

A large, dark industrial smokestack is positioned on the left side of the image, emitting a thick, billowing plume of smoke. The smoke is illuminated from below, giving it a fiery orange and red glow. The background is a deep blue sky, suggesting dusk or dawn. The overall mood is somber and industrial.

WHERE DID ALL THE MONEY GO?

HOW EU MEMBER STATES SPENT
THEIR ETS REVENUES - AND WHY
TIGHTER RULES ARE NEEDED

NOVEMBER 2022

EXECUTIVE SUMMARY

We have very little time left to keep global temperature rise to 1.5°C and stop runaway climate change. And how we spend public money is critical. This means we need to look closely at the Emissions Trading System (ETS), an EU policy that puts a price on carbon emissions and so generates significant income for EU countries. This report examines how Member States have been spending their ETS revenues to date, and reveals that tighter rules are urgently needed.

Using data reported by Member States and information from the European Environment Agency (EEA), it shows that over the 2013-2021 period:

- **Member States earnt a total of €88.5 billion from selling emission allowances under the ETS.**
- **Of this, they only spent 71.9% on climate action.** The rest - €25 billion - went into general government spending.
- Even the figure of 71.9% is questionable, or at least difficult to justify with any confidence. **WWF analysis suggests that at least €12.4 billion attributed to climate action was in fact likely spent on things that were unhelpful - or even counterproductive - in climate terms, for example** compensation for the ETS carbon price, modernisation of coal infrastructure, switching from coal to gas, fossil fuel-based heating systems, diesel cars or high carbon sources of bioenergy.
- Overall, this means that **only 57.8% of all ETS revenue was likely spent on genuine climate action.** It's impossible to be certain because lax rules mean that national reporting on how ETS revenue was spent is riddled with inconsistencies and mistakes - if the information is available at all.
- **Meanwhile emission allowances worth €98.5 billion - more than Member States earnt in ETS revenue - were given to industry for free. With no conditions attached, and with little if any impact on emissions reduction.**

- **Indeed less than half (47%) of all emissions covered by the ETS were subject to a carbon price.** This means that while the average cost on the market was €14.02 per tonne of CO₂ emitted, the real price industries paid, taking account of free allowances, was only €6.58.
- **The Modernisation Fund - financed through the ETS - is set to increase significantly and at today's carbon price will yield €60 billion of revenue.** There is a risk that some of this spending ends up supporting fossil gas projects and delaying climate neutrality.

On this basis, it seems clear that issuing free allowances under the ETS has been a serious policy failure. The rational approach would be to stop this now and use the additional revenue to support investment in industrial decarbonisation (e.g. through the Innovation Fund and the Modernisation Fund). But if free allowances are to continue, then at the very least they should be subject to strict conditions, to ensure that they drive investment in decarbonisation.

Similar considerations apply as regards the Modernisation Fund itself: given its significant value we must ensure that this is also spent on rapid decarbonisation. Amongst other things this should mean excluding anything related to fossil fuels from its scope and requiring all beneficiary countries to have adopted a national target for reaching climate neutrality - otherwise there can be no guarantee that spending will be consistent with a trajectory to EU climate goals.

To address this and the other serious flaws above, EU policy-makers should:

1. Phase out free allowances as quickly as possible - and in the interim only give them to companies once they have demonstrated improvements in energy efficiency and adopted a decarbonisation plan;
2. Require Member States to spend 100% of their ETS revenues on climate action;
3. Strictly define what 'climate action' means in this context - and this must exclude anything related to fossil fuels or carbon price compensation for industry;
4. Ensure accountability and transparency over how ETS revenues are used by tightening reporting rules;
5. Align the Modernisation Fund with climate neutrality by excluding fossil fuel investment and requiring that beneficiary countries adopt a national climate neutrality target.

Written by the WWF European Policy Office.

WWF is an independent conservation organisation, with over 35 million followers and a global network active through local leadership in over 100 countries. Our mission is to stop the degradation of the planet’s natural environment and to build a future in which people live in harmony with nature, by conserving the world’s biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption

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INTRODUCTION

Reaching the European Union’s (EU) climate targets for 2030 and beyond will require rapid cuts in emissions in every sector of the economy. The EU has committed to reduce net emissions by at least 55% by 2030 (compared to 1990 levels) and to reach climate-neutrality - net-zero emissions - by 2050 at the latest. Greenhouse gas emissions for power, energy intensive industry and aviation sectors are covered at EU-level by the Emissions Trading System (ETS), and represent around 40% of all EU emissions¹.

Since the inception of the ETS in 2005, emissions covered under this scheme have decreased by 37%². In July 2021, the European Commission proposed to revise the EU ETS Directive as part of its Fit for 55 package³. In their negotiation positions, **the Council of the European Union and the European Parliament have, respectively, called for an emissions reduction target for the ETS of 61-63% by 2030**⁴. Trilogue negotiations between the institutions have started, and negotiators hope to reach an agreement by the end of the year.

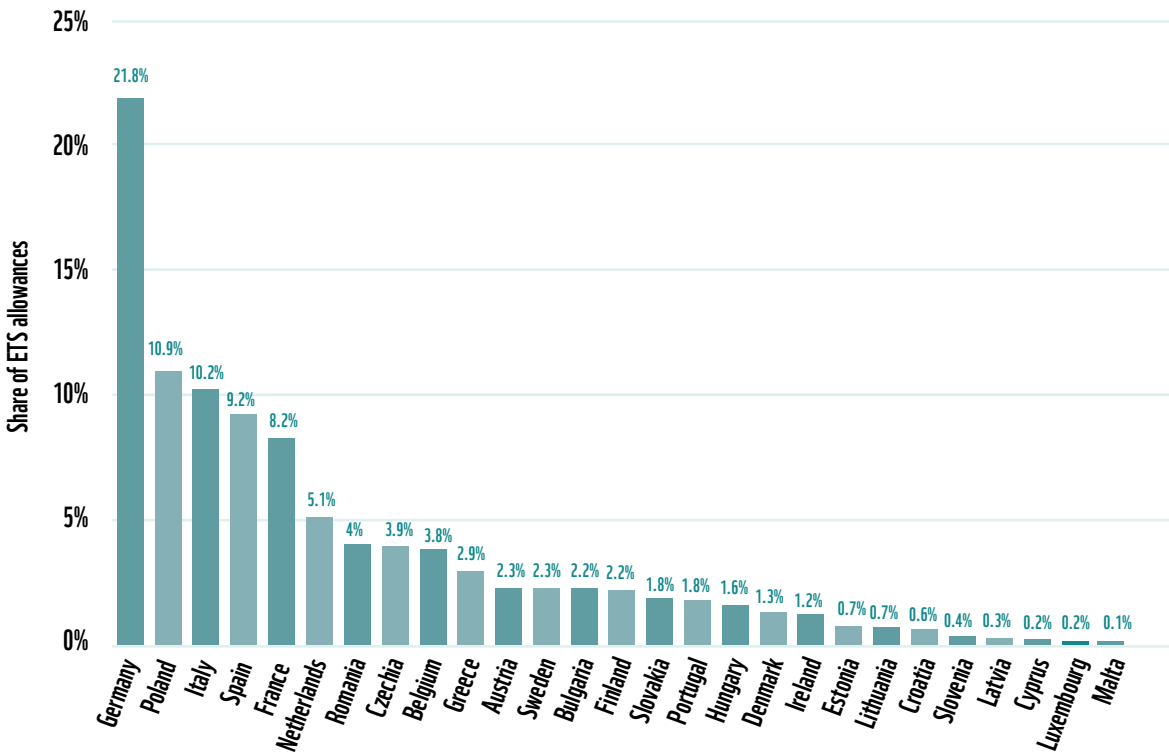
The EU ETS is a market-based mechanism which puts a price on carbon emissions in those sectors it covers. The total amount of emissions allowances allocated under the EU

ETS is capped and decreases over time, in line with a yearly linear reduction factor. But a large part of emissions from the energy intensive industry and aviation sectors are exempted through the allocation of ‘free allowances’.

Each EU Member State receives emissions allowances in proportion to its historical share of emissions. In addition, 10% of all ETS allowances are redistributed to the 16 lowest-income Member States and, until 2020, to four higher income Member States “for the purpose of solidarity, growth and interconnections within the Union”⁵. The graph below shows the amount of ETS allowances distributed to each Member State between 2013 and 2021, after application of this solidarity clause.



Figure 1: Share of ETS allowances (free and auctioned) distributed to Member States (2013-2021)



1 European Environment Agency (EEA), “Total greenhouse gas emission trends and projections in Europe”, 26 October 2022, [eea.europa.eu/ims/total-greenhouse-gas-emission-trends](https://www.eea.europa.eu/ims/total-greenhouse-gas-emission-trends).

2 EEA, “Trends and projections in Europe 2022”, [eea.europa.eu/publications/trends-and-projections-in-europe-2022](https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2022), p. 8.

3 European Commission, proposal for a Directive amending Directive 2008/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, 14 July 2021, ec.europa.eu/info/sites/default/files/revision-eu-ets-with-annex_en_0.pdf

4 The Council Secretariat has published the co-legislators’ negotiation mandate on 21 September 2021. See eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST_12619_2022_INIT&from=EN.

5 See Article 10(2)(b) of the EU ETS Directive. The 16 lowest-income Member States are Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain. The four higher-income Member States are Belgium, Luxembourg, Spain and Sweden.

As can be seen, Germany is by far the largest recipient of ETS allowances, followed by Poland and Italy. In consequence, these countries are also the top three beneficiaries of ETS revenues. In addition, two additional redistribution mechanisms come into play when it comes to allocating allowances to Member States:

- 2% of all allowances (worth €1.6 billion in 2021) are transferred into a **Modernisation Fund** and redistributed towards the 10 lowest-income Member States, which can submit funding applications for projects relating to the modernisation of energy systems, including through energy efficiency.
- 450 million allowances (worth €2.2 billion in 2021) are drawn from the pool of allowances given for free, auctioned or held by the Market Stability Reserve and transferred into the **Innovation Fund**. This Fund supports innovation in low-carbon technologies such as carbon capture and utilisation or storage, or hydrogen.

Those EU ETS allowances that have been auctioned have provided a significant (and increasing) revenue stream for EU Member States which - according to the current ETS Directive - Member States are advised to spend at least 50% on domestic or international climate projects. They are legally required to report each year to the EEA⁶: (1) how much ETS revenue they received; (2) how much of it they spent on ‘climate action’; and: (3) which national projects they spent it on⁷.

This report, which follows previous similar WWF reports⁸ takes stock of the use of EU ETS revenues between 2013-2021, based on Member States’ own reporting and data provided by the EEA. It aims to provide an assessment of how ETS revenues have been spent and reported on by EU Member States in recent years. It also draws conclusions from this analysis as regards the reform options that are on the table in the trilogue negotiations, and that could improve ETS revenues spending for the period up to 2030.

