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# The study on the EU ETS revenue use for social justice and climate neutrality in the context of Social Climate Fund and ETS2

REPORT

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# Table of contents

## Glossary

**Brennstoffemissionshandelsgesetz (BEHG) –** national carbon pricing scheme in Germany, which applies to heating and transport sectors.

**Bundesförderung für effiziente Gebäude (BEG) –** German funding programme for financing building renovations in both residential and non-residential sectors.

**Bundesministerium für Wirtschaft und Energie (BMWE)** – German Federal Ministry for Economic Affairs and Energy.

**Bundesverband Nachhaltige Wirtschaft (BNW)** – German Association for Sustainable Business.

**EU Allowances (EUA) –** tradeable permits in the EU ETS, which need to be purchased by relevant entities to emit greenhouse gases; one EU Allowance gives right to emit one tonne of $CO_2$ equivalent.

**European Energy Exchange (EEX)** – electricity and related commodities exchange, which holds regular auctions of EU allowances (EUAs) on the spot market.

**European Environment Agency (EEA)** – an agency of the European Union which provides independent information on the issues related to natural environment, climate policy, biodiversity conservation and other environmental goals.

**European Union Emissions Trading System (EU ETS)** – the EU's flagship carbon pricing scheme, launched in 2005, which covers emissions from the electricity and heat generation, industrial manufacturing and aviation sectors.

**European Union Emissions Trading System 2 (ETS2)** – the EU's planned second carbon pricing scheme, which is to be implemented after 2027, which will cover emissions from the heating and transport sectors, as well as small industrial installations.

**Fondo de Carbono (FES-$CO_2$)** – Carbon Fund for a Sustainable Economy, climate finance instrument in Spain, designed to incentivise private sector investment in clean technologies.

**Gestore dei Servizi Energetici (GSE)** – Energy Services Manager, Italian state-owned company, which is responsible for the promotion and development of renewable energy sources and energy efficiency.

**Green budgeting** – a fiscal instrument for managing national budgets, present in several EU countries, based on the qualification of public expenditures as environmentally (un)friendly.

**Greenhouse gas emissions (GHG emissions)** – emissions of gases that contribute to climate change, such as carbon dioxide, methane, nitrous oxide or fluorinated gases.

**L'agence national d'habitat (ANAH)** – public housing agency in France responsible for managing MaPrimeRenov' program, the biggest single target of EU ETS funding.

**Klima- und Transformationsfonds (KTF)** – extra-budgetary fund in Germany, financing the measures that serve to achieve the national climate protection targets.

**Najwyższa Izba Kontroli (NIK)** – Supreme Audit Office, independent state audit body whose mission is to safeguard public spending in Poland.

**Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej (NFOŚiGW)** – National Fund for Environmental Protection and Water Management, public institution in Poland,

supporting national level initiatives that aim to protect environment and improve water management in the country.

**National Energy and Climate Plan (NECP)** – national strategic planning tool that outlines actions and policies to achieve national climate and energy targets in the medium term, and fulfil the broader objectives of the Energy Union; the development of NECP is mandatory for each EU Member State under the Governance Regulation.

**Planes de Impulso al Medio Ambiente (PIMA)** – Environmental Promotion Plans, are national planning tools in Spain for implementing measures to mitigate and adapt to climate change at the national level.

**Programmation Pluriannuelle de l'Énergie (PPE)** – multi-annual energy transition programme in France.

**Société nationale des chemins de fer français (SNCF)** – National Company of the French Railways, France's state-owned company that operates the railway system.

**Social Climate Fund (SCF)** – an EU funding instrument designed to support households, micro-enterprises and transport users that will be the most affected by the introduction of carbon pricing in transport and heating sectors (ETS2).

**Social Climate Plan (SCP)** – national plan for spending of the funds allocated under the Social Climate Fund (SCF), including a thorough diagnosis of the national-level social issues concerning the building and road transport sectors, and a detailed description of the planned policy measures.

**Stratégie Nationale Bas-Carbone (SNBC)** – French national decorbanisation strategy.

# Introduction

The aim of this study is to examine the governance and utilisation of EU ETS revenues in the five Member States with the highest emissions within the system: Germany, Poland, Spain, Italy, and France. Building on this analysis, the report provides policy recommendations for an effective, socially equitable, and climate-aligned implementation of ETS2 and the Social Climate Fund (SCF), as well as suggestions for enhancing the use of revenues generated by the EU ETS. The study draws upon analysis of data reported by the Member States to the EU institutions, interviews with national and EU-level experts and stakeholders, and comparative policy evaluation. This report is a part of the LIFE Effect project[1], funded by the EU LIFE Programme and the German Federal Environmental Foundation.

The first chapter outlines current EU-level legislation on the EU ETS, emphasising the key obligations of Member States. It also presents an overview of how EU ETS revenues are utilised across the EU. The second chapter assesses revenue governance and usage in the five selected Member States, highlighting good practices and areas for improvement, and offering country-specific recommendations. Subsequent chapters compare the approaches adopted by these countries and summarise the good and bad practices identified. The report concludes with general recommendations addressed to both Member States and EU institutions. These recommendations also reflect the key findings of the Greek case study featured in the report published by The Green Tank and Facets, "Recommendations for policies and measures to mitigate ETS2 implementation impact in Greece".[2]

We would like to thank all national and EU-level experts and stakeholders who participated in the in-depth interviews conducted during the preparation of this report, including: Géraud Cayol – I4CE, France; Diana Cárdenas Monar – I4CE, France; Phuc-Vinc Nguyen – Jacques Delors Institute, France; Isabel Haase – Oeko Institute, Germany; dr Victoria Noka – Oeko Institute, Germany; Eike Velten – Ecologic, Germany; Francesca Bellisai – ECCO, Italy; Giulia Colafrancesco – ECCO, Italy; Costanza Scano – ECCO, Italy; Adam Guibourge-Czetwertyński – T&E, Poland; Magdalena Jóźwicka – EEA, and others.

