of ETS2 emissions coming from Germany, France, and Italy - they are in a prime position to show climate ambition and keep market prices down.

Member States currently do not have sufficient national policies in place to significantly reduce road transport and buildings emissions.

- The Commission should increase pressure on countries to add new national policies to their National Energy and Climate Plans (NECPs).



Source: Öko-Insitut (2024)

4 Creating a predictable price path through national taxes

While financial compensation paid from ETS2 revenues should always be used as the first response to high CO_2 prices, there can be instances where price hikes are too sudden to adjust payments.

In such cases, Member States could use their national taxes on transport and heating fuels to counterbalance the ETS2 price.

This would come down to the introduction of a national price corridor, with a floor and ceiling price.

If a Member State opts to lower national taxes - in essence setting a national ETS2 maximum price - it should also introduce a minimum price to ensure that when ETS2 prices go down again, national taxes are reinstated.

Neutralising the ETS2 price effect in the largest emitting countries could lead to an overall allowances shortage for the entire EU market - leading to higher prices for the entire EU-27. For that same reason, these countries are excellent candidates for national taxes serving as the back stop.

5 Alternatively, at EU level, expand the Market Stability Reserve (MSR) to ensure price levels remain close(r) to the €45/tCO_2 soft price cap (in nominal terms - €55/tCO_2 when adjusted for inflation)

This MSR could be gradually phased out over time. This would require an amendment to the ETS directive and would also mean the ETS would be less likely to deliver the required emission reductions.

What is the Emission Trading System 2 (ETS2)?

The first EU Emission Trading System (ETS1) was established twenty years ago to help reduce emissions from our largest polluters—industry and electricity generation. In 2027, the EU is introducing a new emissions trading system, the so-called ETS2, that will levy a carbon price on diesel, petrol and heating fuels, as well as emissions from small industries and electricity generation that are not covered by the ETS1.

An Emissions Trading System (ETS) operates on a cap-and-trade principle. In the case of ETS2, fuel suppliers—who are the covered entities—must purchase allowances on the carbon market for every tonne of CO_2 contained in the fuel they sell. The total number of allowances available is capped and gradually reduced each year, aiming for a 43% reduction in emissions by 2030 compared to 2005 levels. This target is 3 percentage points more ambitious than the EU Effort Sharing Regulation's 40% goal, which also includes other sectors such as agriculture and waste, in addition to those covered by ETS2.

The aim is for the price signal to stimulate investments in energy savings and zero-emission technologies. However, as the ETS2 price will be levied equally and regardless of income — both between and within Member States —, there is concern that it'd disproportionately impact low-income households as well as small and medium-sized enterprises (SMEs).

ETS2 market price predictions and impact on road fuel

The ETS2 market price is driven by demand for allowances, influenced by emissions from fuel suppliers, hedging for future compliance, and speculative investment. In a demand-supply and marginal abatement cost model, the carbon price is adjusted annually to ensure low-carbon alternatives (e.g., electric vehicles) reach cost parity with fossil-fuel options. As a result, price projections vary widely—from around €50/tCO_2 in scenarios with full implementation of the "Fit for 55"package (FF55), to over €250/tCO_2 with weaker supporting policies.

In this report, we present quantitative results for two carbon pricing scenarios: €55/tCO_2, based on the 'soft cap' value of €45/tCO_2 (in 2020 euros, adjusted for inflation), and a second scenario with a carbon price of €100/tCO_2.

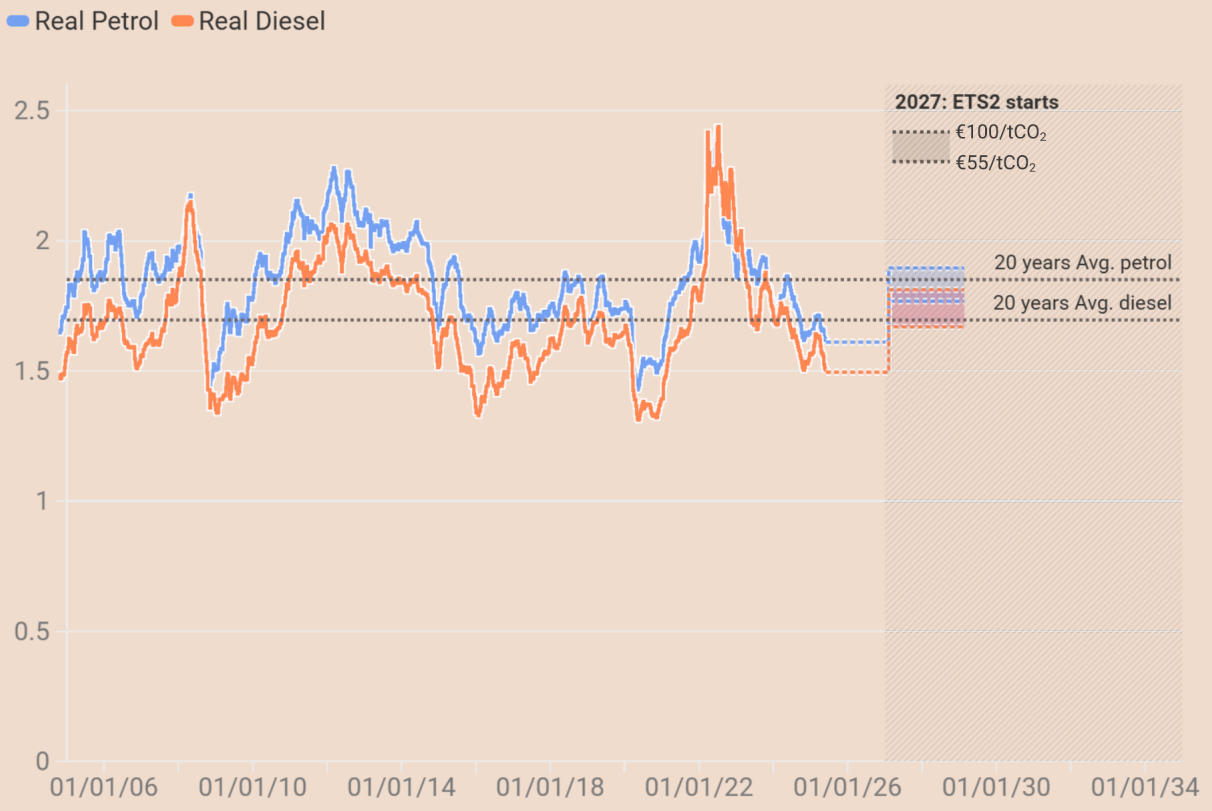
If compliance costs were fully passed on to consumers at the pump, every €10 increase in the carbon price would add approximately 2.4 cents per litre of petrol and 2.7 cents per litre of diesel (excluding VAT). That translates to about €6 when filling up a Volkswagen Polo.

ETS2 carbon price (€/tCO2)	Price impact in cts/l on petrol (incl. VAT)	Price impact in cts/l on diesel (incl. VAT)	Price impact when filling up a small car with petrol, in €/45l (incl. VAT)	Price impact when filling up a small car with diesel, in €/45l (incl. VAT)
10	2.4 (2.8)	2.6 (3.1)	1.1 (1.3)	1.2 (1.4)
55	13 (15.6)	14.4 (17.3)	5.8 (7)	6.5 (7.8)
100	23.6 (28.3)	26.2 (31.5)	10.6 (12.8)	11.8 (14.2)

Assuming a Value Added tax (VAT) of 20%
Assuming a tank size of 45 litres, similar to the one of a Volkswagen Polo.

The price premium introduced by ETS2 should be viewed in the context of fuel price fluctuations over the past years.
The graph below illustrates real-term price variations for petrol and diesel prices at the pump (including taxes). Assuming a carbon price of €55 in 2027 and all other factors remaining constant, fuel prices would still remain below the past 20-year average, in real terms and including a Value Added Tax (VAT) of 20%. This effect would be even more pronounced when considering projected declines in oil prices. Additionally, significant improvements in vehicle fuel efficiency over recent decades means that the ETS2 premium will come at a time where the quantity of fuel needed to drive 100 km has on average steadily decreased in the last decades.

Real EU average fuel price and ETS2 premium, €/l



Source: Weekly Oil Bulletin • ETS2 premium includes a Value Added Tax of 20%.

This is where revenues recycling comes in. If the carbon price were for example to be constant at €55/tCO_2 (inflation adjusted reference price of €45/tCO_2), the ETS2 , including the Social Climate Fund (SCF), will represent €296 billion in revenues between 2026 and 2032. With a CO_2 price of €100, €534 billion euros will be raised. Redistribution of revenues between Member States is baked into the system through the newly established SCF. Member States such as Bulgaria are net receivers of this fund, while countries such as Belgium are net contributors (see Annex). Solidarity within Member States however is not prescribed by EU law. Further national-level redistribution of the revenues can make the ETS2 less regressive — or even progressive —, but only if national governments make spending decisions that include both climate and social objectives.

Investments in zero-emission alternatives take time though. Imagine the lead time between starting renovation works on a social housing project and their impact showing on residents' energy bills. Or between the start of a new public transport plan and changed mobility habits. That is why in 2026, 50 million ETS1 allowances will be auctioned for the SCF to serve as an early spending budget.

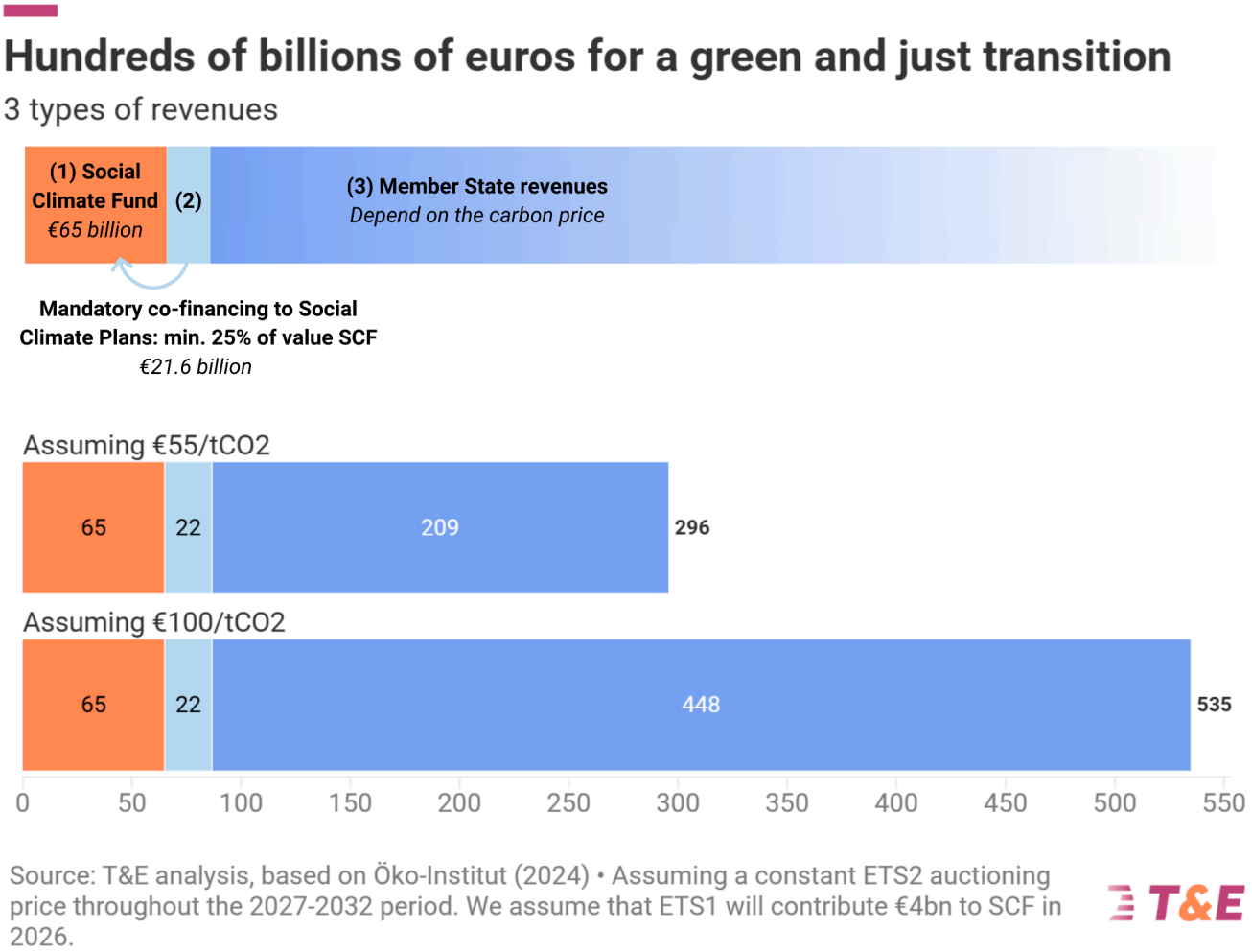
This early SCF budget is an excellent provision — if only the budget had been larger. Spread out across 27 Member States, €4 billion (or less) will not make a dent in switching people to sustainable heating or transport modes, and in the absence of additional measures families will feel the ETS2 price heavily when it starts being levied in 2027. The money will also only be available in 2026, which makes it hard to finalise investments and have an impact on people's energy bills as little as one year later.