6 See the EEA Reportnet portal on the use of ETS auctioning revenues, reportnet.europa.eu/public/dataflow/542.

7 See Article 19 the Regulation 2018/1999 on the Governance of the Energy Union (‘Governance Regulation), December 2018, eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1999&from=EN.

8 See also WWF previous publications: “Fit for 2030: Optimising EU ETS revenues for people and climate”, June 2021, [73886441/Flawed-EU-carbon-market-losing-EUR-billions-for-climate-action-report](https://www.wwf.org.uk/publications/fit-for-2030-optimising-eu-ets-revenues-for-people-and-climate); “Strategic spending: how the EU Emissions Trading System can fund fair climate action”, December 2019, [7357181/Strategic-spending-how-the-EU-Emissions-Trading-System-can-fund-fair-climate-action](https://www.wwf.org.uk/publications/strategic-spending-how-the-eu-emissions-trading-system-can-fund-fair-climate-action); “Smart cash for the climate - Maximising ETS auctioning revenues”, December 2016, [7289291/Smart-cash-for-the-climate-Maximising-ETS-auctioning-revenues](https://www.wwf.org.uk/publications/smart-cash-for-the-climate-maximising-ets-auctioning-revenues).

1. ETS REVENUE FOR EU COUNTRIES - AN ALL-TIME HIGH

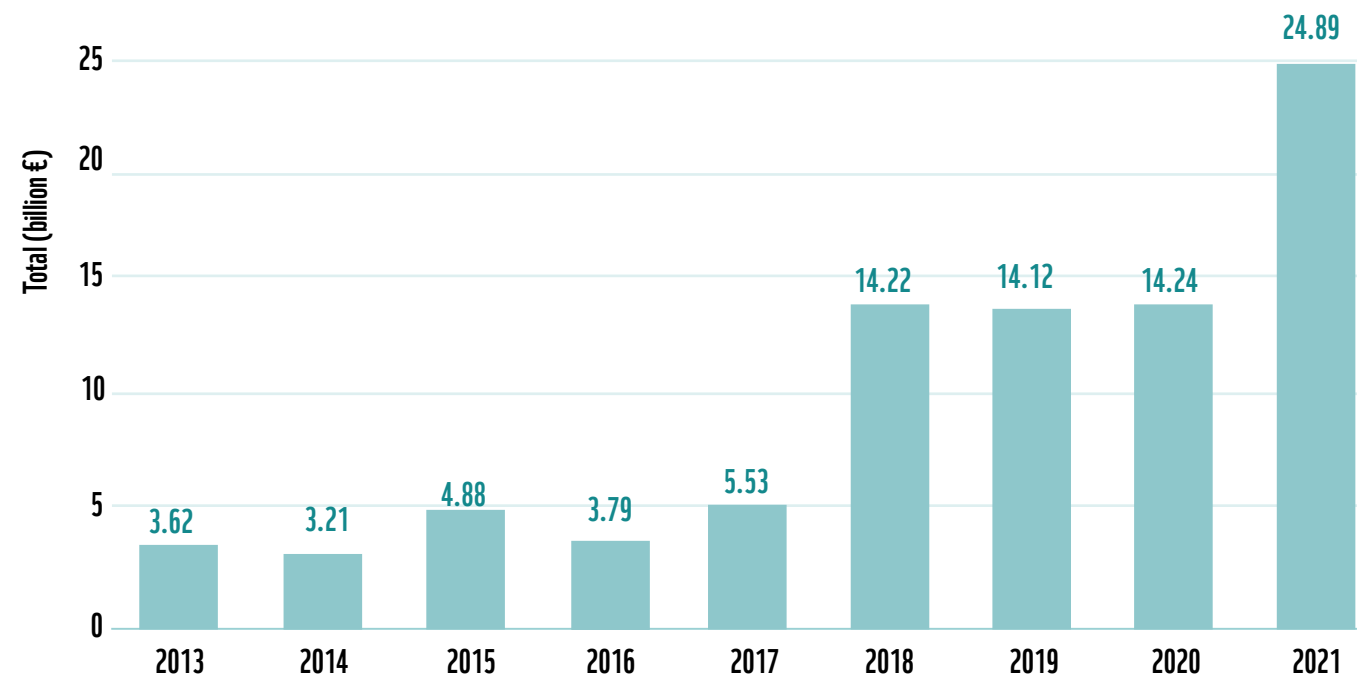
According to the Intergovernmental Panel on Climate Change (IPCC), **human-induced climate change has already increased the planet's average temperature by approximately 1.1°C**⁹, and emissions are still increasing, with the result that the 1.5°C limit could be exceeded before 2040. Leaving aside the risks of runaway climate change, the social and economic benefits of speeding up the transition to climate neutrality have never been so clear, not least in terms of energy security, health and employment opportunities - there are now as many clean energy jobs as fossil fuel ones¹⁰. The European Commission nevertheless estimates that meeting the revised 2030 climate target will require, from 2021, **an average yearly investment of €387-438 billion, depending on the policy scenario**¹¹. The ETS is a key tool in helping bridge this climate investment gap.

Based on available data, over the last nine years, **Member States collectively raised €88.5 billion euros in ETS revenues**, with over 28% of the total amount coming from the 2021 auction alone. The apparent slight decrease in ETS revenues during the year 2019 actually reflects the UK's departure from the European Union, meaning that revenues have in fact increased for the 27 Member States in 2019. The stagnation in ETS revenues during the year 2020 can be

explained by a stagnation of the price resulting from a drop in industrial activities due to the Covid-19 pandemic and emergency sanitary measures taken in response.

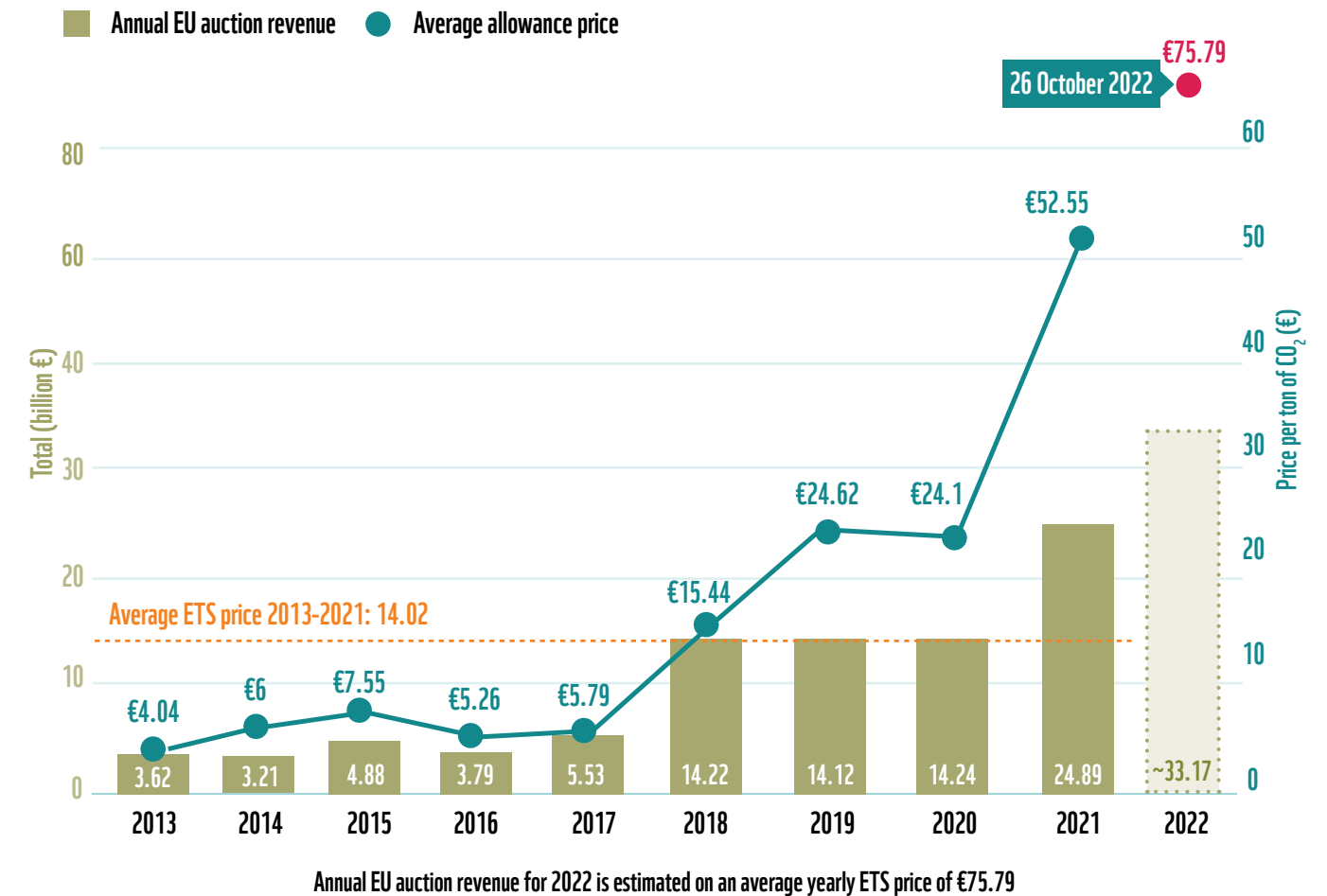
The rationale underpinning the EU ETS is that companies in the sectors covered by the system could reduce their greenhouse gas emissions if they had a financial incentive to do so, and that a market-based mechanism will ensure that

Figure 2: ETS revenue for Member States (2013-2021)



9 IPCC Sixth Assessment Report, Working Group I, "Climate Change 2021: The Physical Science Basis", Summary for policy-makers, August 2021, p. 8, [ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf).
 10 International Energy Agency, "World Energy Employment", September 2022, p. 11, 19, [iea.org/news/global-energy-employment-rises-above-pre-covid-levels-driven-by-clean-energy-and-efforts-to-strengthen-supply-chains](https://www.iea.org/news/global-energy-employment-rises-above-pre-covid-levels-driven-by-clean-energy-and-efforts-to-strengthen-supply-chains).
 11 European Commission, Impact Assessment accompanying the Communication "Stepping up Europe's 2030 climate ambition: Investing in a climate-neutral future for the benefit of our people", 17 September 2020, p. 71, ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12265-2030-Climate-Target-Plan_en.

Figure 3: Average EU ETS price in euros per tonne of CO₂ (2013-2021)



this happens in a cost-optimal way. The ETS carbon price signal exists then to provide this incentive: certainty that the carbon price will stay - and even increase with the gradual reduction of available allowances - is meant to ensure that companies integrate the cost of carbon pollution in their long-term planning. Rational market operators are expected to take financially sound decisions not to invest in polluting fossil fuel infrastructure that will end up reducing their profitability in the near future. Figure 4 below shows changes in the ETS carbon price since 2013.