[1] LIFE Effect project website is available here.

[2] Gakis, N., Lalas, D., Mirasgedis, S., Sarafidis, G., Mantzaris, N., Souka, I., (2025) *Recommendations for policies and measure to mitigate ETS2 implementation impacts in Greece*, Facets and The Green Tank, carried out within the framework of the LIFE Effect project.

# 1. EU ETS revenues – context and legal framework

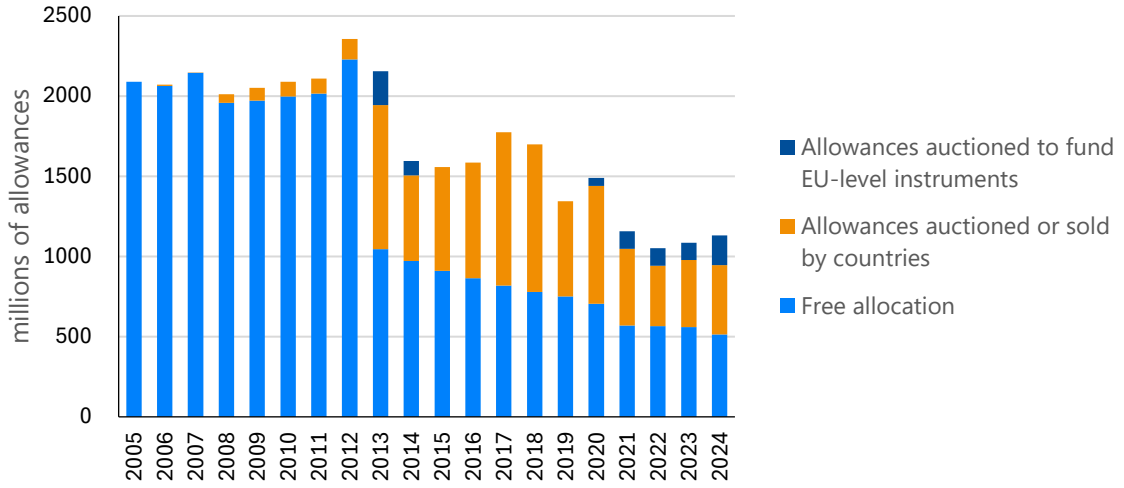
The European Union Emissions Trading System (EU ETS) was launched in 2005 and has remained in place ever since, with changes being introduced along the way. It is a market-based mechanism designed to reduce greenhouse gas emissions by providing a carbon price signal within the sectors it covers, thus ensuring an incentive to switch to cleaner solutions.

The system has been implemented in all the EU Member States, as well as in Iceland, Liechtenstein and Norway. It also applies to electricity generation in Northern Ireland. Since its launch, the EU ETS has expanded its scope from power sector and heavy industries to also incorporate aviation and maritime transport, now covering 37% of total emissions in the European Economic Area. At the same time, the emissions in the stationary installation covered by the system declined by 51% between 2005 and 2024, driven primarily by decarbonisation of the power sector[3].

**How does the EU ETS work?**

The EU ETS is a 'cap and trade' system. The amount of greenhouse gases that can be emitted by the companies from the sectors which participate in the system is limited by the number of emission allowances (EUAs) available for a given period ("cap"). The overall cap is reduced each year in line with the EU's climate targets. Each allowance enables the emission of one tonne of $CO_2$ equivalent. The allowances are tradeable, and companies must monitor and report their emissions annually and surrender enough allowances to fully cover their yearly emissions, otherwise they face penalties. This creates the demand side of the carbon market.

**Figure 1. Allocation of the EU ETS allowances, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

The primary supply of allowances in the system comes from either free allocation to the participants or auctions, the latter introduced as a default mode of distributing allowances since 2013. The allowances to be auctioned are allocated to the Member States, with the

[3] See the EEA analysis for more details.

exception of the EUAs set aside to finance the EU-wide mechanisms which include Innovation Fund, Modernisation Fund, co-financing the REPowerEU chapters of the national recovery and resilience plans and the upcoming Social Climate Fund (SCF). Most countries use a common auction platform operated by the European Energy Exchange (EEX) to conduct the auctions. The main participants in the European carbon market are energy and industrial companies. Financial intermediaries, such as banks, trade on behalf of smaller companies and emitters.

**EU ETS as a source of revenues**

Since 2013, the EU ETS has generated over EUR 230 billion in auction revenues[4]. Despite the increasing role of additional mechanisms such as Innovation Fund, the direct auctions by the Member States remain the main source of the EU ETS revenues (see Figure 1). The remaining emission allowances are provided free of charge, particularly to installations at risk of 'carbon leakage', i.e. relocation outside the European Union to avoid EU ETS costs.

In the past, the ETS Directive required the Member States to spend the financial equivalent of at least 50% of auction revenues – and all revenues from aviation allowances – on climate and energy-related purposes. **Since mid-2023, 100% of Member States' auction revenues from the EU ETS (or equivalent in financial value of these revenues) must be used to support climate- and energy-related purposes,** including measures related to just transition and protection of vulnerable households[5]. This figure excludes the revenues used to shield the energy-intensive industries from the risk of carbon leakage.