This briefing outlines how the Commission could increase the budget for early investments that end people's exposure to carbon priced fossil fuels, as well as four other ways Member States could better prepare for this forthcoming EU carbon price.

1. Put all the ETS2 revenues at work for a green and just transition

Pricing pollution will raise hundreds of billions of euros. There are three types of revenues under the ETS2:

1. Revenues that are auctioned directly for the SCF (max. €65 billion). These only flow back to Member States after a distribution key has been applied (based on a mix of parameters such as GDP, population size, energy poverty, etc.).
2. Revenues that are auctioned for Member States, but that need to be reserved for co-financing the SCF (€21.6 billion). To have access to the fund, at least 25% of the value of the projects planned under the SCF needs to be confinanced by Member States. The larger the SCF allowance of a Member State, the larger the budget required for co-financing.
3. The remaining revenues are auctioned for Member States (€209 billion in the case of a carbon price of €55/tCO_2, €448 billions when assuming a constant carbon price of €100/tCO_2), and are entirely unlinked to the SCF.



Source: T&E analysis, based on Öko-Institut (2024) • Assuming a constant ETS2 auctioning price throughout the 2027-2032 period. We assume that ETS1 will contribute €4bn to SCF in 2026.

1. How Member States should spend their ETS2 revenues to ensure a socially just ETS2 implementation?

The biggest tool available to Member States is wise spending of their ETS2 revenues. Without revenue redistribution, the ETS2 will be regressive. Ideally, every vulnerable household could have its housing equipped with renewable energy and fulfill all its mobility needs through zero-emission transport modes. But renovating a house easily costs more than €20,000 or way more in richer countries where local labour and material are more expensive, and a cheap electric vehicle costs on average €25,000. That inevitably means that ETS2 revenues will be insufficient to replace all fossil fuel equipment of households whose expenditure comes under pressure from the ETS2 price. Compensating low- and lower-middle incomes is therefore essential to a green and just transition. Adequately targeting every single person in need can be administratively challenging though. To avoid vulnerable households falling through the cracks, sufficient revenues should be set aside for compensation.

1.1 At least half of ETS2 revenues should go to financial support

Many investments, such as the renovation of a house, take multiple years from start to finish. Over that time, households that are dependent on public support for such investments remain exposed to the carbon price. For some of those, monetary support will be the only way to maintain a good quality of life. Rebates help to prevent backlash in the short term, and increase patience for investments to yield tangible returns. At the same time, they provide (ex-ante) insurance against future income losses. Rebates can easily be scaled directly to the carbon price level, therefore working as an insurance against high ETS2 prices. Using revenues for rebates is also much less susceptible to misuse than other uses of funds.

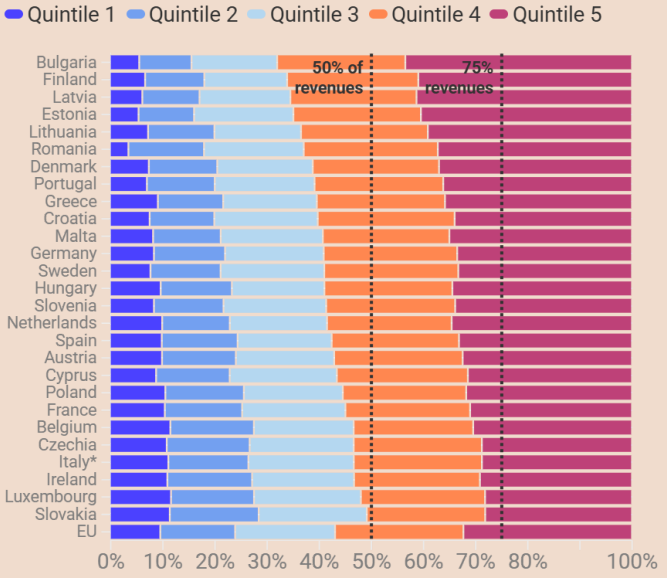
For all of the reasons above, T&E recommends compensating at least 50% of the impact of the ETS2 on a country' residents with financial support - which was found to be sufficient to compensate the first three income quintiles, as well as the fourth one in lower-income Member States, using 2015 household expenditure data (see Infobox below).

We refer here to 50% of the virtual revenues each Member States would raise in a scenario where there had been no SCF. In reality, the SCF redistributes revenues between Member States. As a result, the amount that Member States that are net contributors to the SCF have available for national-level redistribution is lower than the total amount paid in carbon prices by all their citizens. If such a net contributor wants to ensure that its lower income half is fully compensated, it will require more than 50% of its remaining revenues. On the other hand, a net receiver will have more than 50% of its revenues left. See the visualisation in the Annex for more detail on the difference between ETS2 revenues and ETS2 impact on a Member State.

Higher earners to contribute more to ETS2 revenues than lower earners

Distribution of ETS2 household burden, per income quintile

Circulating back 50% of revenues to lower income households would be enough to fully compensate the burdens of the lower 60%.



Source: B. Held et al. (2022). Criteria for an effective and socially just EU ETS 2 • Data partially based on 2015 household surveys. *Partially based on 2005 data for Italy due to data gaps.

B. Held et al. (2022), supported by several studies, analysed the distributional effects of the direct impact of ETS2 on households across EU Member States, differentiated by income (measured by net equivalent income) using 2015 household survey data (see graph on the left).

For heating, the burden of ETS2 in relation to the household consumption expenditure in 2015 is consistently higher for lower-income households and declines as income increases. The pattern is somewhat reversed for transport, where the relative cost tends to rise with income. The overall impact of ETS2 on buildings and transport differs among Member States. In some countries, such as Poland, middle-income households face the highest relative burden in relation to their expenditure. In contrast, in most Member States, higher-income households are more affected, although for countries such as Czechia, Slovakia, Ireland, Belgium and Luxembourg, it is the lowest and second lowest income.

The study indicates that average carbon emissions per capita for heating and transport increase substantially with income—implying that higher-income households will carry a greater financial burden and contribute more to total revenues. Specifically, on average, the top 40% earners would face a financial burden 2.4 times greater than the bottom 40%, and slightly higher than the other 60%.

Using 2015 households survey data, this study concludes that in all Member States **allocating 50% of ETS2 revenues would be sufficient to fully compensate households in the bottom three income quintiles.**

It's important to note that these calculations are based on a 2015 household survey and may not fully reflect recent developments, such as the growing adoption of low-carbon technologies in buildings and road transport. For example, newer German data (2023) suggest that higher-income households now tend to have a lower carbon footprint from heating compared to lower-income households—likely due to greater uptake of renewable heating systems. However, when it comes to road transport, emissions still increase with income. It should also be noted that this study focuses solely on the direct impact of ETS2

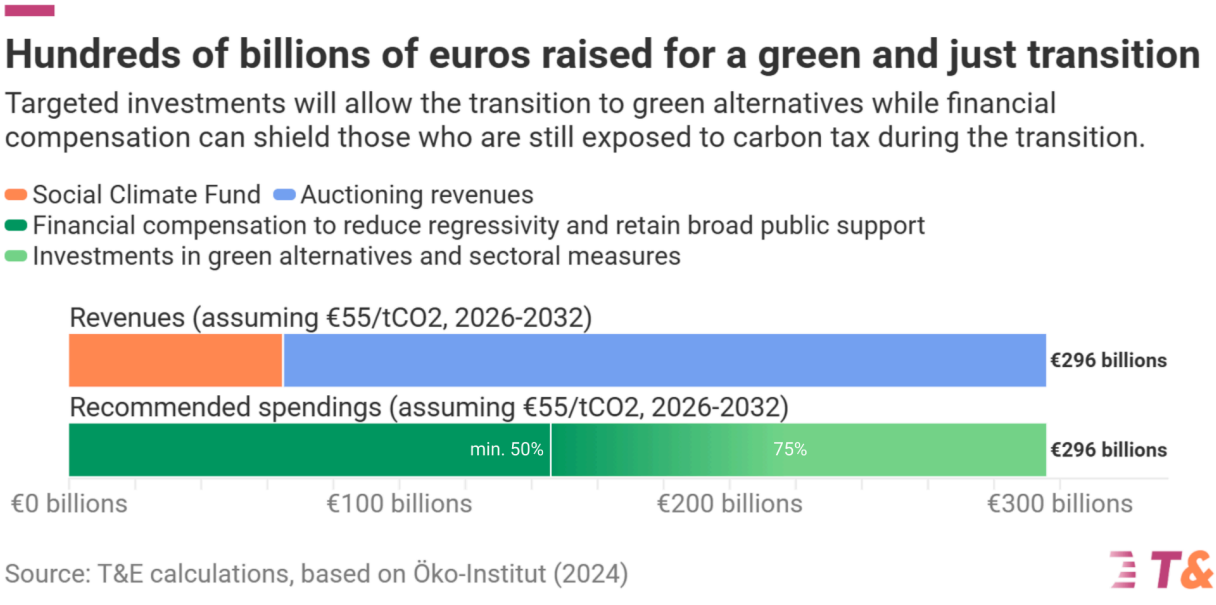
on households' heating and driving emissions. However, businesses will also be affected (e.g., goods transported by trucks), and these additional costs may be passed along the value chain, ultimately leading to higher prices for households consuming these goods and services.

This suggests that allocating at least half of the ETS2 paid in a Member State to compensation can help maintain the quality of life for lower-income households, while it is crucial that the remaining funds support low-income households and small enterprises to structurally reduce their emissions through targeted measures and support schemes (see 1.2 Social investments and 1.3 Support to small enterprises).

Where adequate targeting of those in need of support is not feasible, up to 75% of revenues could be used for more population-wide compensation. At EU level, and assuming a carbon price of €55/tCO_2 that would leave between €77 and €150 billion available for investments over the 2027-2032 period. With a constant price of €100/tCO_2, it would leave €137 to €269 billion euros for investments and structural measures.

Financial compensation can take many shapes and forms. We define it as a support that financially alleviates the ETS2 burden on a household. This can be achieved by reducing the cost of essential goods and services (e.g., lowering electricity tax) or directly increasing household income (lump sum, targeted direct income support, lowering income tax). This support is typically non-prescriptive, meaning households are not required to spend the additional money in a specific way. As financial support is unlinked to fossil fuel consumption, the marginal incentive to reduce fossil fuel consumption remains: each unit of fossil fuel still costs more, and consumers save money by reducing their consumption or choosing other options.

In the context of the ETS2, the following three versions are the key ones under discussion, and can also be combined to reach the 50-75% range T&E recommends. **There is no one size fits all, and which support system works best will depend from Member State to Member State.**



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1.1.1 Population-wide climate dividends ensure no one is left behind

A transfer labelled 'Climate Bonus' to your bank account every month is a very credible form of communication. Under a lump sum system, revenues are returned equally to all citizens as direct payments. This benefits low-income households more than rich ones in relation to their total expenditures — a population-wide €200 cheque makes more difference to those with limited financial resources — while also ensuring that the median voter is a net recipient of compensatory measures. As such, it helps policymakers to reconcile normative aspirations ('just transition') with political feasibility. Administrative costs can be kept low and by including the entire population rather than offering funds only to specific individuals, the scope for special interests and favouritism is reduced.

Switzerland follows this approach. Roughly two-thirds of their carbon pricing revenue is redistributed, with every person (including children) receiving an equal amount. Rebates are distributed as a discount on health insurance premiums, as due to compulsory basic insurance Swiss health insurers have the most current address directory of residents.

Payments can however be diversified by household type. Austria and Canada are well-known examples of countries offering population-wide climate dividends with top-ups for certain constituencies:

- The Canadian rebate is funded from 90% of the carbon tax revenues and hands a top-up of 20% to households in rural areas and small communities. Rebates are based on the information provided tax-free in the annual tax return. They are paid out four times a year and come in advance, so before households face increased costs from carbon pricing. Some regions have their own system and differentiate rebates by income. British Columbia for example sets an income threshold at approximately 65% of the province's medium income. Families below the threshold receive the full amount, and the credit is reduced by 2% of the income above the threshold until it reaches zero.
- The Austrian 'climate bonus' is paid out once a year to citizen's bank accounts where those are known, or in the form of a voucher per post. On top of a universal base rate, regional top-ups are granted, resulting in four different rebate levels: €145, €195, €245 or €290. Those who live in regions with poorer public transport connections or public service infrastructure (e.g. schools, hospitals) receive more. The policy uses 100% of the revenues from carbon pricing and 80% of households receive more in dividends than they pay in carbon taxes.