The amount of ETS revenue available to Member States is directly related to the ETS carbon price. For example, Figure 4 shows that the doubling of the carbon price from 2020 to 2021 resulted in a similarly significant increase in

revenues for Member States. The carbon price has only been (relatively) high for the last few years. At its inception, the ETS suffered malfunctions, with many more allowances available than verified emissions, which caused the carbon price to be very low. The 2008 financial and economic crisis further increased the surplus in emission allowances due to the unforeseen reduction in economic activity. Only since 2018 has the ETS price increased meaningfully. The introduction of the Market Stability Reserve (MSR) played a large part in this increase, as it was specifically created to reduce the historic surplus in emission allowances. **On average between 2013-2021, a tonne of carbon sold under the ETS cost €14.02.** Studies suggest that the true cost of a tonne of CO₂ for society is actually far higher, and ranges from €180 to €640¹².

12 Dr. A. Matthey, "Methodological Convention 3.0 for the Assessment of Environmental Costs", November 2019, p. 8, [umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2019-02-11_methodenkonvention-3-0_en_kostensaetze_korr.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2019-02-11_methodenkonvention-3-0_en_kostensaetze_korr.pdf).

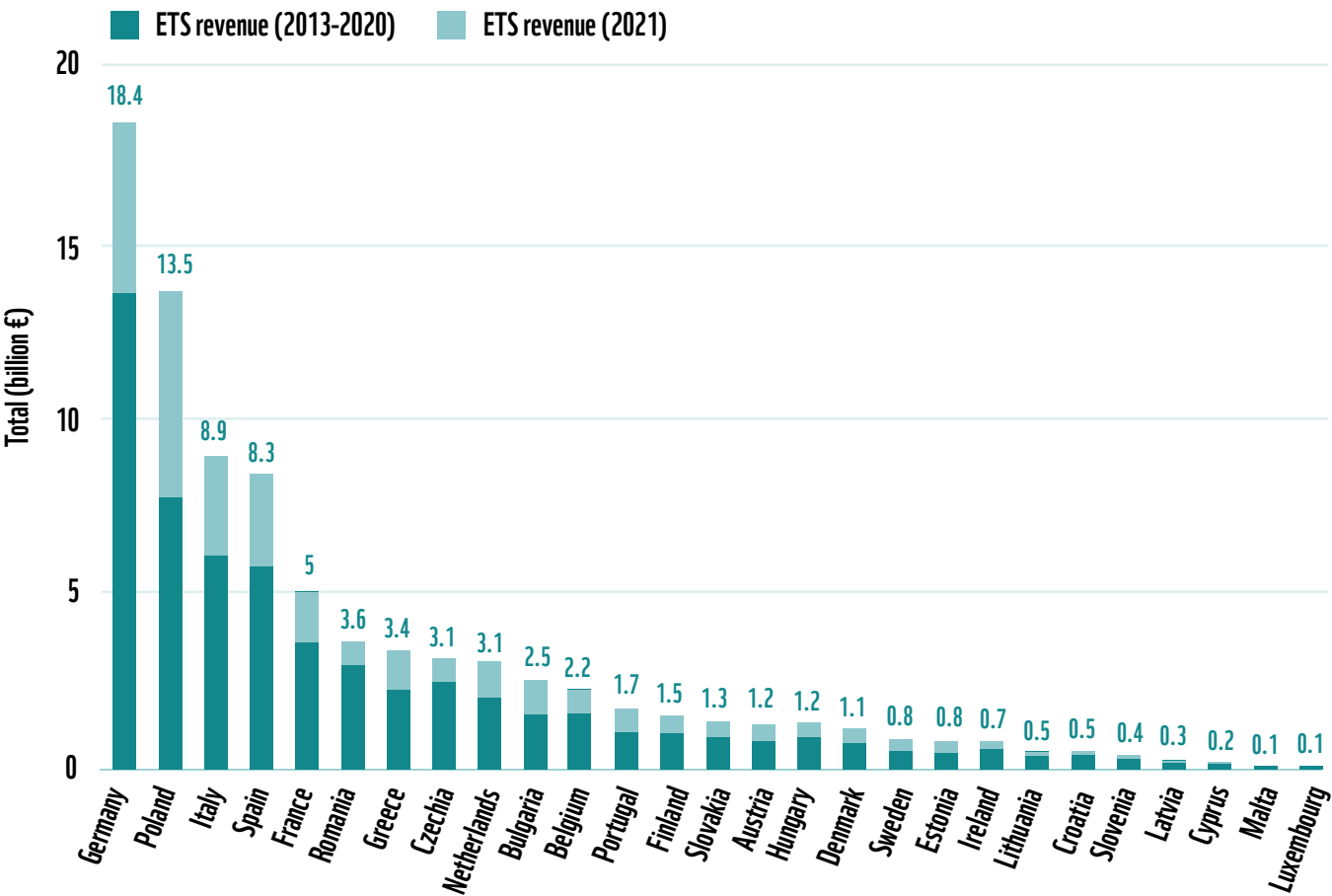
In recent years, Member State revenues have benefitted from a higher ETS price, which has resulted in billions of additional euros being available for spending on climate action. The amount of revenue available in each Member State is proportionate to their share of ETS allowances.

As a result of the carbon price, all Member States’ auctioning revenue substantially increased during the year 2021. **Germany is the top beneficiary from ETS revenues**, with €18.4 billion collected over the last 9 years up to 2021, while Poland comes second with €13.5 billion. The top four beneficiaries from ETS revenues (Germany, Poland, Italy and Spain) together account for over half of all revenues. But even for Member States which receive lower amounts, such revenues can constitute a substantial share of their national budget dedicated to investment in climate action. For example, Croatia mentioned in its 2020 reporting on ETS revenues that “[It] uses these auctioning [ETS] revenues

to finance almost all climate activities in the country”¹³. However given the climate emergency, ETS revenues should be *additional to* - i.e. come on top of - national funding available for climate action, and not replace such national funding streams.

The ETS carbon price is essential to emissions reduction in ETS sectors in line with climate goals. Because the main aim of the ETS is not to raise revenues but to cap emissions and provide a least-cost mechanism to incentivise decarbonisation in the power sector and in energy-intensive industries. However this is seriously undermined by the ETS Directive itself, through mechanisms that weaken or even cancel the carbon price, such as the allocation of free allowances or carbon price compensation for industry. These design flaws, which amongst other things dramatically reduce potential ETS revenues that could be spent on decarbonisation, are discussed in the next section.

Figure 4: Total ETS revenue per Member States (2013-2021)



13 EEA Reportnet platform, “Use of ETS auctioning revenues - Reporting year 2021”, reportnet.europa.eu/public/dataflow/159.

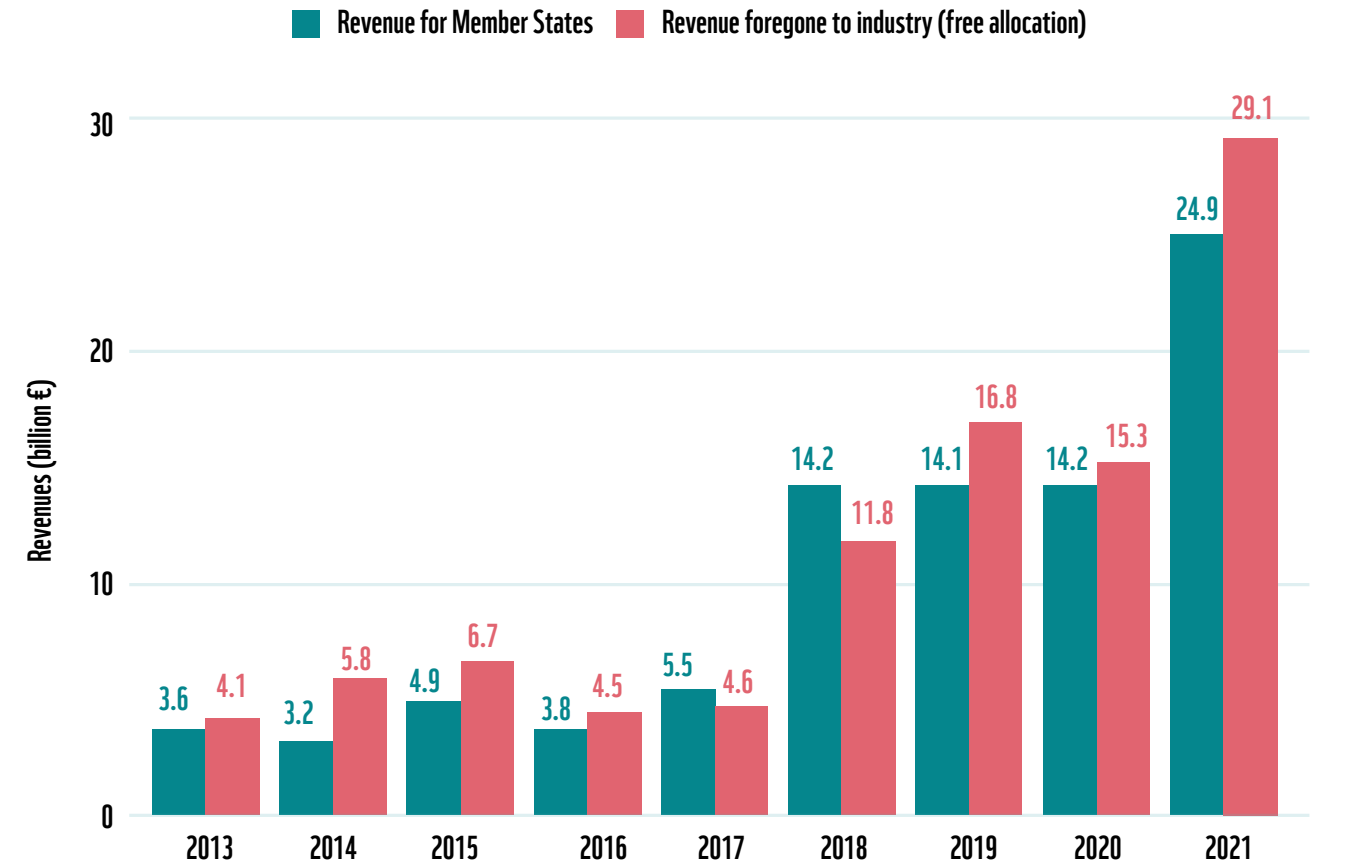
2. FREE ALLOWANCES AND CARBON PRICE COMPENSATION FOR INDUSTRY

The carbon price is the only tool available under the ETS for reducing emissions, and it provides a substantial and necessary source of revenue for Member States to spend on climate action - including within the sectors covered by the ETS. But despite this, the majority of emissions covered by the ETS is not subject to any carbon price signal at all. In fact, **53% of emissions covered by the ETS between 2013 and 2021 were emitted for free, in direct contradiction with the polluter pays principle.**

Between 2013-2021, **industries have been the top beneficiary of the ETS with free allowances worth a total of €98.5 billion** - more than Member States received in revenue (€88.5 billion). This also means that while the average carbon price on the market was €14.02 per tonne emitted, **the actual average price industries paid (taking account of free allowances) was only €6.58.**

Free allowances - or free pollution permits for energy intensive industries and aviation - have been given without any conditions attached, in the hope that these sectors would reduce their emissions despite much reduced financial incentives to do so. Unsurprisingly, these sectors have not reduced their emissions to any significant extent¹⁴ and have even in some cases made windfall profits by selling surplus free allowances on the market¹⁵.