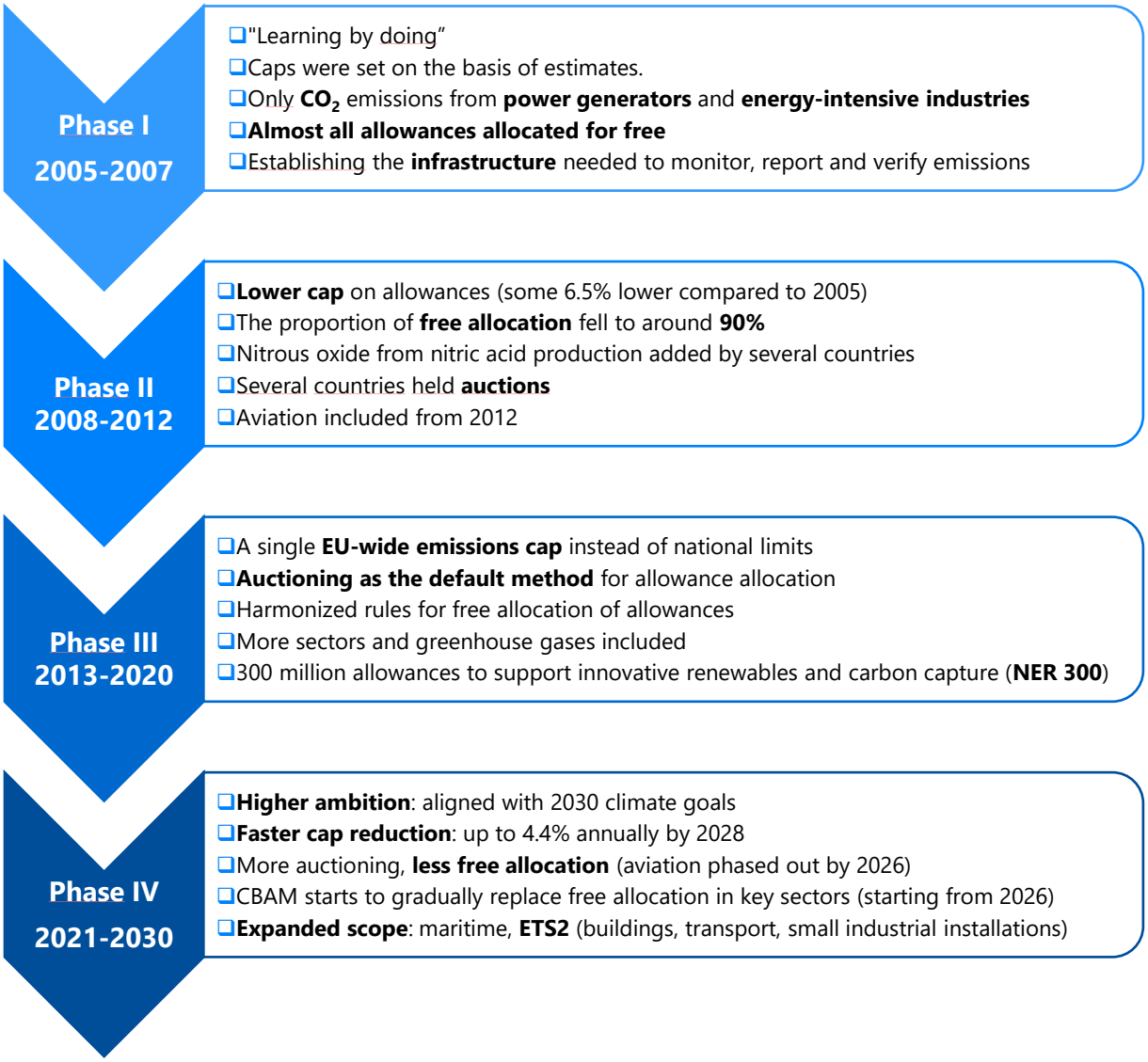
To shield the energy-intensive industries from the indirect costs of the carbon pricing in the power sector (passed through to the consumers via electricity prices) and to avoid the risk of carbon leakage, the Member States are allowed to support these industries with state aid equivalent to up to 25% of their EU ETS revenues. This support has to be approved by the European Commission, and its volume reported every year. Surpassing the 25% limit comes with a requirement to submit an explanatory report to the European Commission[6].

| **Key legal acts establishing the legal framework for the EU ETS auctions and revenue reporting** |
| --- |
| ▪ Consolidated text of the ETS Directive (2003/87/EC).<br>▪ Delegated Regulation on the EUA auctioning rules (2023/2830)<br>▪ Basis for revenue reporting: Regulation on the Governance of the Energy Union and Climate Action (2018/1999)<br>▪ State aid guidelines (including a 25% revenue utilisation limit for indirect carbon cost compensation): Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021 (2020/C 317/04) |

[4] See the European Commission website on Auctioning of allowances for more details.
[5] See the Article 10(3) of the ETS Directive (2003/87/EC).
[6] See the European Commission guidelines, point 62.

The ETS continues to evolve. It is currently in Phase IV, which reflects the EU's ambition in line with the European Green Deal and the "Fit for 55" package. One of the main goals of Phase IV is to reduce emissions from sectors covered by the system by 62% by 2030 compared to 2005 levels.

**Figure 2. EU ETS evolution over time**




*Source: Reform Institute based on the European Commission website*

### ETS2 – a new system awaiting implementation

A separate EU emissions trading system – ETS2 – will be introduced for buildings and road transport. ETS2 is intended to be similar to the first version of the ETS. The main difference is that the cost of allowances for several years will be subject to a soft price cap of EUR 45 per tonne of $CO_2$ (in 2020 prices, rising with inflation to around EUR 55 in 2027). When the prices of allowances exceed this limit for a certain period, additional allowances will be released to increase supply and lower the price. The system will cover entities such as fuel depots and

suppliers rather than the final consumers. While initially scheduled to launch in 2027, as of December 2025 the ETS2 is expected to start operating no earlier than in 2028 as a result of postponement introduced as a part of the negotiations on the revision of the European Climate Law in late 2025.

At the same time, more funding has been allocated to vulnerable citizens and enterprises facing the transition in the form of SCF which will be launched in 2026[7]. The SCF is an EU instrument designed to support households, micro-enterprises and transport users that will be the most affected by the ETS2. The measures and investments supported by the Fund should also tackle the issue of already existing energy and transport poverty.

Under the SCF a maximum of EUR 65 billion is available to be spent by the Member States between 2026 and 2032. For each Member State, a maximum allocation under the SCF was set in line with the methodology described in the EU regulation that established the SCF which considered:

- population at risk of poverty living in rural areas,
- carbon dioxide emissions from fuel combustion by households,
- the percentage of households at risk of poverty with arrears on their utility bills,
- total population,
- gross national income per capita,
- the share of reference emissions under Article 4(2) of Regulation (EU) 2018/842.