In 2024, the Austrian climate bonus was taxed for people on a high income. While this can be a good way to ensure the highest incomes don't receive a payment, or to lower their payment, the money that is taxed away ends up in the general budget of a country. T&E therefore recommends where this choice is made to model beforehand how much will be taxed away and

end up in the general budget. This amount can then be added to the budget available for distribution from the start, in order to ensure no climate money is lost to the general budget.

Climate dividends result in slightly lower energy poverty rates in most countries. Surveys in multiple countries offer strong reasons to expect that bundling carbon taxes with lump-sum rebates could increase public acceptability. However, it is important to note that support appears dependent on good communication and high visibility of the rebates, and is not guaranteed.

1.1.2 Targeted compensation shields the most vulnerable, but can be administratively challenging

Targeted compensation only supports low- and lower-middle income households, while more affluent citizens don't receive any rebate. Analysis finds this also results in slightly lower energy poverty rates in most countries. However, it raises the challenging question of who should be compensated.

Quite a few studies have looked at the share of revenues needed to avoid worsening energy and transport poverty. Most of those differ in scope or approach though from the actual ETS2 and SCF regulations, which makes it hard to directly apply their findings. A 2022 study that is close to the final legal design found that 25% of ETS2 revenues would be sufficient to compensate the first two quintiles in all Member States. With 50% of ETS2 revenues also the third quintile across all Member States, as well as the fourth quintile in lower-income countries, could be compensated.

While income is a key factor in determining vulnerability to carbon costs, other factors such as high energy needs due to inefficient buildings, limited availability of public transport, etc., play an important role, too. Accurately identifying each and every household that will end up in energy or transport poverty without government support requires elaborating analysis of income data, energy consumption patterns, and all these other factors.

Targeting compensation ensures more money remains available for investments, which can structurally relieve those benefitting from investments from carbon price exposure. That's a great benefit of this approach. But, it comes with administrative burdens and challenges, which could lead to delays and higher costs, and in some Member States even clash with privacy or data processing rules.

Depending on where you decide to set the cut-off point for support, this approach also does not "buy" support for the ETS2 from the (higher) middle class. As the middle class tends to be the most vocal constituency, this may impact both their willingness to continue to support rebates that don't benefit themselves, or even the ETS2 as a whole. Again, this highlights the need to combine the redistribution approach of choice with thought-through communication to citizens.

1.1.3 Reducing other taxes creates a double dividend, but benefits mostly middle class

ETS2 revenues could also be used to lower other taxes, creating a tax shift from 'bad' (pollution) to 'good' (e.g., electricity or labour). This is often referred to as the 'double dividend' approach.

Beyond commodity prices, EU electricity bills include a wide range of taxes and levies such as network charges, renewable energy and social levies, capacity market charges, nuclear levies, etc. The Draghi report showed that such taxes on electricity are much higher in Europe than in other world regions. Today, electricity is taxed 1.4 times more than gas in Europe. Correcting this imbalance by removing some of those taxes and levies from electricity bills would incentivise the switch to decarbonised energy sources and speed up electrification.

Reducing electricity or labour taxes however tends to benefit the more affluent households. It is also a lot less visible than cash handouts. For example, the recent German 'Erneuerbare Energien Umlage (EEG)' was not noticed by many people. On the other hand, it can increase the impact of some of the investment policies by making alternatives financially more attractive. When opting for reducing other taxes, T&E therefore recommends complementing this approach with targeted compensation for the poorest.

1.1.4 Legal conditions around financial compensation

For the part of the revenues that are required to finance the Social Climate Plans (SCPs) (type 1 and 2 under Section 1 above), compensation is capped at 37.5% of the value of each SCP. This will be insufficient for many Member States to compensate for 50% of the impacts of ETS2 on their citizens. The remaining compensation needs should therefore be covered from the national ETS2 revenues (type 3 under Section 1 above). While it is clear that targeted income support is eligible for ETS2 revenue spending, there is some debate as to whether population-wide dividend schemes are as well.

The law explicitly designates the financing of 'national climate dividend schemes' with 'a proven positive environmental impact' as an allowed form of revenue spending, without defining what constitutes a positive environmental impact. This should be seen as a description rather than a restriction, and should not hold Member States back from rolling out such schemes. In their reporting to the Commission under art.19(2) of the Governance Regulation, Member States should just explain how climate dividends fit their wider strategy. For example:

- When opting for population-wide rebates, the idea is for carbon pricing and handouts to act as two sides of the same coin, with the environmental impact lying in the combination of both.
- Direct payments can increase and decrease in line with carbon prices, retaining public support and protecting consumers' purchasing power whilst increasing the price polluters pay. Because this makes higher prices and their associated emissions reductions viable, direct payments have a positive environmental impact.
- While it is not compulsory for the rebates to be spent on climate-friendly expenses, it

could also be argued that these are intended for that purpose and that beefing up citizen's purchasing power enables them to save up for zero-emission alternatives. This can apply to the more affluent as well, as beyond costs also risk aversion, habits, short-term thinking, as well as laziness can be the deterrents against changing heating or mobility habits.

1.2 Social transport investments

The ETS2 covers the road transport and buildings sector, as well as small industries that are too small to fall under the ETS1. At EU level, road transport represents about 58% of total ETS2 emissions (but e.g., lower share in Romania and higher share in Spain). T&E therefore recommends spending around half of the budget available for investments on social transport measures. As car usage makes up the lion share of road transport emission (59%), specific measures targeting people in forced car ownership should be foreseen, such as low-cost EV leasing.

Social transport measures should aim to develop a multimodal 'portfolio' of alternative transport options, since the fundamental step to address transport poverty is to enable mobility choice. This includes support to:

1. Active mobility, e.g., through subsidies or leasing schemes for (e-)bikes or upgrading of cycling infrastructure. Cycling has proven to generate societal benefits of up to €1/km travelled whereas cars cost ca. €1/km travelled.

2. Public transport, e.g., measures aimed to improve the capacity of public transport (fleets and frequencies) in peri-urban and suburban areas, or increase its quality, reliability and efficiency (e.g., priority lanes and crossings, means allocated to low-density areas and off-peak hours, financing of refurbishment and the European Rail Traffic Management System, retrofitting of rail rolling stock, etc.). For example, express regional buses from peripheral areas to city centres or between cities could enhance citizens' mobility options. Baden-Württemberg, one of Germany's largest regions, annually invests €29 mln to support the provision of 49 lines, one of which also links across the border with France. The costs are estimated at €2.50 per vehicle-kilometer. Buses are equipped with air conditioning, internet access and electricity plugs. Note that funding for the extension of public rail or road infrastructure is not listed as an eligible measure under the SCF.

3. Mobility on demand and shared mobility services (e.g., on-demand bus services, public bike, e-scooter and car sharing, and mobility hubs that bundle the provision of such services in the public space). These measures have the potential to unlock personal transport options for less connected communities and offer a high degree of flexibility and availability that helps complement traditional public transport services. Car sharing services should use zero-emission vehicles to maximise the potential for emission reductions, offer affordable services and help new user groups become familiar with electric vehicles. Designing measures will require an assessment of local community needs in the context of urban planning and regional development, aiming to improve accessibility and connectivity across multiple modes of transport.

4. Mobility credits and scrappage schemes provide targeted financial support to replace polluting cars with active, shared and public transport or, where necessary, cleaner vehicles. In the latter situation, purchasing a new EV may still be unaffordable.

5. Targeted roll-out of charging infrastructure for electric vehicles is equally critical to enable the uptake of zero-emission vehicles across the population, especially among citizens that are unable or cannot afford to install charge points at home. Cities and regions should ensure a targeted, equitable and rapid provision of charging infrastructure, e.g., through land use planning, public procurement or public investments. Targeted financial support to enable low-income households to purchase or lease charge points should be considered, too. Broad geographic coverage, including in lower-income and suburban areas, and the integration with other shared and public transport services (e.g., discounts for users that combine different offers) will be critical to ensure coherence with Sustainable Urban Mobility Plans (SUMPs). Furthermore, integrating charging infrastructure with electric car-sharing schemes has been successfully implemented in many cities and can reduce the costs of installing and operating charge points.

6. Governments can also opt for vouchers that allow for the purchase of a climate-friendly good or service. For example, affordable public transport tickets could be offered, as listed by Greenpeace. The German example shows this can also have an impact on emissions reductions. The so-called 'Deutschlandticket' gives its users access to all public transport across Germany, excluding long-distance travel, for formerly €49 and now €58 euros per month. Analysis finds that the ticket led to a shift in transport from road to rail, leading to a drop in car emissions of 6.7 mln tons in the 12 months after its introduction. To make this ticket more accessible to low-income households, a reduced fare could be provided exclusively for them, as is already the case in certain German regions. The ticket and thus service would stay the same, while the pricing would be adjusted to accommodate less affluent households. The social impact obviously would depend on the price.

1.3 Support for small businesses

As Europe steps up its ambition to decarbonise transport and buildings through the extension of the ETS2, small and medium-sized enterprises (SMEs) face growing cost pressures. These businesses are the backbone of Europe's economy, yet they often lack the capital and capacity to invest in clean technologies at the pace required. Without targeted support, the green transition risks exacerbating existing inequalities between large and small firms.

While support measures should be primarily designed to shield vulnerable households from the impact of carbon pricing, the SCF can help empower SMEs to decarbonise their operations. For example, this could include targeted support to enable smaller companies to buy zero-emission commercial vehicles (i.e. vans and trucks), as well as related charging infrastructure. The road haulage industry is mainly made up of SMEs that do not yet have the access to capital for

higher upfront purchase costs, whereas many van users are tradespeople who rely on their vehicles for their work.

Support schemes should be designed to support SMEs investing in clean transport and energy solutions through simple, accessible schemes at national or local level, reducing administrative burdens and ensuring rapid uptake. Support should prioritise SMEs operating in rural, low-income or industrial regions where the economic case for electrification is often harder to make, as well as SMEs operating in areas with (upcoming) low- or zero-emission zones to make sure they can continue operating.

A lending facility to increase countries' early investment power

The EU lending facility described in Section 2 above would provide additional funding to accelerate these investments. Section 2 below outlines T&E's proposal, which allocates €21.6 billion to Member States as early as 2025 and 2026 to kick-start sectoral measures and investments. Based on our allocation proposal in Section 1, and assuming a constant carbon price of €55/tCO_2, between 15% and 27% of the total investments and sectoral spending outlined above could be covered already in 2025–2026 thanks to the lending facility. For the breakdown of early investment power per MS, see Section 2.3 below.

2. Frontloading the Social Climate Fund to ensure investments start at scale before the ETS2 kicks in

To ensure sufficient measures are in place to mitigate ETS2 impacts from its very start, the Commission should extend loans directly to Member States for investment-related spending as of 2025. These loans would then be recouped from future guaranteed ETS2 revenues. Such a mechanism would supplement the initial – and underwhelming – maximum €4 billion from ETS1 allowance auctioning available in 2026. The Commission could use the undersubscribed loan compartment of the Recovery and Resilience Facility (RRF) to provide these loans. An alternative option is to frontload the revenues using an intermediary like the EIB or another public institution. The EIB could provide Member States with low-interest loans which would be repaid via resources from ETS2 revenues.

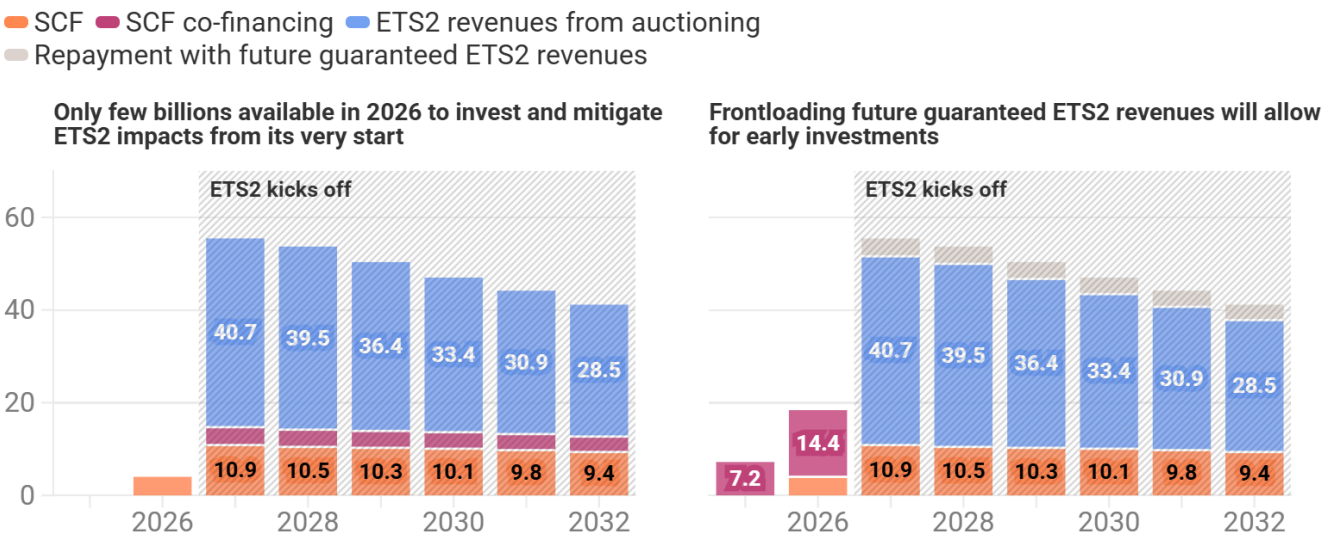
2.1 How much money should be frontloaded, and how do we ensure the money is both well spent and fully repaid?