Figure 5: ETS revenue compared with revenue forgone to industry in free allocation (2013-2021)



14 See for example Carbon Market Watch, “A New Hope: Recommendations for the EU emissions trading system review”, April 2021, p. 4, carbonmarketwatch.org/wp-content/uploads/2021/04/A-New-Hope_recommendations-for-the-EU-ETS-review-2.pdf.
15 Carbon Market Watch, “The Phantom Leakage: industry windfall profits from Europe’s carbon market 2008-2019”, June 2021, carbonmarketwatch.org/wp-content/uploads/2021/06/Phantom_leakage_WEB.pdf.

The provision of free allowances has been predicated over a perceived fear of ‘carbon leakage’ i.e. the risk that some polluters might decide to relocate their production outside the EU to escape the carbon price and lower their costs. This eventuality remains unproven, however the detrimental impact of these free pollution permits on national budgets and on emissions reduction is well documented¹⁶.

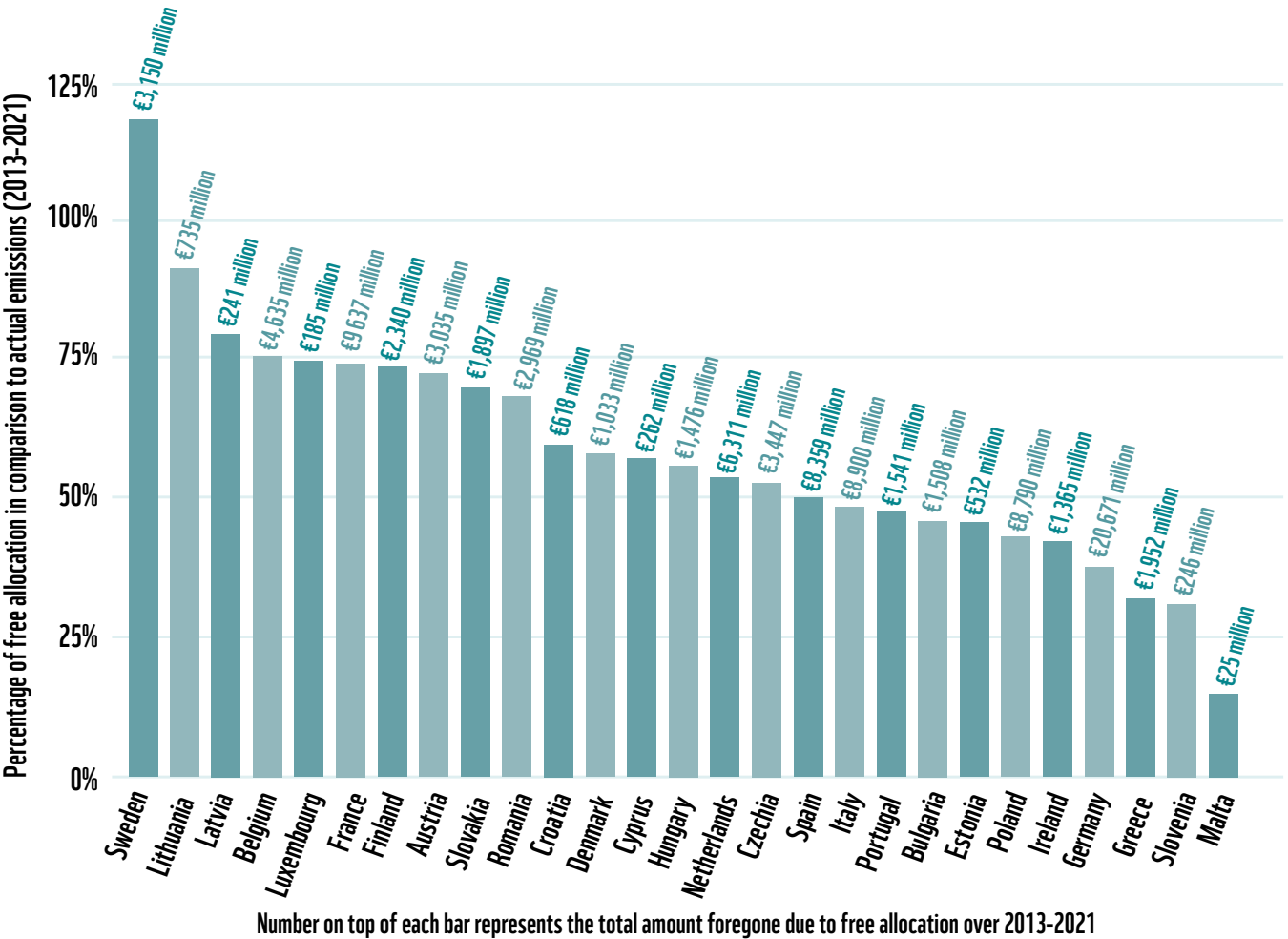
It is also even less likely to materialise now that policy-makers are negotiating the setup of a Carbon Border Adjustment Mechanism (CBAM) from 2023 for sectors covered by free allocation. Once phased-in, the CBAM will result in the ETS price gradually being applied to imports of e.g. cement, iron and steel, aluminium, fertilisers and

electricity, which will render free allocation unjustifiable - the two must not be additional to one another¹⁷.

The volume of free allowances which was given out to industries between 2013 and 2021 is very high, and translated into a significant loss of revenue for EU Member States.

For 17 EU countries, free allocation covered more than half the entire national pollution covered under the ETS between 2013-2021. Over this period, Sweden for example forfeited €3.15 billion in free allocation for industry - which covered the equivalent of 114% of all Sweden’s ETS emissions for this period. Germany’s free allocation covered 36% of all its ETS emissions - with a negative impact of €20.67 billion on its budget.

Figure 6: Member States' total revenue forgone in free allocation as a proportion of their verified emissions covered under the ETS (2013-2021)



16 See for example European Court of Auditors, “The EU’s Emissions Trading System: free allocation of allowances needed better targeting” 2018, p. 10, eca.europa.eu/en/Pages/DocItem.aspx?did=54392.

17 See Joint NGO statement on the Carbon Border Adjustment Mechanism, December 2021, www.eu-awsassets.panda.org/downloads/joint_ngo_statement_on_cbam_proposal_final_dec_2021.pdf.

To weaken the carbon price signal even further, many national governments choose to compensate some of the polluters who paid the carbon price. These “indirect ETS compensation schemes” are allowed under the ETS Directive and EU state aid rules, and they were used by 13 Member States between 2013 and 2020, at a total cost of around €3.3 billion¹⁸. The size of such compensation schemes is set to increase dramatically in the 2021-2030 period as more EU countries receive the European Commission’s green light to use them: **Germany, Spain and Italy have already been allowed to spend €27.5 billion¹⁹, €2.9 billion²⁰ and €1.49 billion²¹ respectively on such industry subsidies.**

Industry compensation schemes could be considered free allocation in disguise. Indeed it seems incongruous to ask polluters to pay a carbon price through the ETS on the one hand while on the other hand offsetting this cost through what is in effect a subsidy scheme.

In some cases, EU countries even fully close the vicious circle by using their ETS revenue, obtained through carbon pricing, to finance these schemes - and then report this spending as ‘climate action’ (as is explained below). These schemes hinder the ability of the ETS to drive emissions reductions in a cost-effective manner, and come on top of the many advantages that industries already benefit from (free allocation, funding under the Modernisation and Innovation Funds, etc.). They should be phased out as soon as possible.

Key take-away for ETS trilogue negotiations

Available data leaves absolutely no doubt that free allowances are extremely expensive and have done little if anything to promote the decarbonisation of eligible sectors. From a social justice perspective they also look increasingly unacceptable, as decision-makers are currently debating the extension of the ETS carbon price to road transport fuel and heating bills but without providing similarly generous free emission permits for everyday citizens.

Free allocation should be ended as soon as possible, but policy-makers have decided that this scheme should survive until *at least* 2030 and may agree to let it continue until *at least* 2032 for sectors which will also be covered by the CBAM (e.g. cement, iron and steel, aluminium, fertilisers, electricity). The end date for all free allocation covered under the ETS will meanwhile be decided in the next revision of the ETS, i.e. during negotiations on the post-2030 ETS (the Commission will submit a report to the European Parliament and Council on this “*within six months of each global stocktake*” (i.e. around May 2024)²².

A more promising angle in ETS trilogue negotiations relates to conditionality. The European Commission has proposed to make some free allowances conditional on the implementation by energy-intensive industries of recommendations contained in energy efficiency audits. These audits are already required under the Energy Efficiency Directive, but industries will need to surrender 25% of their free allowances if they fail to apply the recommendations.

The European Parliament has taken a more progressive stance and proposed to **make all free allowances conditional on the implementation of these energy efficiency recommendations, as well as on the adoption by each industry operator of a decarbonisation plan** that is consistent with the EU’s objective of reaching climate neutrality by 2050 at the latest (see formula n°181 of the 4-column trilogue negotiation document).

Requiring that industry operators make energy efficiency gains and sign up to the climate neutrality objective should be the absolute minimum if they are to receive billions of euros worth of free emission allowances in the coming decade.

18 These Member States are: Belgium, Finland, France, Germany, Greece, Lithuania, Luxembourg, Poland, Romania, Slovakia, The Netherlands, the United Kingdom, and Spain. See Commission evaluation accompanying the impact assessment on Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post 2021, September 2020, p. 16, eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0194&from=EN.

19 See Commission press release “State aid: Commission approves €27.5 billion German scheme to compensate energy-intensive companies for indirect emission costs”, August 2022, ec.europa.eu/commission/presscorner/detail/en/ip_22_4925

20 See Commission state aid approval, “Compensation for indirect ETS costs in Spain for 2021-2030”, March 2022, ec.europa.eu/competition/state_aid/cases/1/202214/SA_100004_F092E07F-0000-C781-A5C0-FA13438AD16C_51_1.pdf.

21 See Commission state aid approval, “Compensation for indirect ETS costs in Italy, July 2021”, ec.europa.eu/competition/state_aid/cases/1/202135/291177_2310452_103_2.pdf

22 See Article 45 of the EU ETS Directive.

3. MEMBER STATE SPENDING OF ETS REVENUES

The previous sections have shown that ETS revenues provide significant financial resources to EU countries, but that this could be more than doubled if free allowances were auctioned instead. Since the purpose of the ETS is to reduce emissions, it is only logical that the revenue generated by the carbon price be spent on climate action projects. This is particularly important given that the ‘stick’ provided by the carbon price is not necessarily sufficient on its own to drive all the required upfront investment in clean energy and energy efficiency processes or related R&D, and that the ‘carrot’ of public spending is needed too. It is also likely that the more ETS revenues are spent on genuine climate action, the more justified and socially acceptable any carbon price will be. And of course the more easily citizens and industries will be able to reduce their dependence on fossil fuels.