As a result, the maximum total allocation under SCF for the Member States analysed in the study was set in the Annex II of the regulation:

- Poland – EUR 11.44 billion (17.60%)
- France – EUR 7.28 billion (11.19%),
- Italy – EUR 7.02 billion (10.81%),
- Spain – EUR 6.84 billion (10.52%),
- Germany – EUR 5.32 billion (8.18%).

To receive the funds, the Member States must submit a national Social Climate Plan to the European Commission, listing the planned measures which are based on a thorough diagnosis of the national-level social issues concerning the building and road transport sectors[8].

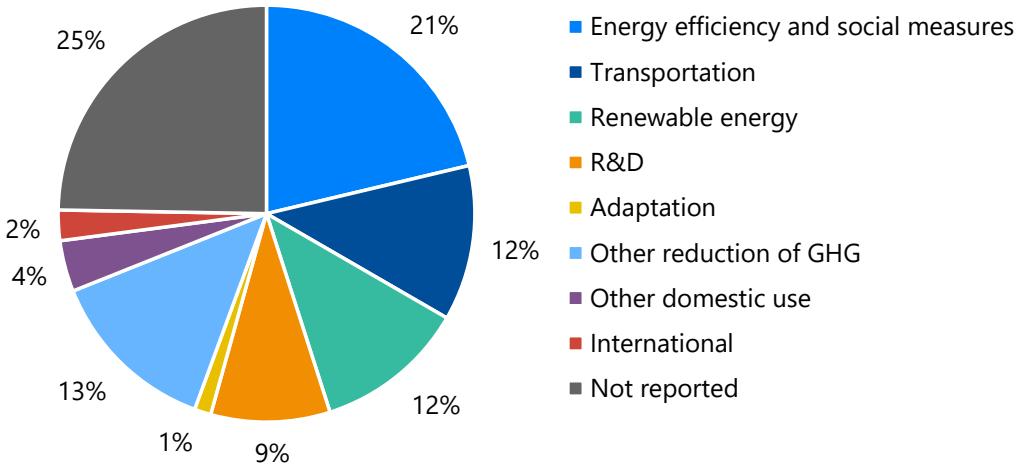
**What does the official reporting by the Member States tell us about the EU ETS revenue utilisation?**

The Member States are required to report annually on how they use revenues from the EU ETS. Based on these reports, the European Commission publishes summaries which are included in the Climate Action Progress Reports and Carbon Market Reports.

[7] See the EU Regulation (EU) 2023/955 establishing a Social Climate Fund for more details.
[8] See the Reform Institute report "To overcome energy and transport poverty. Social Climate Plan as an instrument for structural change" for more details and policy recommendations for Poland.

The European Commission indicates that the sum of the projects and actions reported for the period 2013–2022 amounts to EUR 70.3 billion, which constituted 75% of total auction revenues which the Member States received over this period. The figure below shows the main types of objectives reported in relation to the spending of auction revenue between 2013 and 2022. The vast majority of funds were spent on domestic climate action, with international support limited to 2%. More than half of the revenues which were reported by the Member States fell into one of the three areas: energy efficiency, transportation and renewable energy[9].

**Figure 3. Spending of auction revenues by categories reported to the European Commission, 2013-2022**




*Source: Reform Institute based on the European Commission Climate Action Progress Report 2023*

In 2023, the reporting method changed. Among other elements, the new reporting groups were introduced, such as the 'Category' group, in which Member States classify and align their revenues with specific areas. A 'Visibility' column was also added, in which Member States indicate how the origin of the funds is marked. Additionally, a new section was added where countries can specify the link between revenues and their National Energy and Climate Plans (NECPs) and Just Transition Plans (JTPs).

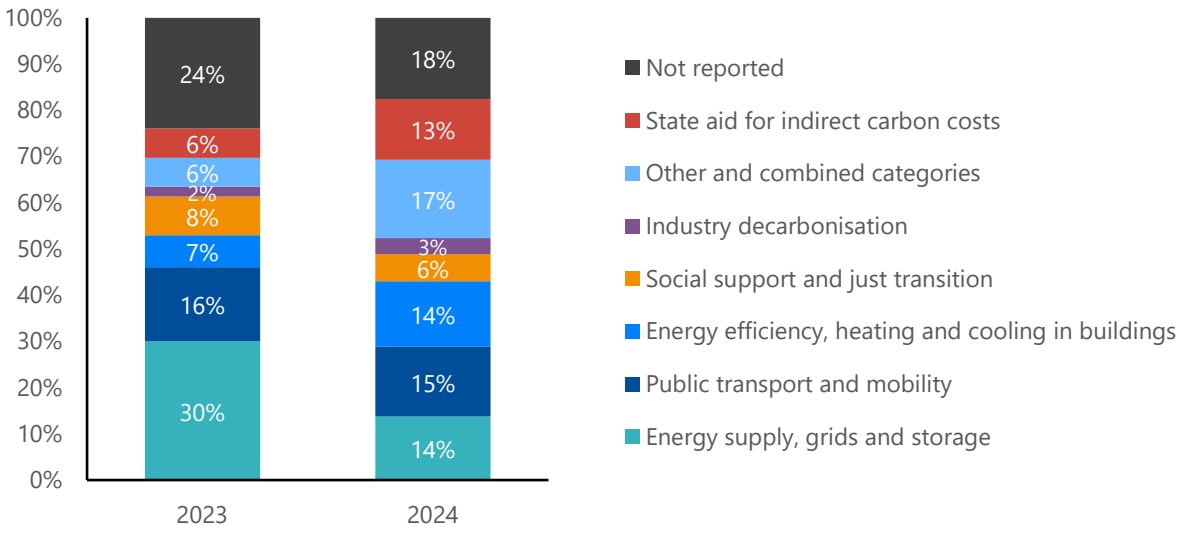
According to the European Commission's Climate Action Progress Reports 2024-2025:

- EU ETS auctions generated EUR 43.6 billion in 2023 and EUR 39 billion in 2024,
    - out of these, the Member States directly received EUR 33 billion in 2023 and EUR 24.4 billion in 2024,
    - the rest of the revenues supported the Innovation and Modernisation Funds as well as REPowerEU part of the Recovery and Resilience Facility.