We recommend creating a fixed frontloaded budget allowance per Member State, based on the amount they are required to set aside in later years to co-finance the SCF. Member States would be allowed to borrow this fixed amount after approval of their planned investments. For this, T&E suggest using the SCPs.

2.1.1 Where does the frontloaded money come from, and what should it be used for?

We suggest frontloading the entire co-financing budget, revenue type (2) above in Section 1, from 2025. That would make €21.6 billion available across all 27 Member States for early social investments in the road transport and buildings sectors.

Frontloading ETS2 revenues will allow for early investments



Source: T&E calculations based on Öko-Institut (2024) • Example with a constant carbon price of €55/tCO2. We assume that 1/3 of the loan is spent in 2025, and 2/3 in 2026 (indicative).

The table below shows what amount this entails for each Member State, and compares it to the SCF resources that will later become available to each country over the 2027-2032 period.

Frontloading the co-financed part of Social Climate Plans will allow for upfront investments

And especially benefit countries with relatively large SCF allocations

Revenues available in billion euros

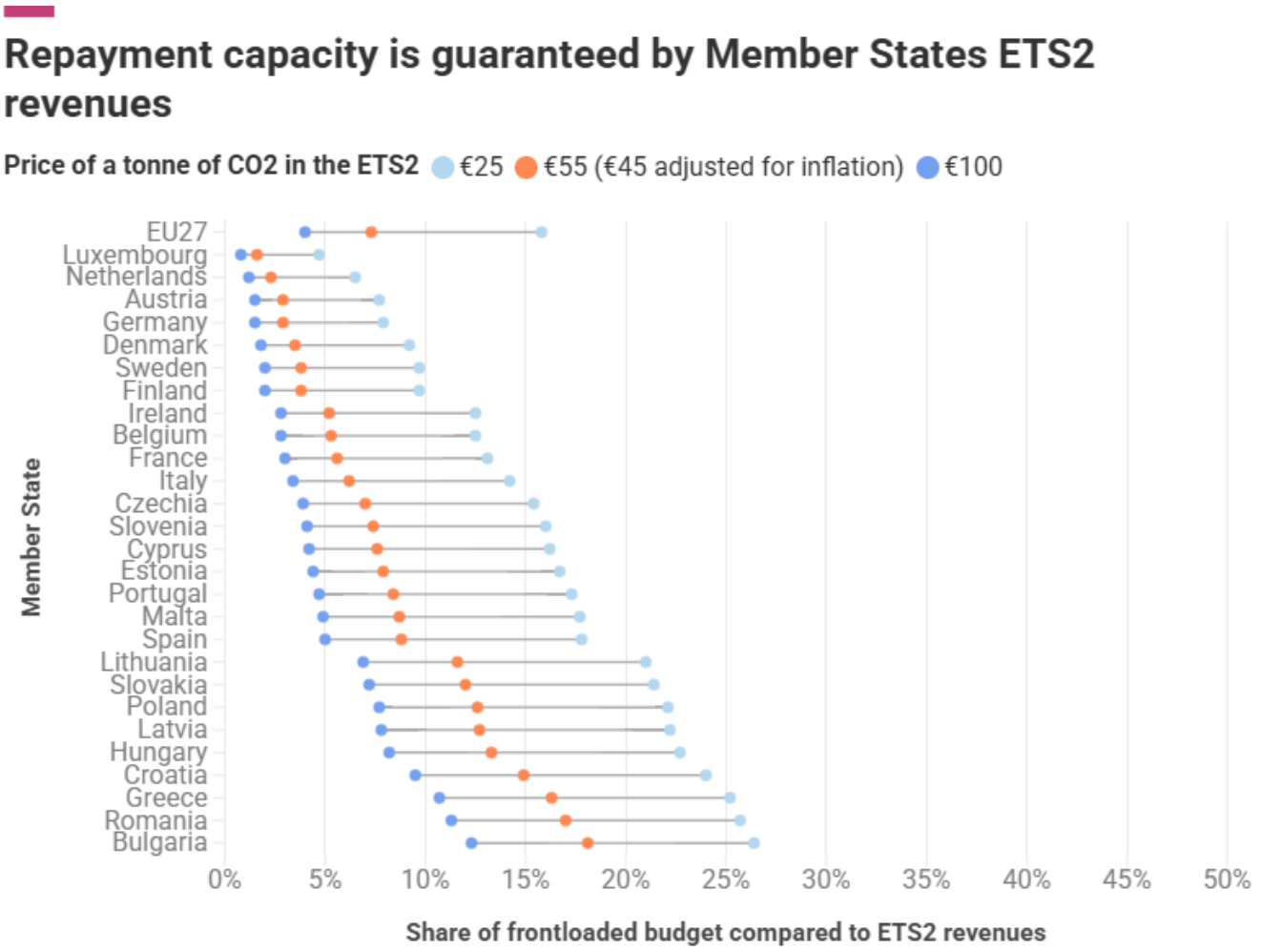
Member State	Social Climate Fund budget	Frontloaded co-financing budget
EU27	65.00	21.60
Poland	11.44	3.81
France	7.28	2.43
Italy	7.02	2.34
Spain	6.84	2.28
Romania	6.01	2.00
Germany	5.32	1.77
Greece	3.59	1.20
Hungary	2.82	0.94
Bulgaria	2.50	0.83
Belgium	1.66	0.55
Czechia	1.56	0.52
Slovakia	1.29	0.43
Croatia	1.26	0.42
Portugal	1.22	0.41
Netherlands	0.72	0.24
Lithuania	0.66	0.22
Ireland	0.66	0.22
Austria	0.58	0.19
Latvia	0.46	0.15
Sweden	0.40	0.13
Slovenia	0.36	0.12
Finland	0.35	0.12
Denmark	0.32	0.11
Estonia	0.19	0.06
Cyprus	0.13	0.04
Luxembourg	0.07	0.02
Malta	0.05	0.02

Source: T&E calculations • Member States are mandated to co-finance 25% of their Social Climate Plans

2.1.2 Can repayment of the loan be guaranteed?

As shown in the graph below, the budget required for co-financing their SCF allowance ranges between 1.6% (Luxembourg) and 18.1% (Bulgaria) of total national ETS2 revenues, when assuming a constant CO_2 price of €55/tCO_2 (inflation adjusted reference price of €45/tCO_2) between 2027-2032 (see the orange dots in the graph below). See results for other carbon prices in Annex. Even if CO_2 prices were to be very low, e.g., €25/tCO_2 (see the light blue dots in

the graph below), each country could repay the loan, with a loan ranging from 4.7% (Luxembourg) to 26.4% (Bulgaria) of total ETS2 revenues. However, no country would be obliged to take out the full loan available to them, nor are countries obliged to spend all the money already in 2025-2026. They can take out the loan in installments over the 2025-2028 period, just as they can repay the loan in annual installments over the next 6 years (as of 2027) as the ETS2 revenues come in.



Source: T&E calculations, based on Oeko-Institut (2024) • ETS2 revenues include both revenues from auctioning and revenues redistributed through the Social Climate Fund.

2.2.2 How can Europe ensure the money is well spent?

To access the SCF, Member States need to submit their SCPs by June 2025 for review and approval by the Commission. In those plans, governments have to detail the concrete policies and investments they plan in order to reduce the negative effects of fuel price increases on vulnerable households and micro-enterprises.

Once submitted, the Commission has two months (until August 2025) to seek additional information, and a final decision is made within five months of submission (by December 2025). The disbursement of the funding is then conditional on the achievement of the milestones and targets, with first payments commencing in 2026.

T&E recommends the pre-approval of certain measures included in the plans as of summer 2025, with payments commencing in September 2025. These payments would not come from the SCF, but instead from the new EU lending facility populated from the frontloaded co-financing budget as outlined above. In that sense, pre-approval (before the entire SCP has been reviewed) and pre-payment (before a milestone has been hit) does not require any changes to the SCF legal text.

One could even envisage payments already before the submission of the SCPs, based on a sort of pre-plan with just one or a few calculated measures chosen out of a pre-defined list by the Commission. The Commission published a guidance document for Member States with best practice spending measures for the SCF in 2024. If a Member State chooses to implement one of these best practices, e.g., low-cost electric vehicle leasing (see chapter 3.3 below, or p.46 of the Commission's guidance document), and submits a partial plan already outlining implementation of this best practice ahead of its SCP submission, it could start financing it from the loan once the Commission approves the pre-plan.

2.2. Does this require reopening of any laws, or depend on the Multiannual Financial Framework (MFF) negotiations?

The approach described above does not require the reopening of any laws such as the SCF or ETS2. The early investment budget is in essence a loan undertaken by the Commission that is later paid back by Member States from their ETS2 revenues. Article 10 of the ETS regulation stipulates that Member States can determine the use of those funds, as long as the equivalent in financial value is spent on ETS-aligned investments. Therefore, if a Member State decides to accept the loan, it can independently make the decision to use ETS2 revenues to pay back that loan. When subsequently reporting on their ETS revenue spending to the Commission, countries can show they have used equivalent amounts in earlier years for eligible investments. As soon as the ETS2 kicks off, Member State-level revenues continue to accrue to Member States as per the regulation. Equally, revenues continue to accrue to the SCF as stipulated by that regulation, with disbursement of those funds dependent on the approval of SCPs and the targets and milestones within those plans. The budget of the SCF itself is not changed or frontloaded.

The money that is frontloaded comes from the Member States' national revenues, and is hence not linked in any way to the MFF. The lending facility itself can either be set up as a specific legal arrangement sitting outside of the EU budget, or under an already existing financial instrument at EU-level. The loan compartment of the RRF — which is undersubscribed — could for example be used for the Commission to provide loans to Member States. The repayment of these loans would be guaranteed by national ETS2 revenues as described above. This would enable the set-up of a lending facility without amending the current MFF.

Notably, these loans would be more advantageous for Member States for a variety of reasons: frontloading would equip Member States with the resources to support vulnerable groups before ETS2 kicks off and mitigate the impact of the new carbon price, hence reducing potential public backlash; as ETS2 revenues are guaranteed by law, these loans would be low risk and

self financing over time; using the existing frameworks, such as the RRF, would ensure speed, more simplicity, and accountability; and Member States would benefit from lower borrowing costs than they would by issuing national bonds.

By frontloading only part of a Member State's national revenues, money remains available in later years as well for additional investments.

When deciding the type of projects to prioritise for frontloaded investments, Member States should balance short-term and long-term impacts. For instance, low-cost EV leasing as described under chapter 3.3. below has an effect after a year, whereas a car-sharing service may take longer to reach a significant level of usage, renovation works may take a few years, and building new infrastructure could take even longer. The aim of this pot of money is to invest in 2025 for impact by the time the ETS2 starts in 2027 already. The remaining budget that comes available in later years can then be prioritised to prepare the ground for higher prices in later years.

2.3. Impact of lending facility for ETS2 revenues on countries' early investment power

The EU lending facility described in Section 2 above would make more money available to start these investments early on. Assuming that 50% to 75% of the impact of the ETS2 on a countries' residents is returned as financial support, the table below shows how much each Member State would have left for investments, and what part of that investment budget would be frontloaded. The table assumes a constant ETS2 price of €55/tCO_2 (inflation adjusted reference price of €45/tCO_2) over the 2027-2032 period.

A lending facility will allow for upfront investments

Assuming that 50% to 75% of ETS2 costs on a Member State are compensated with financial support

Revenues in billion over the 2026-2032 period, assuming a €55/tCO2 price.