But the rules are far too weak in this regard and only *invite* governments to spend at least half of their ETS revenue on climate action. The result has been that large amounts of funding derived from the ETS and that could have been available for climate action has not materialised. According to Member State reports, only 71.9% of ETS revenue collected between 2013-2021 was spent on climate action, meaning that (at least) the remaining 28.1% - €25 billion - was not.

Even though the total amount of ETS revenue has increased across the years, the proportion of revenue that EU countries

have decided to spend on climate action has not, and a decreasing trend can even be observed, with a peak at 85% in 2015 and a low at 60% in 2018. But these figures must be viewed with caution for two reasons. Firstly, **the quality of Member States’ annual reports is extremely poor and the data they provide is not robust.** For example, many Member States often report that they spent more ETS revenue on climate action than the total revenue they have received. For the purposes of this analysis the total amounts reportedly spent on climate action have therefore been capped at a maximum of 100% of ETS revenues.

Figure 7: Share of ETS revenue reported as spent on climate action by EU Member States (2013-2021)

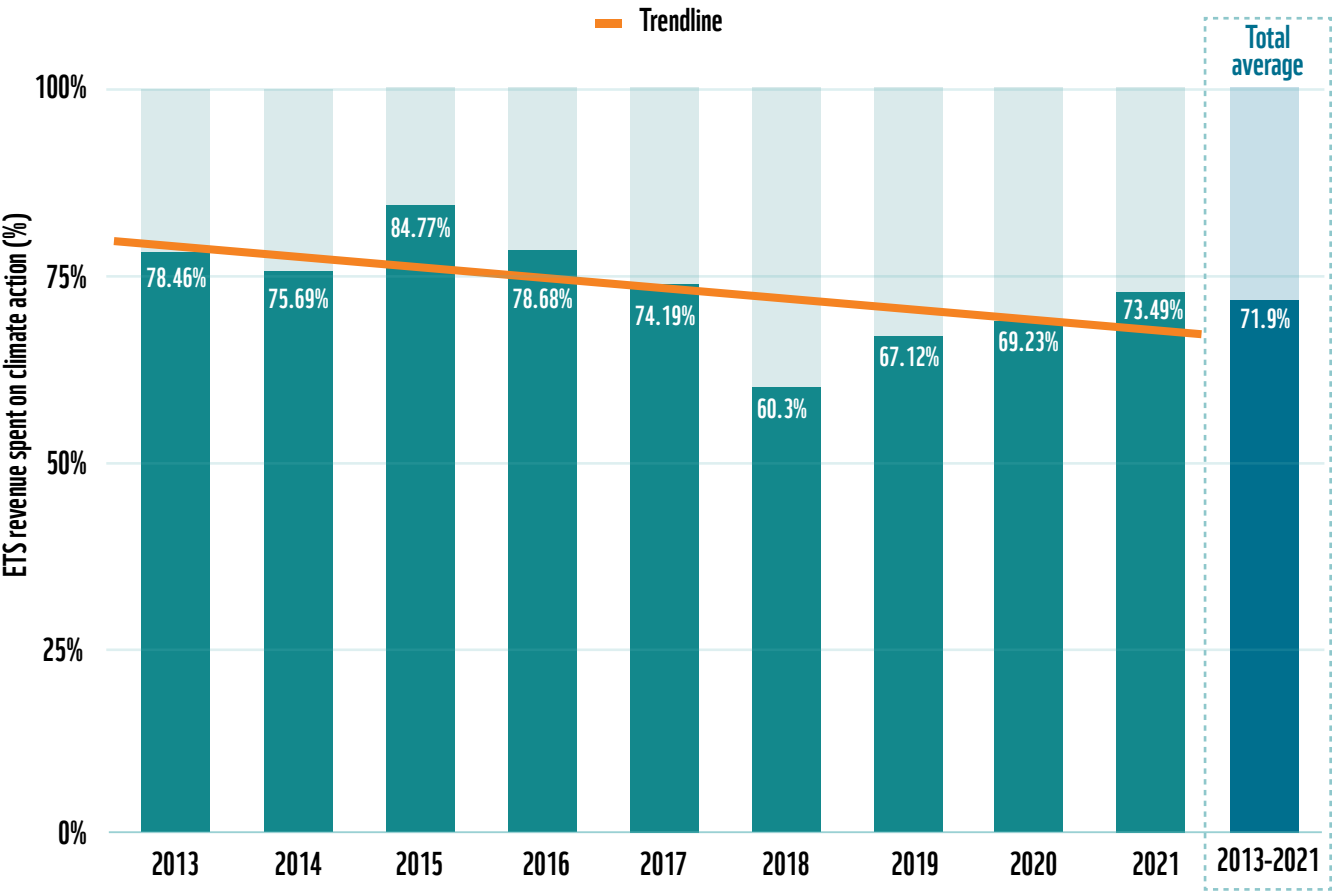


Figure 8: 14 EU countries are not following the ETS Directive recommendation to spend at least 50% of their yearly ETS revenue on climate action

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Italy	✓	47%	44%	29%	✓	10%	12%	37%	19%
Austria	✓	✓	✓	0%	0%	0%	0%	0%	0%
Belgium	0%	0%	0%	35%	✓	✓	✓	47%	33%
Estonia	✓	49%	50%	✓	40%	38%	45%	✓	✓
Hungary	✓	23%	39%	29%	✓	29%	32%	✓	✓
Latvia	✓	✓	✓	✓	25%	30%	27%	14%	9%
Slovakia	✓	✓	✓	✓	47%	24%	18%	11%	18%
Croatia	✓	0%	✓	✓	✓	14%	18%	✓	39%
Romania	✓	✓	✓	✓	0%	22%	6%	21%	✓
Czechia	✓	48%	✓	✓	✓	✓	✓	49%	49%
Cyprus	✓	✓	✓	✓	12%	25%	✓	✓	✓
Finland	3%	49%	✓	✓	✓	✓	✓	✓	✓
Netherlands	✓	✓	✓	✓	✓	✓	✓	0%	0%
Malta	✓	✓	✓	✓	✓	31%	✓	✓	✓

The European Commission has not so far seemed willing to call on Member States to correct these inaccuracies, and has even used the inaccurate data in question in various reports. For example, the Commission’s latest Climate Action Progress Report indicates that EU countries spent on average in 2021 76% of their ETS revenue on climate action²³, which this analysis finds to be an inflated figure.

Secondly, there is no apparent scrutiny of the projects that Member States decide constitute ‘climate action’ spending, and this has led to misleading reporting. For example, France reports over €1 billion in 2021 as ‘climate action spending’ when this amount was simply transferred

to the French general budget. In section 4 below, WWF identifies a number of projects which, despite being financed by ETS revenues and attributed to climate action, are likely unhelpful or even counterproductive to the transition to climate neutrality. If the ‘climate action’ label is removed from these projects, then the total share of ETS revenues spent by EU countries on climate action in 2013-2021 falls from 71.9% to 57.8%.

Even with the benefit of these weak reporting requirements, our analysis finds that over half the Member States did not follow the ETS Directive’s recommendation that they spend at least half their yearly revenue on climate action.

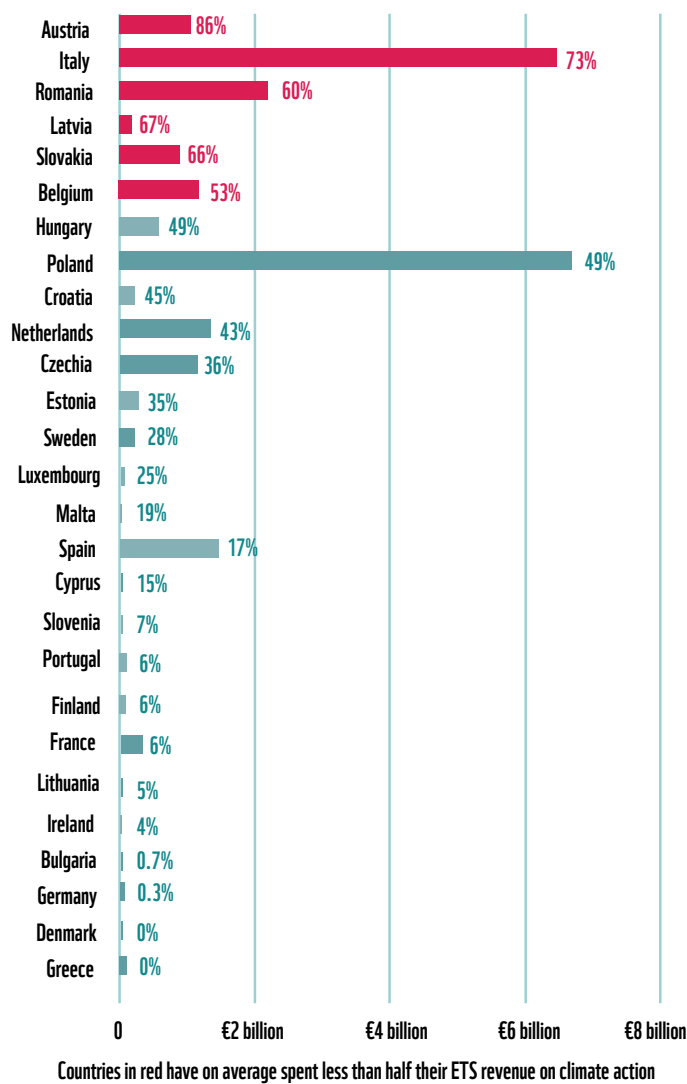
23 European Commission, EU Climate Action Progress Report 2022, 26 October 2022, p. 9, climate.ec.europa.eu/system/files/2022-10/com_2022_514_en.pdf.

During the year 2021 alone, Latvia, Slovakia and Italy, spent less than 20% of their ETS revenue on climate action, while Austria and The Netherlands spent zero. These two countries explain in their reporting that they are simply unable to report properly on how they have spent their ETS revenues due to their national budgetary principles: they cannot earmark ETS revenue and therefore cannot track these revenues in their national budget. If accepted then this justification makes any rule on spending ETS revenue on climate action unenforceable and largely meaningless. Finally, it is interesting to note that Poland does not appear at all in this table even though it has spent less than 51% in six out of the 9 years studied (and never more than 57%).

Figure 9 on the right provides an overview of how all Member States have performed when it comes to spending ETS revenues on climate action.

Poland is the Member State that has the most revenue not spent on climate action (over €6.5 billion), closely followed by Italy. Denmark and Greece appear as best-in-class with virtually all ETS revenues spent on climate action. Unfortunately, this performance must be balanced by a closer analysis: Greece regularly spends ETS revenue on industry cost compensation (e.g. 11% of its ETS revenue for 2021, or 16% for 2022) and considers this to be ‘climate action’ spending. Denmark (like several other countries) does not earmark ETS revenues in their general budget and chooses to report instead on ‘the equivalent in financial value of these revenues’. This practice is allowed under the current ETS Directive and allows governments to argue that they have spent their ETS revenues very effectively - as long as they pick corresponding amounts from their general budget - bringing essentially no information on the additionality in climate terms if any of ETS revenues.