[9] See the European Commission's Climate Action Progress Report 2023 for more details.

In 2024, 15 Member States reported using their revenues for carbon leakage protection related to indirect carbon costs, utilising EUR 3.2 billion for that purpose (or 13% of the total Member States' revenue in 2024). Overall, in both 2023 and 2024 the combined value of revenues which were either not reported or allocated to state aid for indirect carbon costs exceeded 30% of the total EU ETS revenues. Thus, despite progress in decreasing the share of unreported revenue spending before and after the introduction of 100% reporting obligation by the EU ETS Directive in mid-2023, the actual share of revenues (or their financial equivalents) declared by the Member States as being spent on climate and energy transition remains slightly above 2/3.

**Figure 4. Spending of auction revenues by categories reported to the European Commission, 2023-2024**




*Source: Reform Institute based on the European Commission Carbon Market Reports 2024 and 2025*

In the next chapter, we take a closer look at the spending declared by the five Member States with the highest revenues in order to better understand the individual policy and reporting choices made by the national governments which – when combined – contribute significantly to the overall patterns discussed in this part of the report.

# 2. National case studies on the EU ETS revenue use

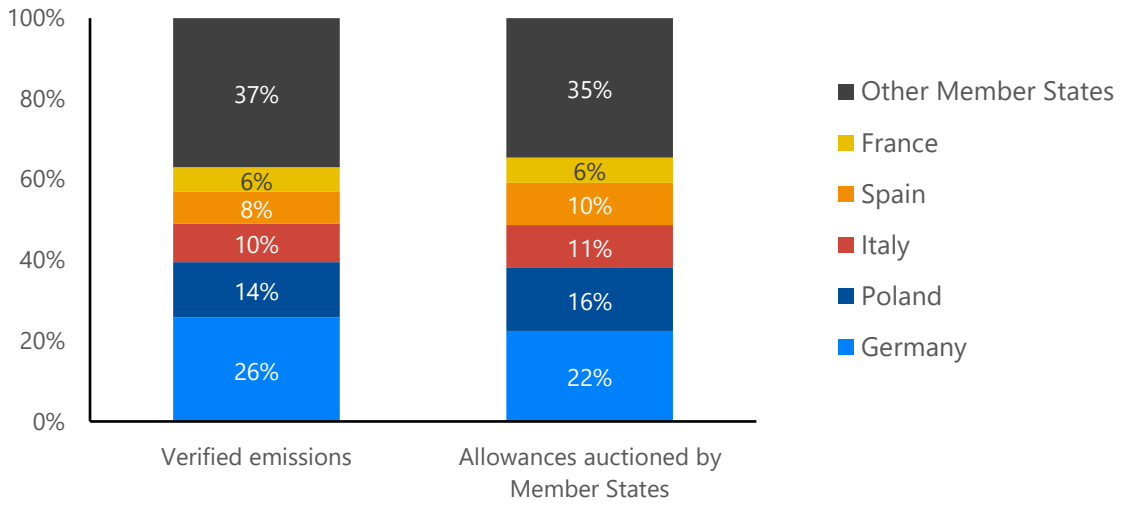
The share of allowances to be auctioned by each Member State is currently influenced by:

- historical emissions at the start of the system, which determines distribution of 90% of allowances,
- solidarity mechanism – remaining 10% of allowances are distributed among 16 Member States with relatively low income per capita (Bulgaria, Czechia, Estonia, Greece, Spain, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Portugal, Romania, Slovenia and Slovakia).

The fixed shares in auctioning revenues imply a significant difference compared to a simple carbon tax: the revenue received by a Member State does not depend on the current GHG emission from its economy. This provides an additional incentive for the national governments to ensure enabling framework for rapid domestic emission reductions in sectors covered by the system, as faster cuts do not diminish the carbon revenues.

The distribution of both the emissions and the auctioning revenues among the Member States is driven mostly by the size of the economies and historic emission intensity of their power sector (for which auctioning is the default mode of allowance allocation). **The top five countries assessed in this report (Germany, Poland, Italy, Spain and France) are responsible for 63% of verified emissions and 65% of the allowances auctioned directly by the national governments**.

**Figure 5. National shares of verified emissions and allowances auctioned by the Member States, 2024**

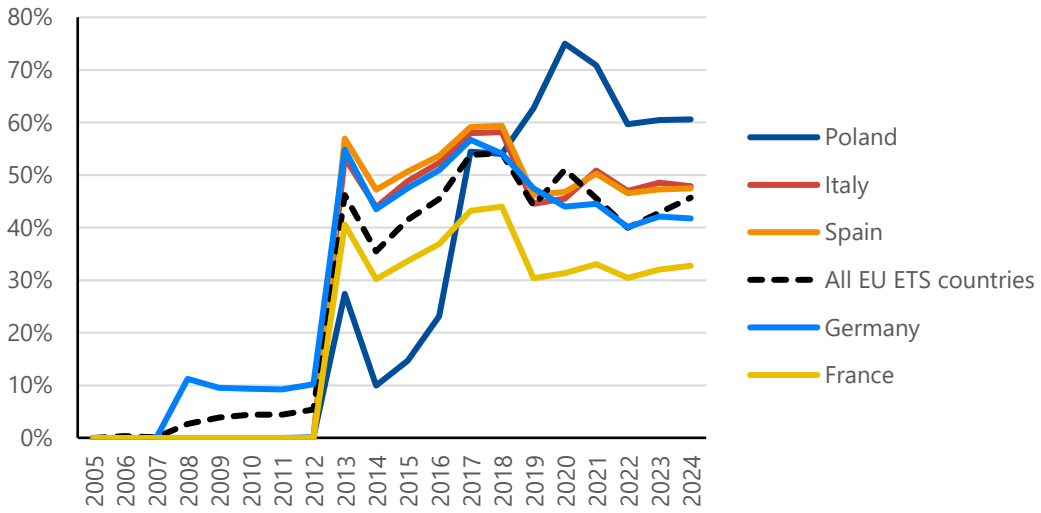



*Source: Reform Institute based on EEA EU ETS data viewer*

Despite the mechanisms which weaken the direct link between current emissions and auctioning revenues described above, the overall correlation between the two values remains strong for the top five countries. Notable examples of divergence include significantly lower share of auctioning revenues for Germany (explained by relatively slower progress on decarbonising power sector and high share of industries which receive free allowances) and higher share for Poland (explained by the impact of solidarity mechanism and high share of power sector in the national EU ETS emissions; since abandoning the temporary free allocation