	Revenues for financial support - in bn€ over 2027-2032	Revenues for investments and sectoral measures - in bn€ over 2027-2032	Revenues made available already in 2025 through a lending facility - in bn€	Share of total investment budget made available already in 2025 through the lending facility (%)
EU27	145.9 - 218.8	149.9 - 76.9	21.59	14% - 28%
Austria	3.9 - 5.8	2.9 - 0.9	0.19	7% - 21%
Belgium	5.6 - 8.4	4.9 - 2.1	0.55	11% - 26%
Bulgaria	1.3 - 2	3.3 - 2.6	0.83	25% - 32%
Croatia	1 - 1.5	1.8 - 1.3	0.42	23% - 31%
Cyprus	0.3 - 0.4	0.3 - 0.2	0.04	15% - 28%
Czechia	3.7 - 5.5	3.7 - 1.9	0.52	14% - 28%
Denmark	1.7 - 2.6	1.3 - 0.5	0.11	8% - 23%
Estonia	0.4 - 0.6	0.4 - 0.2	0.06	15% - 29%
Finland	1.7 - 2.6	1.3 - 0.5	0.12	9% - 24%
France	22.8 - 34.2	20.6 - 9.2	2.43	12% - 26%
Germany	34.6 - 51.9	25.5 - 8.2	1.77	7% - 22%
Greece	2.4 - 3.5	5 - 3.8	1.20	24% - 32%
Hungary	2.7 - 4	4.4 - 3	0.94	21% - 31%
Ireland	2.2 - 3.4	2 - 0.9	0.22	11% - 26%
Italy	19.2 - 28.9	18.2 - 8.6	2.34	13% - 27%
Latvia	0.5 - 0.7	0.7 - 0.5	0.15	21% - 31%
Lithuania	0.8 - 1.2	1.1 - 0.7	0.22	20% - 30%
Luxembourg	0.8 - 1.2	0.5 - 0.1	0.02	4% - 16%
Malta	0.1 - 0.1	0.1 - 0.1	0.02	16% - 29%
Netherlands	6.1 - 9.1	4.3 - 1.2	0.24	6% - 20%
Poland	11.8 - 17.8	18.3 - 12.4	3.81	21% - 31%
Portugal	2.3 - 3.5	2.6 - 1.4	0.41	16% - 29%
Romania	3.6 - 5.5	8.1 - 6.3	2.00	25% - 32%
Slovakia	1.5 - 2.2	2.1 - 1.4	0.43	20% - 30%
Slovenia	0.8 - 1.2	0.8 - 0.4	0.12	15% - 28%
Spain	12.1 - 18.1	13.9 - 7.8	2.28	16% - 29%
Sweden	2 - 3	1.6 - 0.6	0.13	9% - 24%

Source: T&E own calculations, based on Öko-Institut (2024)

If the ETS2 is higher, there would be more investment budget (see table 5 in the Annex, the example with a carbon price of €100).

3. What other tools does the EU have to increase Member States' ETS2 preparedness?

3.1 The more co-financing, the more countries' investments are exempted from the EU's fiscal rules

In February 2024, the EU agreed on a review of its fiscal rules. A new element is that the Commission now ignores all spending on national co-financing of EU programmes when assessing if Member States comply with their fiscal plans.[1] This has the benefit that investments made through EU funds are incentivised. In the case of the SCF, it stimulates investments that will allow the most vulnerable to benefit from the long-term cost savings of clean energy and technology.

The Commission should now encourage Member States to contribute to more than the minimum required 25% of the estimated total costs of their Plans, and clearly state that such additional co-financing will also be exempted from the EU fiscal rules. Member States could do this by allocating more of their national ETS2 revenue to this, but it'd be more beneficial to top-up the co-financing by sourcing additional funds from their national budgets, thereby exempting those from the EU's fiscal rules.

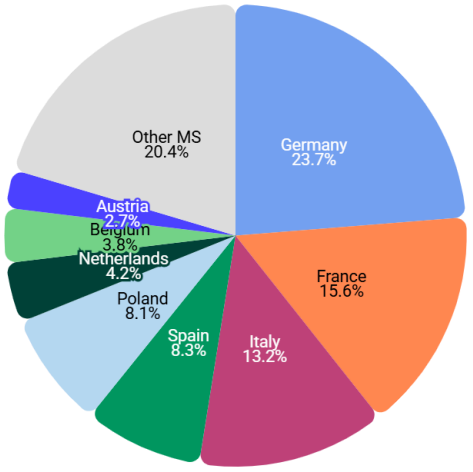
3.2 Improve NECPs and propose gap-closing policies

The ETS2 was introduced as a backstop to the EU's Effort Sharing Regulation (ESR), which sets national climate targets for the non-ETS1 sectors. These include domestic transport (excluding aviation) and buildings. Member States are required to develop National Energy and Climate Plans (NECPs) outlining how they plan to meet their Effort Sharing Regulation (ESR) targets. However, based on draft plans submitted in 2023, the Commission found a 6.2% emissions gap to the aggregate -40% ESR target (vs 2005). T&E updated the Commission's calculations based on plans available in June 2024 and found Member States were still 4.5% short of the EU-wide target.

As an emissions trading system, the ETS2 however ensures that the gap will be closed. If emissions don't decline sufficiently, allowances will become scarce, resulting in higher carbon prices.

ETS2 price driven by only few countries

Germany, France and Italy account for more than half of total EU ETS2 emissions



Source: Öko-Insitut (2024), Next stop climate neutrality. Key questions for the 2040 climate target governance. • Based on 2019 emissions. Norway, Iceland and Liechtenstein are also part of the ETS2 but are not represented in this graph.
See Annex for the breakdown of Other MS.

[1] 2023/0138(COD)

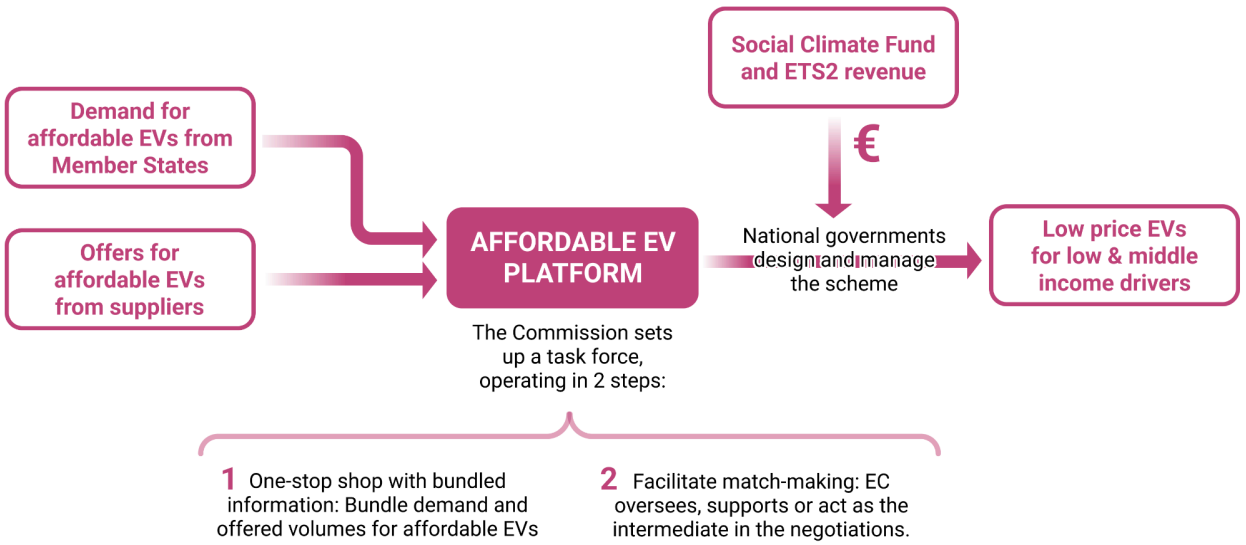
There will be only one carbon price for the entire Union, which inevitably impacts lower-income Member States more negatively, due to their lower average household expenditure, but also because the price is mainly influenced by the actions — or lack thereoff — of richer Member States. Germany on its own is responsible for almost a quarter of the EU's total emissions in road transport and buildings (see figure below). Together with France and Italy, it represents over 50% of total ETS2 emissions. Adding Spain and Poland, the number goes up to almost 70%. That means it is predominantly the actions of those 3-5 governments that will determine the price of the ETS2 for everyone. If Germany, France, Italy, Spain and Poland don't take enough measures at national level to reduce emissions in road transport and buildings, ETS2 prices will increase for the entire Union.

Two of those price-driving countries are not doing well enough on reducing road transport and building emissions. T&E found Germany and Italy to have the largest deficit to their ESR target, and France to be at risk of non-compliance. The Commission should therefore:

- Immediately convene a recurring 'gap closing action group' with Member States to course correct ESR compliance. This process should include:
    - Providing guidance to laggard Member States, presenting them with best practices from other countries and helping them with implementation.
    - Proposing new EU-level measures with tangible pre-2030 impact on the ESR sectors. In road transport, the upcoming Greening Corporate Fleets Regulation can play a pivotal role by stimulating demand for battery-electric cars among large companies, thereby helping Member States cut emissions across passenger transport. Parallel targets for shippers and freight-forwarders would send a clear signal to the market for zero-emission trucks, accelerating fleet turnover and driving down emissions from heavy goods transport - together closing a significant portion of the gap to the EU's 2030 climate objectives.
- Most Member States have now submitted their final NECPs which concludes the process for Commission's feedback. They still have to submit annual progress reports and adhere to annual emission limits. If a Member State is not on track, the Commission can issue recommendations or require a corrective action plan. In the past these have lacked both teeth and persistence. During the 2013-2020 compliance cycle, 11 Member States exceeded their emissions limits for 2 years in a row. More than half of these countries later also exceeded their 2020 emissions allocations. History is already repeating itself: 10 Member States were in breach of their 2023 pollution limits in 2023, and 12 Member States of those are projected to miss their overall 2021-2030 emissions budget according to T&E's calculations. The Commission should be much more persistent on the implementation of its recommendations and formalise stricter non-compliance rules in the announced review of the Governance Regulation (e.g., linking this to EU budget disbursement). In exchange, 12 of the currently standalone national energy and climate plan requirements could be folded into the NECP process, thereby alleviating administrative efforts.

- The Commission should not further give in to calls to lower the ambition of existing CO_2 regulation in the road transport and buildings sector, as such weakening would reduce emissions savings and lead to a shortage of supply on the ETS2 market. Most notably, the car CO_2 emissions standards targets for 2030 and 2035 should remain in place to avoid high ETS2 prices. The weakening of the 2025 target will lead to a decrease in the number of EVs sold in the next few years (close to one million units) which will have an upward pressure on ETS2 prices.

3.3 Set up an EU-level low-cost leasing platform for electric vehicles



Last year, France launched an initiative that allowed low- and middle-income earners to lease an EV for around €100/month, known as 'social leasing'. The French state concluded an agreement with leasing companies and manufacturers for this purpose. In order to promote mainly European EVs, participating models had to achieve a minimum eco-score, cost no more than €47,000, and weigh less than 2.4t. People with a modest income who live more than 15 km from work or drive more than 8,000 km per year were eligible. The initiative was so successful that more than 90,000 applications were submitted. People are clearly ready to switch to an EV — if affordable models are available.

However, not all Member States are home to a large domestic automotive industry and can negotiate competitive leasing prices or administratively pull off such a scheme. The Commission should therefore launch an 'Affordable European Electric Vehicle Platform' that supports Member States in setting up national social leasing policies.

Member States could take part on a voluntary basis, stating the number of households they aim to support and the available support budget. The Platform would then aggregate pan-EU demand for small made-in-EU models. On that basis and via this platform, the Commission would set a framework and pre-conditions for European projects and would facilitate the set up of the schemes by overseeing, supporting or acting as the intermediate in the discussions. To

simplify and harmonise the setting up of social leasing schemes, the Commission would put in place guidance and templates for easy policy set-up.

The platform should be launched already in 2025, accompanying the lending facility for frontloaded revenues so that Member States can have their social leasing schemes pre-approved as early investment projects. It could rely on frontloaded revenue from the ETS2 and remaining RRF funds.

4. Creating a predictable price path through national taxes

The other tool Member States have at their disposal is national taxation. One of the challenges of the ETS2 is that price levels are not set and known in advance, but instead depend on supply and demand in the carbon market. No one knows exactly how market actors will behave. As a result, price projections for the ETS2 vary widely. To avoid sudden large price shocks, Member States could increase or lower national taxes when ETS2 prices deviate from what they had planned for. This would come down to the introduction of a national price corridor, with a floor and a ceiling price. For example, 25 Member States levy excise duties beyond the minimal level required by the EU. However, it is recommended to use direct income support through revenues redistribution first to compensate for higher than expected ETS2 prices as it retains the price signal while alleviating the burden.

One of the main challenges of the ETS2 is that the price is not known in advance. The €45/tCO_2 (€55/tCO_2 in today's price, inflation adjusted) is only a “soft” price cap that could be temporarily overshot before the price containment provisions kick in, or permanently overshot when the MSR is depleted. CO_2 prices will be high if national policies under the NECPs underdeliver — especially in price-setting countries, namely Germany, France and Italy —, but could also be driven up by the behaviour of market actors (e.g., hedging). That makes it challenging to communicate to citizens what they should prepare for.