Figure 9: Share of ETS revenue that Member States have NOT spent on climate action (2013-2021)



Key take-away for ETS dialogue negotiations

As Member States’ ETS revenue increases substantially, it is crucial to ensure that they spend it entirely for the benefit of climate action. If well targeted, ETS revenues can also help to address any possible social impacts flowing from higher carbon prices and demonstrate that carbon pricing provides the resources to help vulnerable citizens benefit from the transition to a low carbon economy.

Both the European Commission and Parliament have proposed that all ETS revenues “shall” be spent on climate action; and to remove the loophole allowing governments to report not on how they have spent their ETS revenue per se but instead on items in their national budget.

However EU governments in the Council are resisting this change, seemingly choosing opacity over transparency and insisting on maintaining - at best - weak spending rules.

Trilogue negotiators should reject this approach and follow the Commission and Parliament’s stance in formula n°173 of the 4-column trilogue negotiation document, which reads as follows:

Article 10(3) of the ETS Directive: “Member States shall use their revenues generated from the auctioning of allowances referred to in paragraph 2, with the exception of the revenues used for the compensation of indirect carbon costs referred to in Article 10a(6), or the equivalent in financial value of these revenues, for one or more of the following:”.

It should be noted that Member State governments seem to want to make the same mistake when it comes to ETS road transport and buildings (ETS2) revenue. While the Parliament has called for all ETS2 revenue to be transferred into the new Social Climate Fund, the Council is seeking to cap the budget of that fund and remove any strict obligation to use ETS2 revenues in a certain way.

4. QUALITY SPENDING: DEFINING ‘CLIMATE ACTION’ UNDER THE ETS

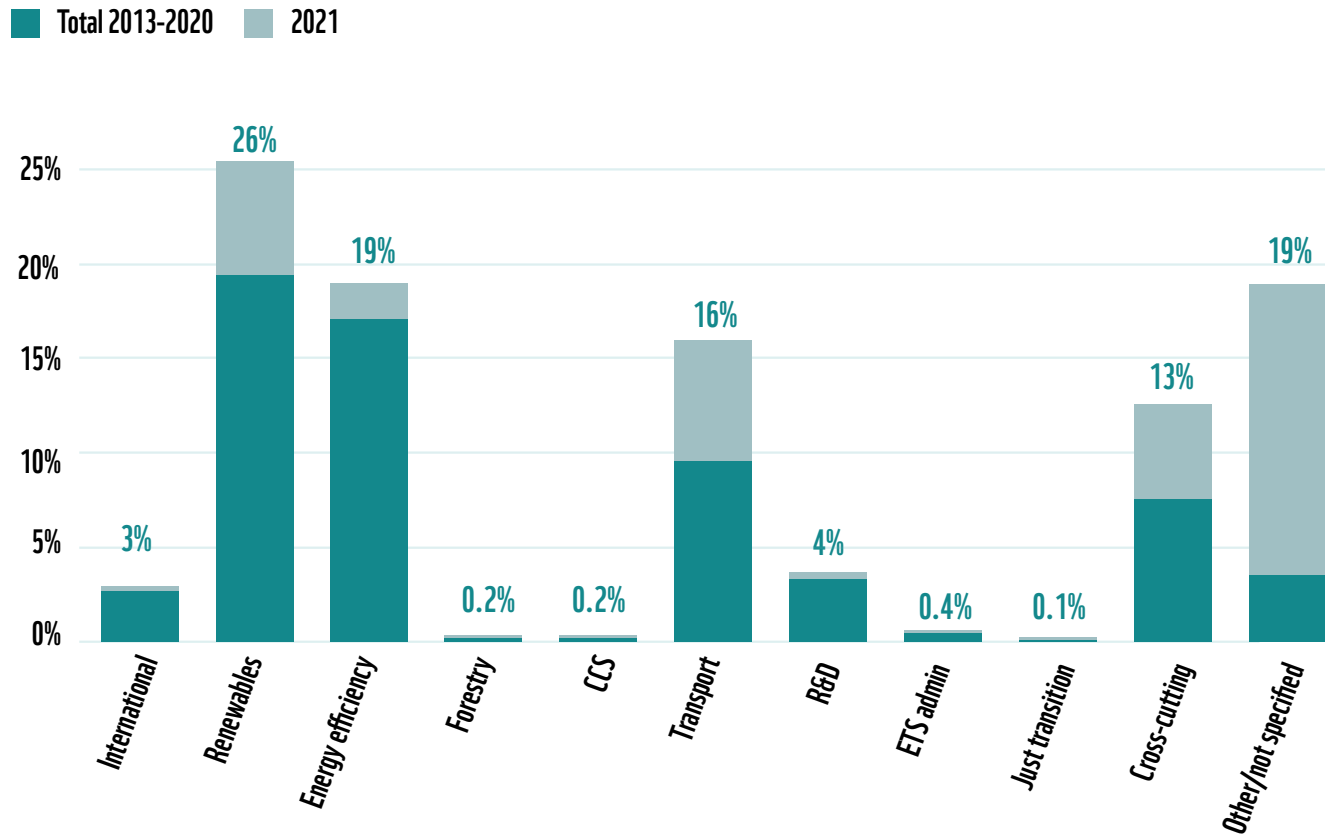
EU ETS revenues must be spent on climate action, but it must also be ensured that what is called ‘climate action’ spending actually contributes rapidly to reducing greenhouse gas emissions in line with keeping global temperature rise to 1.5°C. The current ETS Directive contains a list of ‘climate action’ spending categories under which Member States can classify their use of ETS revenues. However EU countries have no obligation to stick to the list, and they can report spending on other things. In fact, EU countries enjoy complete freedom in deciding which projects qualify for the ‘climate action’ spending label.

Of all spending categories recognised under Article 10(3) of the ETS Directive, renewable energy, energy efficiency and transport have by far attracted most of Member States’ investment. There was also a massive increase in 2021 of ETS revenue spent in the transport sector, with Austria, Cyprus, Germany, Ireland, Poland and Sweden dedicating a significant proportion of their revenue to this sector. By contrast, very little has been spent over previous years on international climate action. Worryingly, **nearly 20% of ETS revenue was spent on projects which lie outside the scope of the listed categories and would fall under the ‘other/not specified’ heading (e.g. on nuclear energy, carbon price compensation, or**

transfers into general state budgets). For many of these projects, it is highly disputable whether they should even be considered ‘climate action’ spending - but lax rules have allowed Member States to take advantage of this label.

It is striking that Member States spent so little of their ETS revenue on the **just transition** - or as the ETS Directive calls it, the ‘promotion of skill formation and reallocation of labour in order to contribute to a just transition to a low carbon economy’. In fact, only 2 Member States used this spending category: Greece spent €50.73 million on the “transition to a low carbon economy in regions most affected by decarbonisation” and Slovenia spent €1.65

Figure 10: Share of ETS revenue spent on individual climate activities (2013-2021)



Spending categories correspond to those mentioned in article 10(3) of the EU ETS directive

million on “*promoting green jobs*”; in both cases only in 2020 and 2021. Germany also spent €0.24 million in 2017 on the promotion of “*structural adjustment measures in lignite regions*”, but reported it under the ‘other uses’ category. In reality, it has proven nearly impossible to isolate ‘just transition’-specific projects, in the reporting, given that most of them would be reported on under the ‘cross-cutting’ or ‘energy efficiency’ heading (especially for energy efficiency projects which under the ETS Directive also aim to “*provide financial support in order to address social aspects in lower- and middle-income households*”).

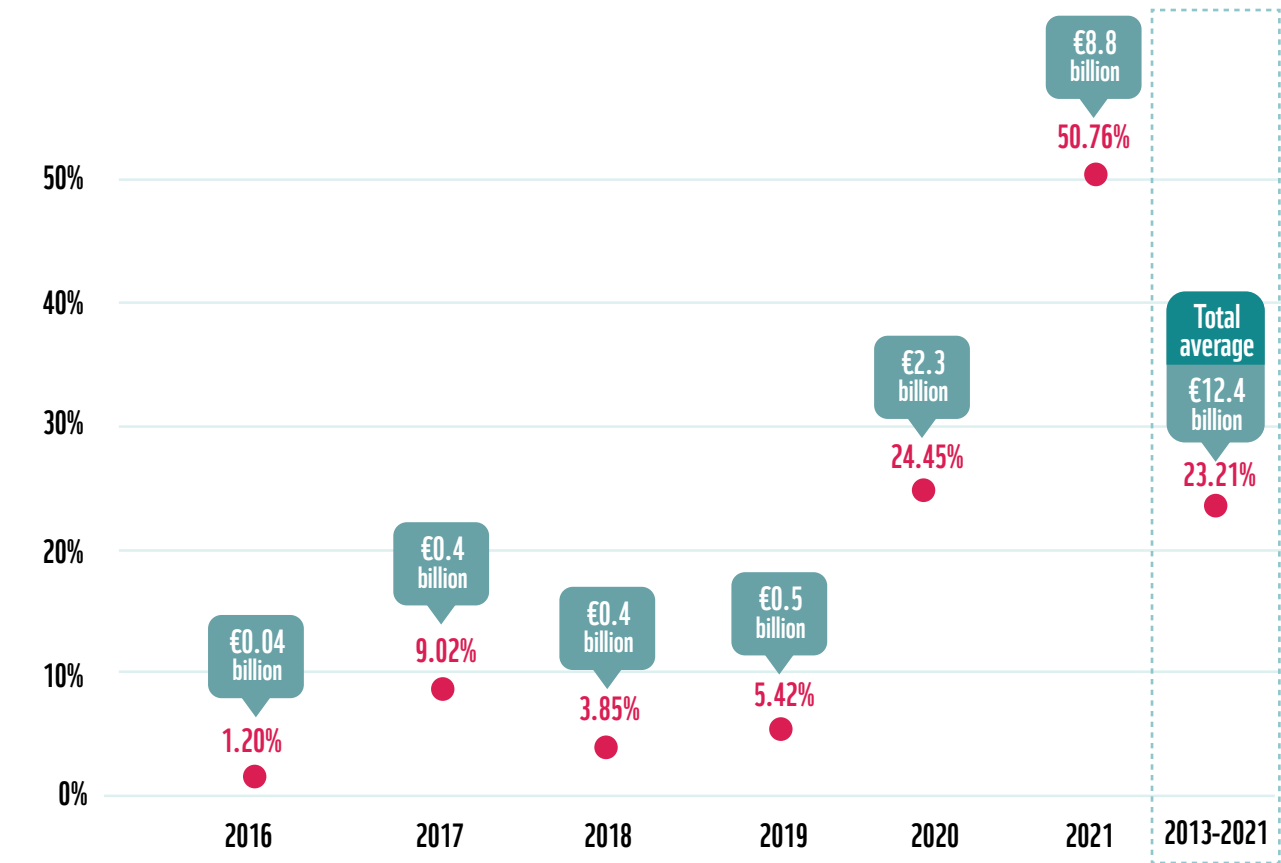
Unfortunately, the data provided by Member States is far from clear, and the percentages should only be taken as an indication of major trends. Indeed, many Member States have reported spending in excess of their total ETS revenue available (in 2021 alone, this was the case for Austria, Germany, Lithuania, Malta, and Romania). In addition, many of the projects listed in Member States’ reporting appear to have been reported under the wrong category, and we have taken the liberty of correcting (many) such apparent mistakes in carrying out the data analysis for this report.