mechanism for power sector, the country consistently auctions majority of allocated allowances).

**Figure 6. Share of allowances auctioned or sold in total allowance allocation, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

## 2.1 Germany

### Context

Germany received 14% of EU ETS revenues in 2024, amounting to EUR 5.53 billion (22% share in the allowances directly sold by the Member States). It ranked as the first in the EU in terms of the volume of auctioned allowances.

Germany's prominent role in the system is mostly the consequence of the sheer size of the country's economy and the German EU ETS-covered sectors. However, a relatively more carbon-intensive energy mix than in France – the EU's second-largest economy – also contributes to Germany's key role in the system.

In recent years, the revenues generated through EU ETS auctions in Germany have been rising steadily from EUR 2.7 billion in 2020 to a peak of EUR 7.6 billion in 2023. They subsequently fell in 2024 by 28% year-on-year to EUR 5.5 billion, mostly due to the lower price of the EUAs. Comparison of these numbers with the total federal budget revenues[10] indicates that the European carbon pricing system constitutes a minor revenue stream for the national economy. However, it provides a crucial and dedicated funding stream for national investments in energy transition.

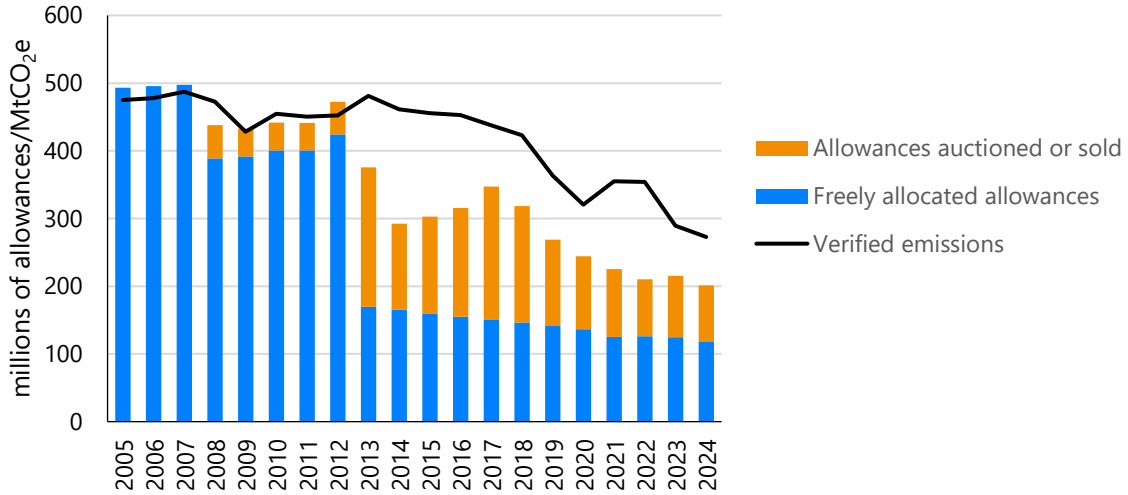
All of the revenues generated through EU ETS are directly earmarked by national regulations for *Klima- und Transformationsfonds* – KTF (Climate and Transformation Fund), which is an

[10] In 2024, according to Eurostat, the total general government revenue in Germany amounted to EUR 2.0 trillion.

extra-budgetary fund (*Sondervermögen)*. The aim of the KTF (stated in the national law[11]) is to finance the measures that serve to achieve the climate protection targets in line with the Federal Climate Protection Act (*Bundes-Klimaschutzgesetz*).

**This practice guarantees high visibility of the funds coming from the European carbon pricing system**, **as they are not transferred to the national budget before the disbursement. It also increases the probability that the money is spent on measures that are broadly supportive of the European transition to climate neutrality.** Although, according to the law, the Fund can also be used to finance compensation payments for emission-intensive companies and broader industrial policy goals (e.g. investment in microelectronics).

**Figure 7. Allocated allowances and verified EU ETS emissions in Germany, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

The budget of the KTF is much larger than Germany's revenue from the EU ETS. On top of the money coming from the EU ETS, the KTF's budget is financed also by the funds generated in the national carbon pricing system – *Brennstoffemissionshandelsgesetz* (BEHG) – which applies to heating and transport sectors. Over the four years that BEHG has been operational, the national carbon pricing generated 36% more revenues than the European system. The two remaining sources of KTF financing are allocations from national budget and the reserve that has built up in the fund over the years.

Historically, the reserve has financed a significant part of the KTF expenditures, but at the beginning of 2025, it got almost depleted: it amounted to EUR 317 million and was projected to be fully spent by the end of the year[12]. It was a consequence of the government's decision to boost the KTF in 2021 with EUR 60 billion of unused loan guarantees that were secured to fight COVID-19 crisis, and the subsequent ruling by the Federal Constitutional Court from November 2023 that this practice was unconstitutional[13]. As a result, the money was withdrawn

[11] More precisely, in the law establishing the KTF – Gesetz zur Errichtung eines Sondervermögens „Klima- und Transformationsfonds" (Klima- und Transformationsfondsgesetz - KTFG).
[12] As follows from the Information of the Federal Government on the 2024-2028 Federal Financial Plan.
[13] More information about the ruling can be found in a news article by Vorwärts.

from the KTF. The Fund's budget had to be revised, and for that reason all KTF spending was frozen for more than two months following the ruling[14]. The investments and initiatives which had already been contracted were covered by the reserve, and the planned spending in the following years was scaled down. However, in 2025 the government decided to replenish the Fund by allocating EUR 10 billion each year in the period 2025-2029 from the Special Fund for Infrastructure and Climate Neutrality (*Sondervermögen Infrastruktur und Klimaneutralität*)[15].