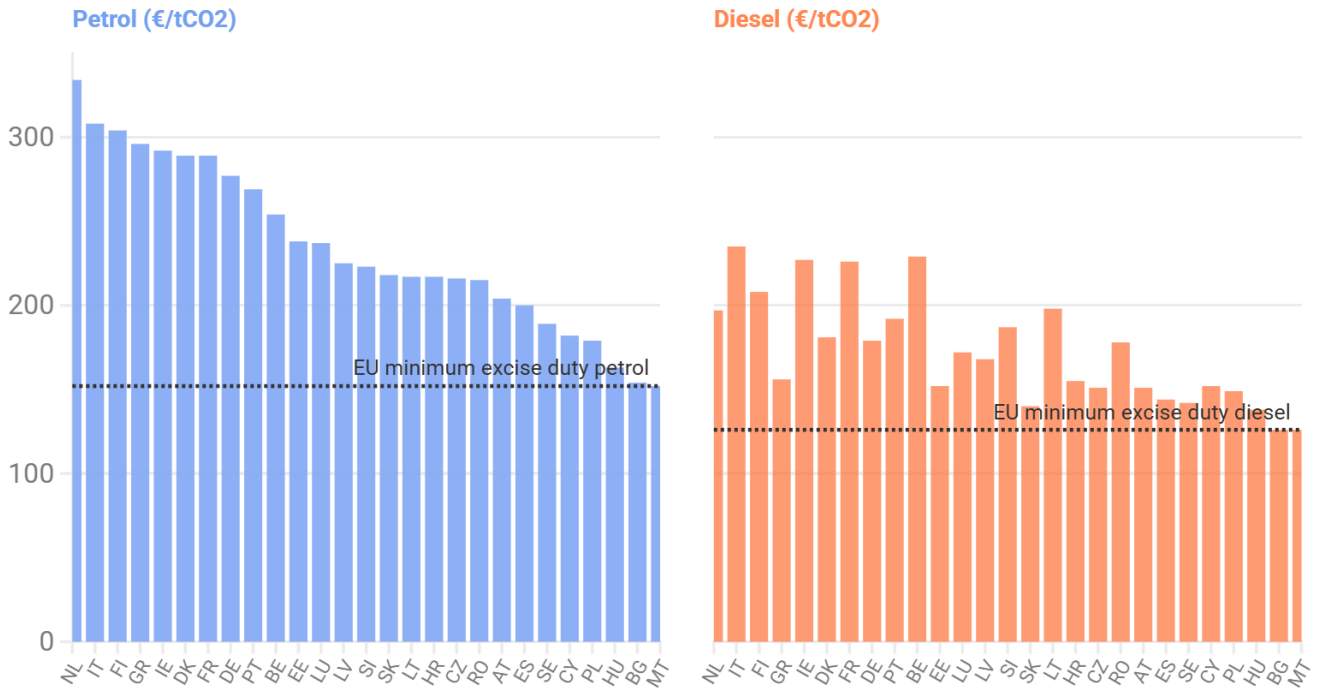
The higher the carbon price, the higher also the revenues though, and thus the more space for investments or compensation. As investments take time, compensation however provides for the only rapid response mechanism when prices spike exponentially or unexpectedly. Depending on how targeted or population-wide rebates are paid out, these may be insufficient as a response. That’s when Member States can opt to reduce pre-existing national taxes instead.

Excise duties on petrol range from €0.36/L in Malta to €0.79/L in the Netherlands. On diesel Member States levy between €0.33/L in Bulgaria and Malta to €0.62/L in Italy. To put this into perspective, a carbon price would need to reach between €126 and €334 to have a similar effect on fuel prices, as shown in the graph below. The EU however sets a minimum excise duty level of €0.359 per litre of petrol and €0.330 per litre of diesel. 25 Member States levy excise duties above the minimum rates, up to €0.43/L above the petrol EU minimum in the Netherlands. That leaves national fiscal space in those countries to counterbalance ETS2 prices if they reach such high levels that neither investments nor compensation through ETS2

revenues could adequately keep up with. Beyond excise duties, depending on the Member State, a range of other national taxes on road transport and heating fuels is available.

Implicit carbon price of road fuel excise duties

In euro per tonne of CO2



Source: European Commission • Some national fuel excise rates might include carbon-pricing components; the absence of standardised data prevents distinguishing which countries apply carbon taxes within their fuel excise rates.

T&E recommends not using this counterbalancing of ETS2 prices through national taxes lightly, and always using direct income support first. The aim of the ETS2 is to gradually include the externalities caused by pollution into fuel prices, and to send a long-term investment signal to citizens and firms. National taxes should not undue this effect. However, Member States could set their own desired increasing ETS2 price trajectory, and use national taxes to adjust to that path if ETS2 prices deviate significantly from that path. This should work in both directions: if ETS2 prices are lower than expected, excise duties could be increased. If ETS2 prices increase more rapidly than expected, excise duties could be temporarily lowered. Essentially, this would come down to a national price corridor.

If a Member State opts to lower national taxes - in essence setting a national ETS2 maximum price - it should also introduce a minimum price to ensure that when ETS2 prices go down again, national taxes are reinstated. It should however be noted that the market prices will mainly be driven by the ability of countries with large ETS2 emissions such as Germany, France and Italy to reduce emissions. Neutralising the ETS2 price effect in these countries could lead to an overall allowances shortage for the entire EU market - leading to higher prices for the entire EU-27. For that same reason, these countries are excellent candidates for national taxes serving as the back stop for that.

5. Expanding the Market Stability Reserve (MSR)

An alternative at EU level would be to expand the MSR to ensure price levels remain close(r) to the €45/tCO_2 soft price cap (in nominal terms - €55/tCO_2 when adjusted for inflation). The MSR could be gradually phased out over time. This would require an amendment to the ETS directive and would also mean the ETS would be less likely to deliver the required emission reductions.

A carbon price that could be anywhere between €10 and €250/tCO_2 is too unpredictable. Since prices cannot be capped at national level – they can only be compensated for – we need a Europe-wide price cap.

The current law contains a soft cap of €45/tCO_2, or 11cts/litre, in 2020 prices. Since the cap is adjusted for inflation, it is now €55, or 13cts/litre, and is projected to rise to €60 in nominal terms by 2030. This is similar to, for example, France and Germany's CO_2 tax and can be gradually increased over time. Making the soft cap 'harder' can be done by strengthening the MSR of emissions allowances that inject liquidity into the market if prices risk breaching the cap.

The expansion of the MSR would better address supply-demand imbalances, improve the resilience of the ETS, and support the EU's climate targets and goals.

For this reason, we suggest an amendment to the section of the MSR Decision which outlines the MSR for the sectors covered by ETS2. This could be done through a delegated act or by making use of the procedure enshrined in the European Parliament's Rule 170. According to this Rule, a written request to decide urgently on a proposal submitted to the Parliament as a result of unforeseen developments may be made to the Parliament by the President, a committee, a political group, Members reaching at least the low threshold, the Commission or the Council. T&E recommends that the Commission suggest targeted amendments to the MSR Decision that would contribute to establishing a price control mechanism to keep carbon prices around €55/tCO_2.

This procedure would be beneficial for three reasons: it would not imply reopening the ETS directives; it'd be faster than the ordinary legislative procedure (OLP), which requires a proposal from the Commission followed by the approval by the two co-legislators, the European Parliament and the Council of the European Union; and it'd still require the vote of the European Parliament to maintain its democratic legitimacy.

Conclusion

Investments in energy efficiency and zero-emission technologies take multiple years from start to finish. Over that time, households remain exposed to the carbon price. The €4 billion available for early investments under the SCF won't make a dent in switching people to sustainable heating or transport modes, and families will feel the ETS2 price heavily when it starts being levied in 2027. To ensure sufficient measures are in place to mitigate ETS2 impacts from its very start, the Commission should extend loans directly to Member States for investment-related spending as of 2025.

These loans would then be recouped from future guaranteed ETS2 revenues. T&E recommends creating a fixed frontloaded budget allowance per Member State, equivalent to the amount countries have to foresee in later years for the co-financing of the SCF. That would make €21.6 billion available for early investments across the EU-27. Member States would be allowed to borrow this fixed amount after approval of their planned investments. For this, T&E suggest using the already planned SCPs. Certain measures from the Plan can be approved in advance as of the summer of 2025, with payments commencing from September 2025. The payments would not come from the SCF, but instead from this new EU lending facility populated from the frontloaded co-financing budget. This can be readily implemented and does not require the reopening of any laws, nor does it create any links to the MFF.

Even with enormous investments already in the 2025-2027 period, ETS2 revenues on their own will never be sufficient to finance the replacement of all fossil fuel equipment for all households at risk of energy and/or transport poverty. In addition to the creation of a larger early investment budget, T&E therefore recommends spending at least 50% of the revenues generated by the impacts of the ETS2 on a countries' residents on financial compensation.

Rebates help to prevent backlash in the short term, and increase patience for investments to yield tangible returns. At the same time, they provide (ex-ante) insurance against future income losses. Rebates can also easily be scaled directly to the carbon price level, therefore working as an insurance against high ETS2 prices. Using revenues for rebates is much less susceptible to corruption and misuse than the use of other funds. Support can be given in the form of population-wide dividend schemes, targeted compensation, a reduction of electricity or labour taxes, the distribution of vouchers for zero-emission goods and services, or a combination of those. Communication and a realistic assessment of administrative capabilities are essential to the success of such schemes.

While direct compensation paid from ETS2 revenues should always be used as the first response to high CO_2 prices, there can be instances where price hikes are too sudden to adjust payments. In such cases, Member States could use their national taxes on transport and heating fuels to counterbalance the ETS2 price. This would come down to the introduction of a national price corridor, with a floor and ceiling price. For example, 25 Member States levy excise duties beyond the minimal level required by the EU.

If a Member State opts to lower national taxes - in essence setting a national ETS2 maximum price - it should also introduce a minimum price to ensure that when ETS2 prices go down

again, national taxes are reinstated. It should be noted that the market prices will mainly be driven by the ability of countries with large ETS2 emissions such as Germany, France and Italy to reduce emissions. Neutralising the ETS2 price effect in these countries could lead to an overall allowances shortage for the entire EU-market - leading to higher prices for the entire EU-27. For that same reason, these countries are excellent candidates for national taxes serving as the back stop for that.

An alternative at EU level would be to expand the MSR to ensure price levels remain close(r) to the €45/tCO_2 soft price cap (in nominal terms - €55/tCO_2 when adjusted for inflation). This MSR could be gradually phased out over time. This would require an amendment to the ETS directive and would also mean the ETS would be less likely to deliver the required emission reductions.

In terms of investments, T&E recommends spending around half of the budget available on the transport sector. At EU-level, road transport represents around 58% of total ETS2 emissions. With car usage making up the lion share of road transport emission (59%), specific measures that target people in forced car ownership should be foreseen, such as low-cost EV leasing. Beyond that, social transport measures should aim to develop a multimodal 'portfolio' of alternative transport options, since the fundamental step to address transport poverty is to enable mobility choice.

Member States can also opt for a higher co-financing share of their SCPs than the compulsory 25%. With co-financing to EU funds now exempted from the EU's fiscal rules, that would increase their investment capabilities.

Moreover, the Commission should take out its toolbox and assist Member States in a successful ETS2 implementation. Pressure should be increased to deliver qualitative NECPs in line with countries' national ESR climate targets, especially in price-setting countries such as Germany and Italy. The Commission should also come forward with new EU support measures. The Greening Corporate Fleets Regulation offers immense potential to reduce emissions and keep ETS2 prices down, and the launch of an EU Platform for low-cost EV leasing would reduce the administrative capacities required at national level to roll-out such measure.

Finally, we must never forget that carbon pricing is just the icing. It is market shaping policies such as car and truck CO_2 standards, rather than carbon pricing, that accelerate cost reductions of new zero-carbon alternatives. This is due to economies of scale, learning by doing and research and development. Still, it is paramount to price in externalities and turn ETS2 implementation into a success. While market-driven price changes in diesel and petrol lead to low demand responses, research indicates that carbon tax elasticity of demand for gasoline can be three times larger than its price elasticity. Consumers thus respond more strongly to changes to the carbon tax rate than to short-run price fluctuations.

Recommendations

1	Put all ETS2 revenues to work for a green and just transition, and return at least half as financial support
2	Frontloading the Social Climate Fund to ensure investments start at scale before the ETS2 kicks in
3	Improve NECPs and propose EU new measures
5	Creating a predictable price path through national taxes
6	Expand the Market Stability Reserve (MSR) to ensure EU market price remain close(r) to the soft cap

Annex

Definitions and assumptions

1. Revenues available and impact of ETS2 on a Member State

Revenues available to a Member State

The ETS2 cap defines the number of allowances issued each year to be auctioned. In this report, we assume that all allowances are auctioned at a constant carbon price (e.g., €55/tCO_2, inflation adjusted reference price of €45/tCO_2). Öko-Institut (2024) calculates the total number of allowances under the cap to be around 5305 million if ETS2 starts in 2027.