The data analysis has also looked beyond the general spending categories and analysed the list of specific projects funded under ETS revenues. It finds that

lax rules have allowed Member States to classify as ‘spending on climate action’ projects which, at least based on the minimal descriptions provided, seem likely unhelpful or even counterproductive to the transition to climate neutrality. ‘Energy efficiency’ for example has been interpreted as allowing for the modernisation of coal infrastructure, or coal-to-gas switching; ‘renewable energy’ has included investment in high carbon bioenergy, and the ‘transport’ category has been used to describe subsidies for diesel or LNG vehicles. None of these investments are likely to be compatible with limiting the global temperature increase to 1.5°C or achieving climate neutrality in a cost-effective or just and fair manner.

Based on the data, roughly 23% of all ETS revenues which Member States claim they spent on climate action (and which together account for 71.7% of ETS revenues over the period) were in fact spent on things which could potentially be unhelpful or even counterproductive in climate terms. **For example, between 2016-2021, more than one in five euros (and one in two euros in 2021) of all ETS revenues attributed to climate action in fact financed projects such as compensation for the ETS carbon price, modernisation of coal infrastructure, switching from coal to gas, fossil-based heating, diesel cars, high carbon bioenergy, or new nuclear power.**

Figure 11: Share of ETS revenue spent on so-called ‘climate action’ projects which are in reality likely unhelpful or counterproductive to the transition to climate neutrality (2016-2021)



Given the poor and limited description of national projects funded by ETS revenues in Member States’ national reports, the data displayed in Figure 11 is likely conservative - many other projects have been discarded from the count due to a shortage of information. Those that have been counted can be grouped in several categories:

- **Industry subsidy to offset the carbon price of electricity (€7.8 billion):** Belgium, Germany, Greece, Slovakia, Italy, Poland and Romania have all used ETS revenues to reimburse companies for the carbon price that they paid. Indeed Germany reported spending €11.6 billion on such a scheme in 2021 - more than twice its ETS revenue for that year²⁴.
- **Coal projects (€1.4 billion):** In 2021, Germany spent €381 million of ETS revenue on compensation for coal-fired power plant operators. Poland’s Clean Air programme (€1 billion) was used to modernise coal heating systems, arguably thereby locking populations into polluting fossil energy, possibly for decades to come.
- **Gas projects (€665 million):** Germany, Lithuania, Sweden and Belgium subsidised non-battery electric (and by implication potentially fossil-fuelled) car programmes. Czechia, Hungary, Poland, and Croatia financed the modernisation of (fossil) gas boilers and heating systems. Belgium, Hungary and Romania supported compressed natural (fossil) gas projects.
- **Biomass / bioenergy (€612 million):** 9 EU countries (Austria, Estonia, Croatia, Finland, Italy, Latvia, Lithuania, Poland, Germany) spent ETS revenues on biomass projects that are highly questionable, either because they rely on high carbon sources of bioenergy or because they do not provide any information on the feedstock used.

- **Carbon Capture and Storage projects (€394 million):** CCS is currently recognised as a spending category under the ETS directive and some fossil CCS projects might be deemed acceptable, at least as a transitional approach, in the case of heavy industry such as cement or steel. But in this case, Belgium, Germany and the UK (before Brexit) failed to explain which sectors these projects were for. Furthermore, CCS projects are already financed by the Modernisation Fund, the Innovation Fund, and free allocation and they should not suck precious ETS revenues.
- **Other projects with no clear climate benefit:** France transferred €1.4 billion of ETS revenues to its national budget and reported this as ‘climate action’ spending. Poland spent €191 million of ETS revenues in 2021 on new nuclear power, which leaves aside security, safety and environmental considerations and is unlikely to be a cost-effective approach to cutting emissions over the timescale available to stop runaway climate change.

Industry compensation represents by far the most extensive use of ETS revenues for purposes that can be considered counterproductive in climate terms. Such spending directly contradicts the objective of the ETS as it subsidises polluters who pay the carbon price and therefore cancels out any incentive to invest in decarbonisation. **At the very least, and however justified on other grounds, counting such forms of industry compensation as ‘climate action’ spending is completely misleading, and should not be allowed to continue.**

Key take-away for ETS trilogue negotiations

EU Member States should retain the freedom to spend ETS revenues on the ‘climate action’ projects they consider most appropriate to their national circumstances, and to count them as such, *as long as* these projects clearly contribute to rapid emissions cuts this decade, in line with the 1.5°C goal. To this end, it is essential that the rules on what constitutes climate action spending be tightened, notably by defining which activities cannot qualify. Had this been done since 2013, we estimate that an additional €12.4 billion could have been spent on genuine climate action.

The European Parliament has included in its negotiation mandate (formula n°175l of the 4-column trilogue negotiation document) an amendment which goes a long way towards solving this issue in the ETS Directive:

New Article 10(3)b of the ETS Directive: “Member States shall use the revenues generated from auctioning of allowances, and not used as own resources, referred to paragraph 2 of this Article, in accordance with:

- (a) the ‘do no significant harm’ criteria as set out in Article 17 of Regulation (EU) 2020/852;*
- (b) minimum safeguards as set out in Article 18 of Regulation (EU) 2020/852;*
- (c) the Member State’s integrated national and energy climate plan submitted in accordance with Regulation (EU) 2018/1999 and, if relevant, the territorial just transition plan prepared in accordance with Article 11 of Regulation (EU) 2021/1056 of the European Parliament and of the Council”.*

24 On this basis we capped the amount to match the total available revenue.

5. NATIONAL REPORTING ON ETS REVENUE USE: ACCOUNTABILITY AND TRANSPARENCY

Reporting by Member States on how they have spent their ETS revenues is overwhelmingly of poor quality and falls far short of the standards that could be expected. This has been a recurring issue since WWF began looking into the subject of ETS revenues in 2016 and no significant progress has been made since then. Poor quality reporting is likely due to weak legal obligations on Member States and an apparent reluctance on the part of the European Environment Agency (which hosts the data on an online platform) or the European Commission (which publishes reports on the data collected) to check the quality of the data provided.

Either way, Member States have so far got away with submitting incomplete or inconsistent data on their use of ETS revenues, which makes public scrutiny of their spending in this area difficult. Examples of general problems with reporting, taking the year 2021 as an example, include the following:

- **The financial information submitted is inconsistent throughout the report.** For example Germany reported that it received €5.3 billion in ETS revenues but that it spent €21 billion of it on climate action. Inconsistencies between the total ETS revenue available and the share spent on climate action, or between the break-down and the total revenue that was spent on climate action projects were also found in reports from Austria, Bulgaria, Lithuania, Malta, Poland, Romania and Slovenia.
- **Boxes and even entire sheets in the excel reporting template are left empty.** For example, The Netherlands only filled in two out of ten reporting sheets for 2021. This is not an isolated case.
- **Descriptions of projects funded through ETS revenues are limited to a sentence or two, and sometimes do not allow any assessment of how the money was spent, or whether it was spent on genuine climate action.** For example, France reported over €1 billion euros of ETS revenues as having been spent on ‘climate action’ but provides no justification or project description beyond the mention that the revenue went to France’s general budget.
- In many cases, **the reported spending category is ambiguous, and does not necessarily match the description of activities.** For example, Croatia reported an activity entitled “energy renovation of buildings” in the ‘renewable energy’ category, when

it may or may not have been better classified as ‘energy efficiency’. Hungary meanwhile classified the “implementation of the Green Bus Program” as ‘other uses’ instead of ‘transport’. A lack of guidance as to how Member States should classify spending makes it difficult to assess reliably in which spending categories ETS revenue is spent.

- **Many EU countries (e.g. Denmark, Luxembourg, The Netherlands) do not earmark ETS revenues and report only equivalent financial values extracted from general government spending. In these cases (even more than otherwise) it is therefore very hard to judge whether spending using ETS revenues would have been additional to what would have happened otherwise.**

On this last point, the lack of earmarking in many Member States has taken away most of the utility of ETS revenue reporting. Indeed one could question the entire relevance of national reporting over how ETS revenues are spent if Member States instead report on spending which is ‘equivalent in financial value’. One interesting area for future analysis in this context would be to analyse how much EU countries have spent on climate action across their national budget, and compare it with ETS revenue spending over time.

As a result of these and other deficiencies in the data, this attempt at shedding light on how Member States have used ETS revenues to date cannot be fully comprehensive or exhaustive. The analysis necessarily involves approximations and to some extent subjective decisions in order to resolve inconsistencies or accommodate lack of detail and so make sense of the data available. As a result, the picture provided in this report of how EU countries have spent their ETS revenue may not correspond fully with the reality - but it will be impossible to make more accurate assessments on this topic while the quality of the reporting remains as it is.

Key take-away for ETS trilogue negotiations

Member States are legally required to produce by 31 July of each year²⁵ a report containing “*information on the use of revenues generated*” under the EU ETS during the previous year²⁶. But they have no obligation to ensure that their report is accurate and WWF’s analysis of the data shows that this has largely not been the case in the last 9 years.

This must be remedied. It should be clear to EU citizens how ETS revenues contribute to climate action and the extent to which they contribute to specific decarbonisation programmes (with a mention of the specific technology supported, or in the case of bioenergy the specific feedstocks). The European Parliament has proposed to significantly tighten the rules around reporting and transparency as follows, in an amendment (formula n°1751 of the 4-column trilogue negotiation document) that should be part of the final deal between negotiators:

New Article 10(3)a of the ETS Directive: “(...) Member States shall submit full, quality and consistent information. In particular, they shall define in their reports the meaning of ‘committed’ and ‘disbursed’ amounts, and submit rigorous financial information. If necessary to ensure compliance with those reporting obligations, Member States shall earmark revenues in their national budgets.

Member States shall ensure that EU ETS revenues are spent in a manner consistent with the obligations laid down in paragraph 3 and maintain their traceability, and ensure that they are additional to national climate spending. The Commission shall take all necessary measures to ensure that Member States respect their reporting obligations under this paragraph”.



²⁵ Over the past years, the deadline has not always been met, and we had to specifically address requests for compliance concerning reports from Bulgaria, Italy and Slovenia several months past the deadline.

²⁶ Article 19(2) of the Governance Regulation, *op. cit.* See also Art. 5 and Annex II of the Commission Implementing Regulation (EU) 2020/1208 of 7 August 2020 on structure, format, submission processes and review of information reported by Member States, eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32020R1208.