The KTF is not managed by a single agency. Instead, several ministries are in charge of distributing the money for different spending purposes. The most important role belongs to the Federal Ministry for Economic Affairs and Energy (*Bundesministerium für Wirtschaft und Energie*, BMWE), which was responsible for spending approximately 85.3% of the total KTF allocation between 2023 and 2026[16].

The complex governance framework applied to spending of the EU ETS revenues in Germany is reflected in the reports submitted by the country to the European Commission. These are particularly elaborate, as each year Germany provides details on approximately 50 spending programmes. What is more, the total amount of expenditures reported far exceeds the amount of revenues generated each year in the EU ETS. In 2023, expenditures were higher by a factor of 2.8, and in 2024 by a factor of 7.4.

**Table 1. Comparison of Germany's EU ETS revenues, national carbon pricing revenues, carbon pricing revenue spending reported to the European Commission, and the budget of the KTF, billion EUR.**

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|---|
| **EU ETS revenues** | 2.7 | 5.3 | 6.8 | 7.7 | 5.5 | - | - |
| **National carbon pricing revenues[17]** | - | 7.2 | 6.4 | 10.7 | 13 | - | - |
| **KTF – planned spending[18]** | 8.4 | 26.7 | 28 | 35.4 | 57.9 | 34.5 | 34.0 |
| **Spending reported to the Commission** | 5.1 | 21.1 | 13.7 | 20.2 | 41 | - | - |

*Source: Reform Institute based on EEA Reportnet 3, German government reporting and Umweltbundesamt* data.

[14] More information about the consequences of the ruling can be found in an article by Tagesschau.
[15] As stated in the Information of the Federal Government on the 2025-2029 Federal Financial Plan.
[16] The information was quoted by the BMWE on the Ministry's website.
[17] Data was published by the Umweltbundesamt – Federal Environmental Agency, available for 2021-2022 and 2023-2024.
[18] Data for 2020-2021 come from: Information of the Federal Government on the 2020-2024 Federal Financial Plan (under the name "Energie- und Klimafonds", which was the KTF's official name until 2022). Data for 2022-2023: Information of the Federal Government on the 2022-2026 Federal Financial Plan. Data for 2024-2026: Information of the Federal Government on the 2024-2028 Federal Financial Plan.

This 'overreporting' practice could be naturally explained by submitting to the European Commission the data about the total KTF spending: since it is not possible to discern which of the KTF measures are financed by the EU ETS, and which by other funding sources, therefore the information on the whole KTF is provided. However, there is a discrepancy between the KTF budget and the spending reported: each year, the spending reported is higher than the sum of EU ETS revenues generated, but lower than the total KTF allocation (see table below). This mismatch is the result of a slow KTF absorption, i.e. an inability to carry out the planned spending due to administrative and procedural constraints., highlighted in the reports from KTF audits prepared by the German Federal Court of Auditors. The assessment revealed that since the KTF was established, the managing ministries have, on average, spent only 69% of the allocated funds annually[19].

**Table 2. Spending reported for domestic measures as a share of EU ETS revenues generated in Germany in a given year.**

| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| 190% | 397% | 202% | 264% | 741% |

*Source: Reform Institute based on EEA Reportnet 3.*

## Key findings

Over the assessed period 2020-2024, the following areas of intervention belonged to Germany's spending priorities:

- decarbonisation of the buildings sector – 39% of total reported spending,
- electricity use subsidies – 29%,
- sustainable private transport – 12%,
- carbon leakage protection – 6%,
- clean industrial transition – 4%,
- research and development – 3%.

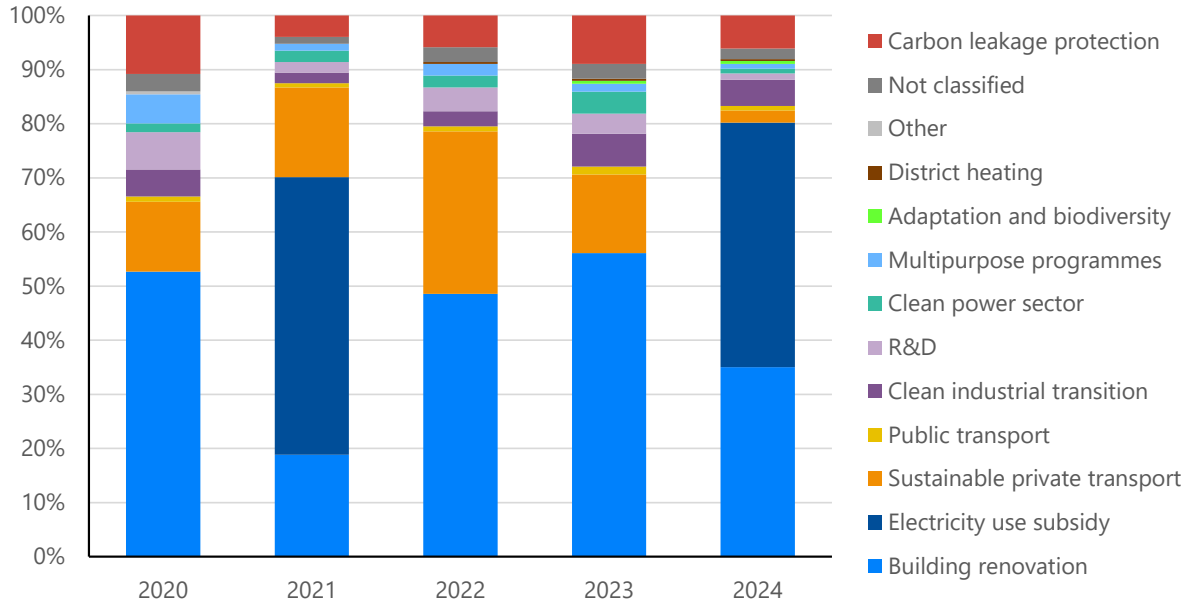
Most of the funds allocated to the buildings sector were used to fund the „Bundesförderung für effiziente Gebäude" (BEG) programme, which is a flagship national initiative financing renovation of both residential and non-residential buildings.