- A part of them are auctioned for the **SCF** until reaching a maximum amount of €65 billion. The auction revenues of the allowances earmarked for the SCF only return back to Member States after a distribution key has been applied (based on a mix of parameters such as GDP, population size, energy poverty, etc.). On top of it, 50 million ETS1 allowances will be auctioned for the SCF in 2026, or around €4 billion if we assume an allowance price of €80.

*Assuming a carbon price of €55/tCO_2 (*inflation adjusted reference price of €45/tCO_2*), over the 2026-2032 period, 1105 ETS2 allowances are auctioned for the SCF. Following the distribution key, Austria and Bulgaria would receive 0.89% (€0.6B) and 1.85% (€2.5B) of the SCF money.*

- The rest of allocations are distributed for **national auctioning** to Member States on the base of their relative 2016-2018 average emissions under the ETS2 scope.

This leaves 4200 allowances for national auctioning. Austrian and Bulgaria average 2016-2018 ETS2 emissions make up for 2.7% and 0.9% of EU average 2016-2018 ETS2 emissions respectively - and are allocated the corresponding share of allowances (112 million and 38 million respectively), raising €6.2B and €2.1B respectively if these allowances are auctioned at €55.

It should be noted that the assumption that emissions will decrease with the cap and that carbon price will be fixed leads to revenues decreasing over-time.

Proxy for the total impact of ETS2 on a Member State

The **total ETS2 cost** on a Member State is the total price paid by entities within the ETS2 scope in this Member State. While the entities liable to surround ETS2 allowances are fuel suppliers, a 100% cost pass-through means that the cost will eventually be paid by individuals - when heating their house and or driving their car with fossil fuels, or businesses and small energy industries.

In this briefing, we approximate the total impact of ETS2 on a Member State as the revenues that a Member State would receive if all allowances were auctioned by Member States, without being redistributed through the SCF. In other words, this proxy implies that:

- Actual EU ETS2 emissions between 2027 and 2032 are equivalent to those defined by the ETS2 cap. This is roughly in line with the Öko-Insitut's central scenario (FF55 policy scenario). We exclude MSR additions and removals.
- The Member States' relative share of ETS2 emissions remained equal to the ones defined by their 2016-2018 average, the years used to calculate the allowance allocations across MS.

The number of ETS2 allowances issued in Austria and Bulgaria over the 2027-2032 period is estimated as their respective share of emissions in 2016-2018 multiplied by the total amount of allowances under the cap over the 2027-2032 period. If entities in Austria and Bulgaria purchase the allowances at €55, the impact is estimated to be €7.8B and €2.6B respectively.

2. SCF redistribution: net contributors and net beneficiaries

The redistribution of revenues through the SCF entails that the **total revenues available** to a Member State (through **national auctioning** and **SCF**) is not equivalent to the **total ETS2 costs** on this Member State.

- Member States that receive a lesser share of the SCF than their average 2016-2018 emissions share are net contributors (e.g., Austria). The total ETS2 revenues of a net contributor are smaller than the total ETS2 impact on this Member State.

Based on the auctioned allowances allocation, Austria theoretically contributes to 2.7% of the SCFwhile receiving back 0.89%. Austria distributes 1.0 billion euros to net beneficiary Member States.

- Member States that received a bigger share of the SCF than their average 2016-2018 emissions are net beneficiaries (e.g., Bulgaria). Total EST2 revenues of a net beneficiary are higher than the total ETS2 impact on this Member State.

Based on the auctioned allowances allocation, Bulgaria contributes to 0.9% of the SCF, while receiving back 1.85%. Bulgaria benefits from 1.9 billion euros from net contributors Member States.

3. Co-financing and SCPs

The budget of the SCF is not equivalent to the value of the SCPs. Member States are required to co-finance the measures included in their SCPs, for example by setting aside a part of their own auction revenues as modelled in this report. This has to be equivalent to at least 25% of the value of the plan.

T&E recommends creating a fixed frontloaded budget allowance per Member State, based on this amount. Member States would be allowed to borrow up to this fixed amount or after approval of their planned investments. Whereas this does not change the total amount of revenues available to Member States, it aims at setting up a pot of money available early on for investments, ahead of the start of the ETS2.

To access the SCF budget, Austria needs to spend €0.2B of its national auctioning revenues to co-finance the SCPs.

To access the SCF budget, Bulgaria needs to spend €0.8B of its national auctioning revenues to co-finance the SCPs.

With our recommendation, this amount of money would be made available to Austria and Bulgaria early on to invest ahead of the start of the ETS2.

4. ETS2 revenues spending

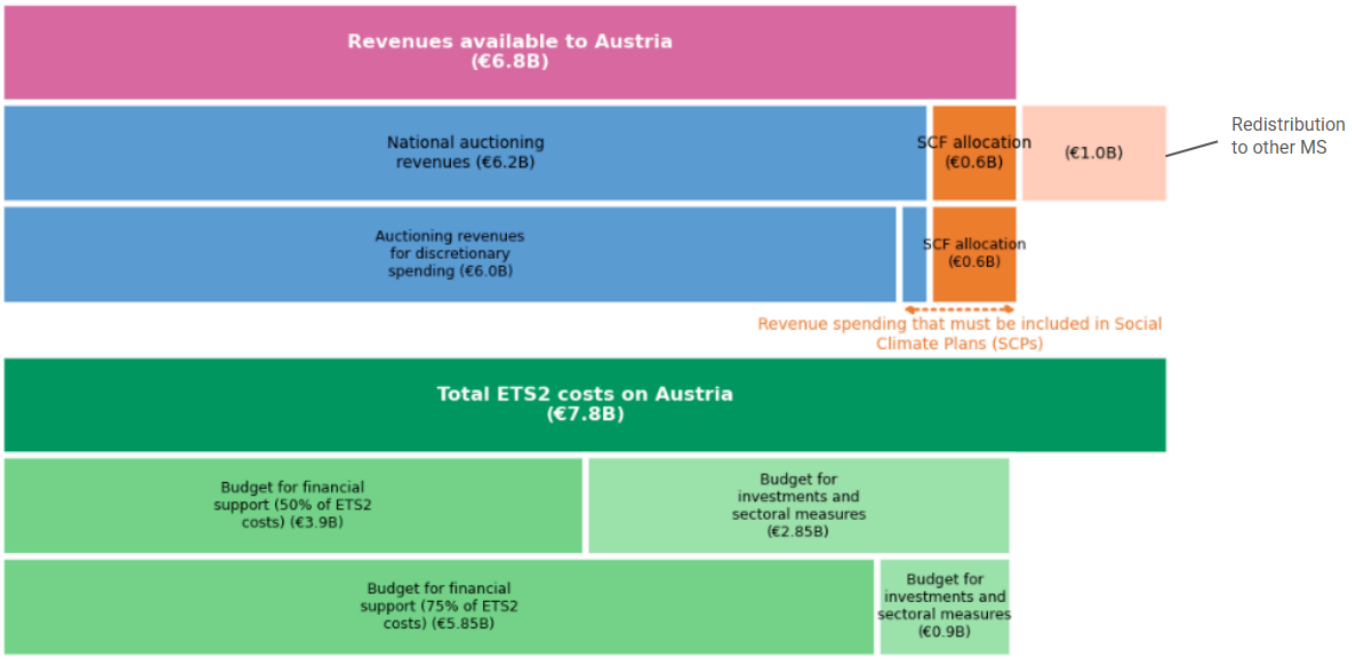
Investment in clean alternative and sectoral measures is crucial to bring long-term and structural emissions reductions, but financial compensation is essential to shield these households that will be facing higher energy prices with no affordable alternatives and to retain public acceptability. T&E recommends Member States returning 50% to 75% of what will be paid as financial compensation (see 1.1).

*For Austria, after having set aside the budget required to compensate 50% (or 75%) of the **ETS2 costs** (€3.2B), less than 50% (or 25%) of the impact is left for investment (€1.5B or €0.2B), since the missing €1.0B is channeled to poorer countries through the SCF.*

For Bulgaria, the money available for investments (€3.3B or €2.6B) after having set aside €1.3B or €2.0 for compensating 50% (or 75%) of the cost of ETS2 is more than the remaining 50% of the costs on its citizens, thanks to the €1.9B received from the solidarity contribution from net contributors Member State through the SCF.

5. Visualisation of revenues and spendings

Example of Austria, a net beneficiary of the SCF



Source: T&E calculations, based on Oeko (2024). Assuming a constant ETS2 carbon price of €55/tCO_2 - or €45/tCO_2 adjusted for inflation to today's price.

Example of Bulgaria, a net beneficiary of the SCF

Source: T&E calculations, based on Oeko (2024). Assuming a constant ETS2 carbon price of €55/tCO_2 - or €45/tCO_2 adjusted for inflation to today's price.

Additional results

Budget available for investments in Member States with different carbon prices

The table below shows the budget available for investments in each Member State after having set aside a sufficient share of the revenues available for a Member State to compensate for 50% to 75% of the impact as financial support. The co-financing part, that T&E recommends being made available already in 2025 is included in the total budget for investment.

Table 1: Total revenues for financial support and investments assuming a constant carbon price of €55/CO_2 (across the ETS2 period (2027-2032))

In billion euros, over the 2027-2032 period	If 50% of the costs on MS is compensated with financial support		If 75% of the costs on MS is compensated with financial support	
	Budget set aside for financial support	Remaining budget for investment and sectoral measures	Budget set aside for financial support	Remaining budget for investment and sectoral measures
EU27	145.9	149.9	218.8	76.9
Austria	3.9	2.9	5.8	0.9
Belgium	5.6	4.9	8.4	2.1
Bulgaria	1.3	3.3	2.0	2.6
Croatia	1.0	1.8	1.5	1.3
Cyprus	0.3	0.3	0.4	0.2
Czechia	3.7	3.7	5.5	1.9
Denmark	1.7	1.3	2.6	0.5
Estonia	0.4	0.4	0.6	0.2
Finland	1.7	1.3	2.6	0.5
France	22.8	20.6	34.2	9.2
Germany	34.6	25.5	51.9	8.2
Greece	2.4	5.0	3.5	3.8
Hungary	2.7	4.4	4.0	3.0
Ireland	2.2	2.0	3.4	0.9
Italy	19.2	18.2	28.9	8.6
Latvia	0.5	0.7	0.7	0.5
Lithuania	0.8	1.1	1.2	0.7
Luxembourg	0.8	0.5	1.2	0.1
Malta	0.1	0.1	0.1	0.1
Netherlands	6.1	4.3	9.1	1.2
Poland	11.8	18.3	17.8	12.4
Portugal	2.3	2.6	3.5	1.4
Romania	3.6	8.1	5.5	6.3
Slovakia	1.5	2.1	2.2	1.4
Slovenia	0.8	0.8	1.2	0.4
Spain	12.1	13.9	18.1	7.8
Sweden	2.0	1.6	3.0	0.6

Table 2: Total revenues for financial support and investments and sectoral measures assuming a constant carbon price of €100/CO_2 across the ETS2 period (2027-2032)

In billion euros, over the 2027-2032 period	If 50% of the costs on MS is compensated with financial support		If 75% of the costs on MS is compensated with financial support	
	Budget set aside for financial support	Remaining budget for investments and sectoral measures	Budget set aside for financial support	Remaining budget for investments and sectoral measures
EU27	265.2	269.2	397.9	136.6
Austria	7.1	6.0	10.6	2.5
Belgium	10.2	9.5	15.3	4.4
Bulgaria	2.4	4.4	3.6	3.2
Croatia	1.8	2.7	2.7	1.8
Cyprus	0.5	0.5	0.8	0.3
Czechia	6.7	6.7	10.1	3.4
Denmark	3.2	2.8	4.7	1.2
Estonia	0.7	0.7	1.0	0.4
Finland	3.1	2.8	4.7	1.2
France	41.4	39.2	62.1	18.5
Germany	63.0	53.8	94.4	22.4
Greece	4.3	6.9	6.4	4.8
Hungary	4.9	6.6	7.3	4.1
Ireland	4.1	3.8	6.1	1.8
Italy	35.0	34.0	52.5	16.5
Latvia	0.9	1.1	1.3	0.7
Lithuania	1.4	1.8	2.2	1.1
Luxembourg	1.5	1.2	2.2	0.5
Malta	0.1	0.2	0.2	0.1
Netherlands	11.1	9.3	16.6	3.7
Poland	21.5	28.0	32.3	17.3
Portugal	4.2	4.5	6.3	2.4
Romania	6.6	11.1	9.9	7.8
Slovakia	2.6	3.3	4.0	2.0
Slovenia	1.4	1.5	2.2	0.7
Spain	21.9	23.8	32.9	12.8
Sweden	3.6	3.2	5.4	1.4

Table 3: Total revenues for financial support and investments and sectoral measures assuming a constant carbon price of €25/CO_2 across the ETS2 period (2027-2032)

In billion euros, over the 2027-2032 period	If 50% of the costs on MS is compensated with financial support	
	Budget set aside for financial support	Remaining budget for investments and sectoral measures
EU27	66.3	70.3
Austria	1.8	0.7
Belgium	2.5	1.9
Bulgaria	0.6	2.5
Croatia	0.5	1.3
Cyprus	0.1	0.1
Czechia	1.7	1.7
Denmark	0.8	0.4
Estonia	0.2	0.2
Finland	0.8	0.4
France	10.4	8.1
Germany	15.7	6.6
Greece	1.1	3.7
Hungary	1.2	2.9
Ireland	1.0	0.7
Italy	8.7	7.8
Latvia	0.2	0.5
Lithuania	0.4	0.7
Luxembourg	0.4	0.1
Malta	0.0	0.0
Netherlands	2.8	1.0
Poland	5.4	11.9
Portugal	1.0	1.3
Romania	1.7	6.2
Slovakia	0.7	1.3
Slovenia	0.4	0.4
Spain	5.5	7.3
Sweden	0.9	0.5

In the case of such low carbon prices, using ETS2 revenues to compensate 75% of the ETS2 impact would mean that:

- Countries that are big net beneficiaries from the SCF (e.g., Bulgaria, Romania and Greece) will not have enough ETS2 auctioning revenues to co-finance the entirety of the money made at their disposal under the SCF.
- For a number of countries, compensating 75% of the costs of ETS2 with financial support would require exceeding the 37.5% limit of “costs of measures providing temporary direct income” established for the SCPs.