6. ENSURING THE MODERNISATION FUND IS COMPATIBLE WITH CLIMATE NEUTRALITY

Under the ETS Directive, 2% of ETS allowances are transferred into the Modernisation Fund and can be spent by the 10 lowest-income EU countries on projects which include renewable energy (including energy communities, energy efficiency and building insulation, energy storage, energy distribution networks, or just transition in carbon-intensive industry dependent regions).

As part of the revision of the ETS Directive, the European Commission has proposed to extend access to the Fund to Greece and Portugal, and to increase its size to an additional 2.5% of ETS allowances between 2024 and 2030. The Commission also argued that “the scope of the Modernisation

Fund should be aligned with the most recent climate objectives of the Union”²⁷, namely the targets of reaching at least -55% net emissions by 2030 and climate-neutrality by 2050 at the latest.

A key consideration in this context is not just the direction of travel, but the destination. Assuming the current ETS price of €70/tonne over the 2021-2030 period, the beneficiary countries can be expected to receive as much as €60 billion. It is therefore reasonable to ensure that this amount will be spent in line with the collective achievement of EU climate goals - notably the transition to climate neutrality by 2050.

Figure 12: Estimated revenue (2021-2030) for beneficiaries to the Modernisation Fund

Beneficiary Member State	Sum of allowances 2021-2030 (million) European Parliament v Council		Estimated revenue with an average ETS price of €70/tonne		Has a national climate-neutrality target
	EP	Council	EP	Council	
Bulgaria	27.4	27.4	€1.92 billion	€1.92 billion	No
Czech Republic	222.6	222.5	€15.58 billion	€15.58 billion	No
Estonia	12.7	12.6	€0.89 billion	€0.88 billion	No
Greece	19.7	19.5	€1.38 billion	€1.37 billion	Yes
Croatia	20	20.1	€1.40 billion	€1.41 billion	No
Latvia	6.5	6.4	€0.46 billion	€0.45 billion	Yes
Lithuania	20.2	20.3	€1.41 billion	€1.42 billion	No
Hungary	31.1	31.1	€2.32 billion	€2.32 billion	Yes
Poland	199.5	199.7	€13.97 billion	€13.98 billion	No
Portugal	16.8	16.6	€1.18 billion	€1.16 billion	Yes
Romania	223.4	223.4	€15.64 billion	€15.64 billion	No
Slovakia	63.2	63.2	€4.42 billion	€4.42 billion	No
Slovenia	0	3.9	€0	€0.27 billion	Yes
TOTAL	865	869	€60.56 billion	€60.81 billion	

* Numbers based on modelling by Climact of the European Parliament and Council positions, January 2022²⁸.



Yet at the moment, **the Commission’s and the Council’s proposals would allow at least part of the Modernisation Fund to be spent on fossil gas projects.** And in fact since the Modernisation Fund started operating in 2021, several beneficiary countries (Poland, Slovakia, Czechia, Romania) have already received €700 million for gas infrastructure investment. For example, Romania will use the Modernisation Fund to finance two brand-new gas-based power plants in Turceni and Islanita while Czechia will finance coal-to-gas switching in power and

heat production. In fact, total disbursement for successful gas infrastructure projects may reach €2.2 billion.

Besides, it is **far from clear that support under the Modernisation Fund will be effective in driving beneficiary Member States towards climate neutrality** given that only 5 out of 13 have adopted a national climate neutrality target. The European Parliament is fully justified therefore in calling for all Member State beneficiaries of the Modernisation fund to have adopted a climate neutrality target at national level.

Key take-away for ETS trilogue negotiations

In order to properly align the Modernisation Fund with climate action and the EU’s climate targets, gas infrastructure must be excluded from the list of eligible projects. The European Parliament has included this proposal in its negotiating position (formula n°225 of the 4-column trilogue negotiation document):

Article 10d(1) of the ETS Directive: “No support from the Modernisation Fund shall be provided to energy-related activities that use fossil fuels”.

In addition, beneficiary Member States should adopt a national, legally-binding target for achieving climate neutrality by 2050 at the latest. 14 EU countries have already done so²⁹ and the European Parliament has rightly advocated this requirement in its negotiating position (formula n°224a of the 4-column trilogue negotiation document):

Article 10d(1) of the ETS Directive: “Support from the Modernisation Fund shall only be granted to Member States that have adopted legally binding targets for achieving climate neutrality by 2050 at the latest (...)”.

27 European Commission, proposal for a Directive amending Directive 2008/87/EC, op. cit., recital 28.
28 See Climact, “Is the EU ETS proposal fit for 55%?”, January 2022, climact.com/en/ets-reforms-assessment-of-the-council-and-european-parliament-positions/.

29 See the WWF map, “To reach EU climate neutrality each country must do its bit”, October 2022, www.wwf.org.uk/what-we-do/our-campaigns/eu-climate-neutrality.

CONCLUSION

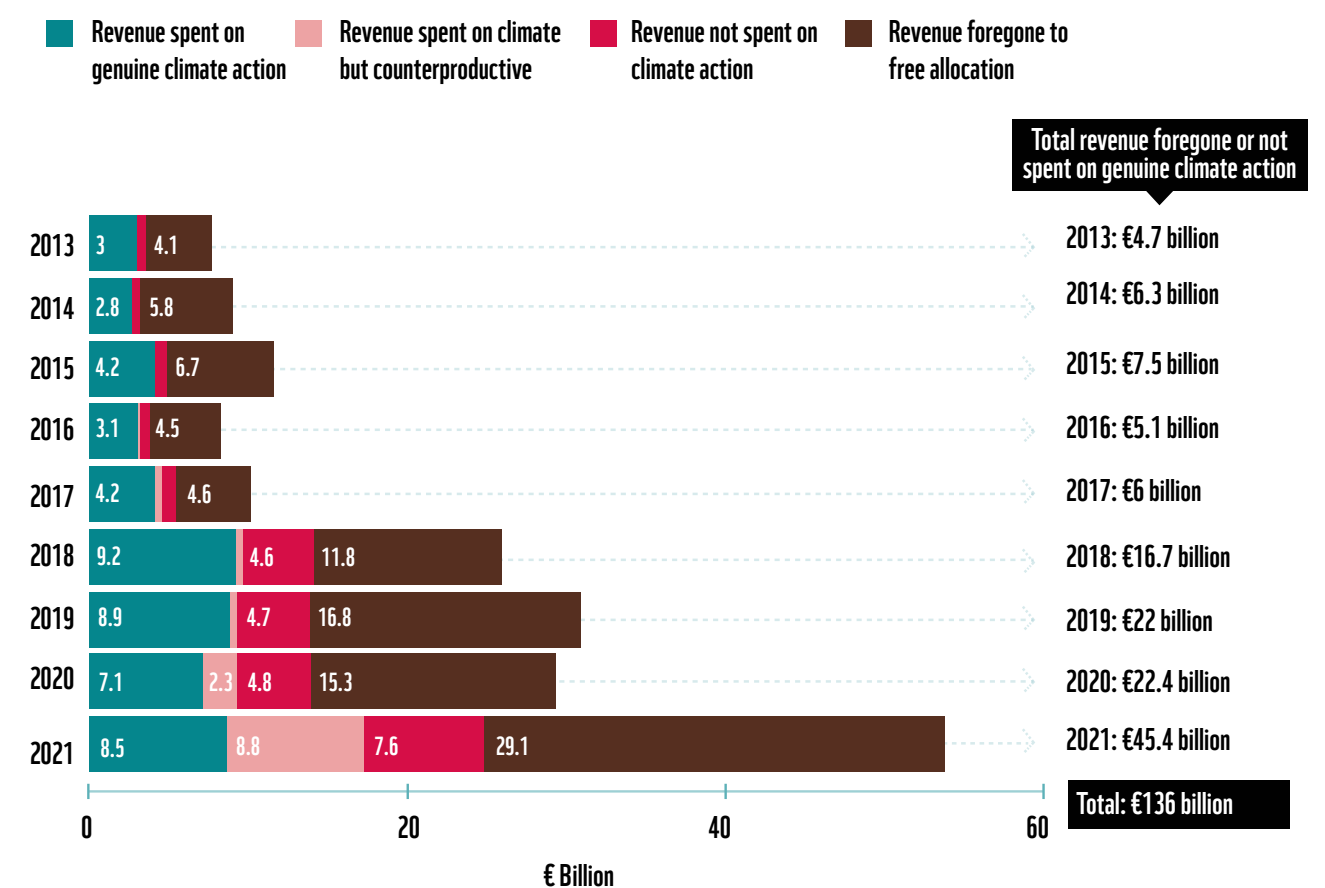
The EU ETS has proven capable of driving reductions in greenhouse gas emissions, in line with the objectives set by the Directive, at least in the power sector. But it has done so insufficiently rapidly, without improving the competitive position of EU industry and in a way that looks increasingly unfair from an economy-wide perspective:

- A majority of the emissions covered by the ETS between 2013 and 2021 were in fact not subject to the ETS carbon price. The energy intensive industry and aviation sectors have benefited to a huge extent from free emission allowances, in direct contradiction to the polluter pays principle and with no long term benefit. Such free allowances have been worth more than the total revenue received by EU countries.
- Not all the ETS revenue that EU countries have collected has been invested in climate action. Indeed even some of the revenue that Member States have ostensibly spent on climate action has in fact been devoted to projects likely unhelpful or even counterproductive to a rapid transition to climate neutrality, including coal and gas-related infrastructure.
- Member States continue to undermine the effectiveness of the EU's carbon market by reimbursing companies for the ETS price through industry compensation schemes. This subsidy for industries comes on top of free allocation and of funding available under the Modernisation and Innovation Funds.
- Member States have consistently failed to provide transparent and accurate reports detailing how they spend ETS revenues. The available data is of poor quality and yet is routinely published and relied on in reports produced by the European Commission and the European Environment Agency.

Ongoing trilogue negotiations are likely to agree to significantly increase the emissions reduction target under the ETS. It is therefore even more crucial to apply the polluter pays principle effectively and ensure that all revenues are spent on genuine climate action. **Between 2013 and 2021, EU countries spent roughly €51 billion of ETS revenues on activities that can be considered broadly in line with a cost-effective trajectory to a climate-neutral EU; but €136 billion more could have been mobilised** had the money not been forfeited to industry with no strings attached, had stricter spending and reporting rules been enacted and had more sensible investment decisions been made.

After more than a decade of relative impotence, the carbon price under the ETS is finally starting to bite, and so fulfil its role in shifting investment. It is now high time that EU policy makers took the next logical step - namely to ensure that ETS revenue is used to invest in the low carbon technologies that will form the backbone of the future global economy.

Figure 13: Overview of ETS revenue and revenue forgone to free allocation (2013-2021)





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WWF'S MISSION IS TO STOP THE DEGRADATION OF THE PLANET'S NATURAL ENVIRONMENT AND TO BUILD A FUTURE IN WHICH HUMANS LIVE IN HARMONY WITH NATURE

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