Table 4: Share of investment budget made available early on through the lending facility (assuming a carbon price of €55/tCO_2 - or €45/tCO_2 adjusted to today's price)

In billion euros		If 50% of the costs on MS is compensated with financial support		If 75% of the costs on MS is compensated with financial support	
	Fronloaded budget (co-financing part of the Social Climate Plan)	Budget available for investment and sectoral measures (2026-2032)	% of the investment budget made available early on through a lending facility	Budget available for investment and sectoral measures (2026-2032)	% of the investment budget made available early on through a lending facility
EU27	21.6	149.9	14%	76.9	28%
Austria	0.19	2.9	7%	0.9	21%
Belgium	0.6	4.9	11%	2.1	26%
Bulgaria	0.83	3.3	25%	2.6	32%
Croatia	0.4	1.8	23%	1.3	31%
Cyprus	0.0	0.3	15%	0.2	28%
Czechia	0.5	3.7	14%	1.9	28%
Denmark	0.1	1.3	8%	0.5	23%
Estonia	0.1	0.4	15%	0.2	29%
Finland	0.1	1.3	9%	0.5	24%
France	2.4	20.6	12%	9.2	26%
Germany	1.8	25.5	7%	8.2	22%
Greece	1.2	5.0	24%	3.8	32%
Hungary	0.9	4.4	21%	3.0	31%
Ireland	0.2	2.0	11%	0.9	26%
Italy	2.3	18.2	13%	8.6	27%
Latvia	0.2	0.7	21%	0.5	31%
Lithuania	0.2	1.1	20%	0.7	30%
Luxembourg	0.0	0.5	4%	0.1	16%
Malta	0.0	0.1	16%	0.1	29%
Netherlands	0.2	4.3	6%	1.2	20%
Poland	3.8	18.3	21%	12.4	31%
Portugal	0.4	2.6	16%	1.4	29%
Romania	2.0	8.1	25%	6.3	32%
Slovakia	0.4	2.1	20%	1.4	30%
Slovenia	0.1	0.8	15%	0.4	28%
Spain	2.3	13.9	16%	7.8	29%
Sweden	0.1	1.6	9%	0.6	24%

Table 5: Share of investment budget made available early on through the lending facility (assuming a carbon price of €100/tCO_2)

In billion euros		If 50% of the costs on MS is compensated with financial support		If 75% of the costs on MS is compensated with financial support	
	Fronloaded budget (co-financing part of the Social Climate Plan)	Budget available for investment and sectoral measures (2026-2032)	% of the investment budget made available early on through a lending facility	Budget available for investment and sectoral measures (2026-2032)	% of the investment budget made available early on through a lending facility
EU27	21.6	269.2	8%	136.6	16%
Austria	0.19	6.0	3%	2.5	8%
Belgium	0.6	9.5	6%	4.4	13%
Bulgaria	0.83	4.4	19%	3.2	26%
Croatia	0.4	2.7	16%	1.8	24%
Cyprus	0.0	0.5	8%	0.3	16%
Czechia	0.5	6.7	8%	3.4	15%
Denmark	0.1	2.8	4%	1.2	9%
Estonia	0.1	0.7	9%	0.4	17%
Finland	0.1	2.8	4%	1.2	10%
France	2.4	39.2	6%	18.5	13%
Germany	1.8	53.8	3%	22.4	8%
Greece	1.2	6.9	17%	4.8	25%
Hungary	0.9	6.6	14%	4.1	23%
Ireland	0.2	3.8	6%	1.8	13%
Italy	2.3	34.0	7%	16.5	14%
Latvia	0.2	1.1	14%	0.7	22%
Lithuania	0.2	1.8	12%	1.1	21%
Luxembourg	0.0	1.2	2%	0.5	5%
Malta	0.0	0.2	10%	0.1	18%
Netherlands	0.2	9.3	3%	3.7	6%
Poland	3.8	28.0	14%	17.3	22%
Portugal	0.4	4.5	9%	2.4	17%
Romania	2.0	11.1	18%	7.8	26%
Slovakia	0.4	3.3	13%	2.0	21%
Slovenia	0.1	1.5	8%	0.7	16%
Spain	2.3	23.8	10%	12.8	18%
Sweden	0.1	3.2	4%	1.4	10%

Table 6: Share of investment budget made available early on through the lending facility (assuming a carbon price of €25/tCO_2)

In billion euros		If 50% of the costs on MS is compensated with financial support	
	Fronloaded budget (co-financing part of the Social Climate Plan)	Budget available for investment and sectoral measures (2026-2032)	% of the investment budget made available early on through a lending facility
EU27	21.6	70.3	31%
Austria	0.19	0.7	27%
Belgium	0.6	1.9	30%
Bulgaria	0.83	2.5	33%
Croatia	0.4	1.3	32%
Cyprus	0.0	0.1	31%
Czechia	0.5	1.7	31%
Denmark	0.1	0.4	28%
Estonia	0.1	0.2	31%
Finland	0.1	0.4	28%
France	2.4	8.1	30%
Germany	1.8	6.6	27%
Greece	1.2	3.7	33%
Hungary	0.9	2.9	32%
Ireland	0.2	0.7	30%
Italy	2.3	7.8	30%
Latvia	0.2	0.5	32%
Lithuania	0.2	0.7	32%
Luxembourg	0.0	0.1	23%
Malta	0.0	0.0	31%
Netherlands	0.2	1.0	25%
Poland	3.8	11.9	32%
Portugal	0.4	1.3	31%
Romania	2.0	6.2	33%
Slovakia	0.4	1.3	32%
Slovenia	0.1	0.4	31%
Spain	2.3	7.3	31%
Sweden	0.1	0.5	28%

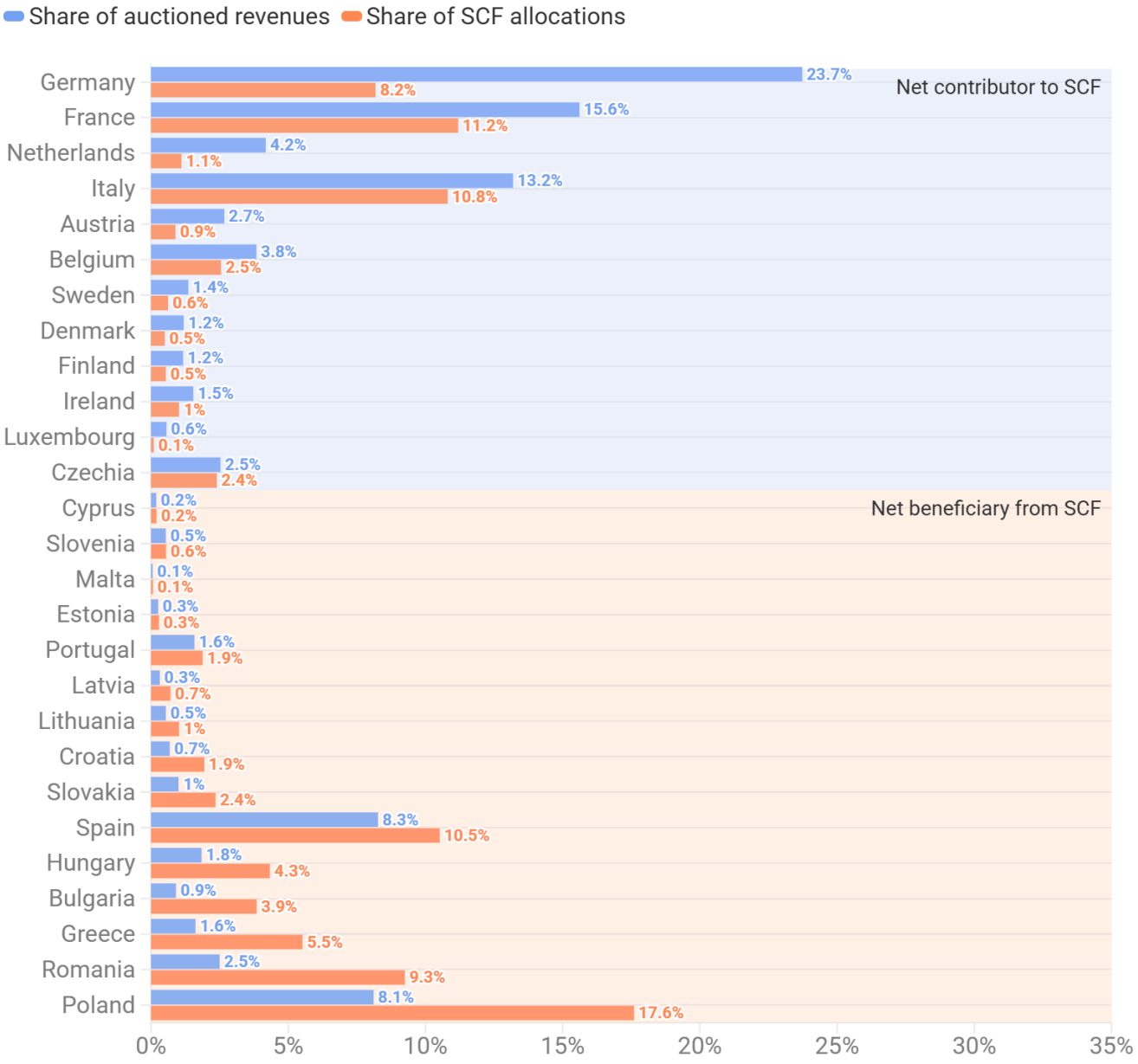
In a situation where the price of CO_2 is as low as €25/tCO_2, the Member States that benefit most from the redistribution of the SCF (Greece, Romania and Bulgaria) would have to use, in addition to their auctioning revenues, part of their SCF (1% to 7%) to repay a loan amounting to their co-financing budget.

Excise duties per Member State

Table 7: Excise duties per Member State and their implicit carbon price

Country	Petrol (€/L)	Diesel (€/L)	Petrol (€/tCO_2)	Diesel (€/tCO_2)
Austria	0.4820	0.3970	204	151
Belgium	0.6002	0.6002	254	229
Bulgaria	0.3628	0.3301	154	126
Croatia	0.5123	0.4061	217	155
Cyprus	0.4290	0.4000	182	152
Czechia	0.5099	0.3951	216	151
Denmark	0.6835	0.4754	289	181
Estonia	0.5630	0.3990	238	152
Finland	0.7177	0.5470	304	208
France	0.6829	0.5940	289	226
Germany	0.6545	0.4704	277	179
Greece	0.7000	0.4100	296	156
Hungary	0.3857	0.3613	163	138
Ireland	0.6888	0.5957	292	227
Italy	0.7284	0.6174	308	235
Latvia	0.5320	0.4405	225	168
Lithuania	0.5130	0.5196	217	198
Luxembourg	0.5591	0.4526	237	172
Malta	0.3590	0.3300	152	126
Netherlands	0.7891	0.5163	334	197
Poland	0.4236	0.3920	179	149
Portugal	0.6344	0.5040	269	192
Romania	0.5085	0.4661	215	178
Slovakia	0.5140	0.3680	218	140
Slovenia	0.5267	0.4918	223	187
Spain	0.4727	0.3790	200	144
Sweden	0.4461	0.3737	189	142

The Social Climate Fund redistributes part of the revenues



Source: Oeko Institut (2024). Supply and demand in the ETS2, EC