Projects financed by the BEG programme can be mostly classified as clean investments, and the programme is assessed rather favourably by the auditors performing regular evaluations on behalf of the BMWE. According to their most recent report, 286 thousand of BEG renovation projects were realised in 2023. Recipients of the grants contributed nearly EUR 31 billion to these investments, while federal government added to that about EUR 7.6 billion. Vast majority of the projects (95%) concerned individual measures in residential buildings (BEG EM track), and only 5% of the initiatives constituted complex renovation measures (BEG WG and BEG NWG – tracks for deep renovations in residential and non-residential buildings, respectively). The investments subsidized in 2023 were expected to save approximately 7.5 TWh of energy per year, which would translate to an annual reduction in GHG emissions of about 2.2 million

[19] Report by the Bundesrechnungshof - Federal Court of Auditors, 2025.

ton of $CO_2$ equivalents. Individual measures contributed 88% to this effect, while 12% came from complex renovation projects[20].

**Figure 8. The EU ETS revenue use declared by Germany as disbursed on domestic measures, by category, 2020-2024.**




*Note: Only disbursed funds were analysed in the given year. The maximum of 22 programs per year with budgets above EUR 500 000 were categorized. Spending on international and third countries' measures is not included in the analysis.*

*Source: Reform Institute based on EEA Reportnet 3*

However, external studies point out that the average cost of $CO_2$ emissions avoided due to the programme was relatively high, and that it used to favour households with above average income[21]. Introduction of the income bonus (Einkommens-Bonus) to the programme, which took place in 2024, should help mitigate the latter issue. Furthermore, the German Council of Experts on Climate Change assesses that the official estimates of energy saved due to investments realised with BEG may be overstated[22]. The programme's strong focus on individual measures rather than stimulation of deep renovations may also result in spending inefficiencies. What is more, the programme does not address a key issue on a German housing market, which is a consequence of a high share of rented properties: the cost of renovation needs to be incurred by the owner, whereas the benefits – lower energy bills and better living

[20] See more details on the ongoing evaluation here.
[21] See GdW (2025), Evaluation des Förderprogramms "Bundesförderung für effiziente Gebäude (BEG)" bestätigt den Praxispfad CO2-Minderung im Gebäudesektor.
[22] See the report by Council of Experts on Climate Change on measures for the building and transport sectors.

conditions – belong to the tenants[23]. Therefore, conventional policy incentives for renovating properties that target owner-occupiers are less effective in Germany.

Moreover, up until 2024, in some cases it was possible to use BEG subsidies to include a fossil fuel installation as a part of heating system investment. However, since 2024 gas boilers can be financed by BEG only if they are „hydrogen ready"[24]. Given that hydrogen heating is not expected to be widely accessible and affordable in the future[25], in practice, this means that investments in fossil fuel technologies can still be financed by the BEG programme, risking fossil fuel lock-in.

The second most prominent spending priority – electricity use subsidy – was reported only in 2021 and 2024, but it still managed to amount to 30% of the total spending reported between 2020 and 2024. The measure was introduced to compensate the final electricity users for the rise in renewables surcharge (EEG-Umlage), which increased after the COVID-19 pandemic. The surcharge was reduced to zero cents in 2022, and then completely abolished in 2023. The introduction of the subsidy in 2021 has coincided with the launch of the national carbon pricing mechanism BEHG, which provided additional revenues for KTF. That means that effectively the burden of financing the past transition measures which supported renewables deployment in power sector was shifted from electricity users to fossil fuel users, providing additional incentive for electrification.

The spending for the third most common area – sustainable private transport – entailed subsidies to purchase of the private and commercial electric vehicles, and investment in refuelling and charging infrastructure. These interventions include (among others) Umweltbonus – a subsidy for purchase of an electric vehicle, which was discontinued in 2023. The measure was criticized for benefitting mostly high-income households, as analysis commissioned by the German government shows that about 33% of the recipients of the aid had a net household income of EUR 5 200 per month or more[26]. The subsidy is due to be reinstated in 2026, with an aim to provide support to low- and middle-income households. However, the planned design of the measure is criticised in public debate for targeting only new vehicles and for inclusion of relatively high income thresholds (up to EUR 45 000 per year), which could disadvantage the most vulnerable households[27].

In the reports submitted to the European Commission by Germany, there were several programmes that depart from „polluter pays" principle:

- compensation payments for operators of coal-fired power plants (2021-2024),
- subsidies to energy-intensive companies to offset electricity price increases caused by emissions trading (2020-2024),

[23] See the study of Behr, S. M. et al. (2024), *Sanierung sehr ineffizienter Gebäude sichert hohe Heizkostenrisiken ab*, DIW, DIW Wochenbericht 19 / 2024, S. 279-286.
[24] More details available on the Federal Ministry for Economic Affairs and Energy webpage.
[25] See e.g. Rosenow, J. (2024). *A meta-review of 54 studies on hydrogen heating*. Cell Reports Sustainability, 1(1).
[26] More details in this evaluation report by Fraunhofer and Technopolis.
[27] The controversies are discussed e.g. in this news article by Die Welt and this article by Merkur.

- compensation for companies that experience undue hardship because of introduction of the national $CO_2$ pricing (2023-2024).

The two latter measures constitute state aid motivated by the risk of carbon leakage. Up until 2023, Germany's expenditure on indirect carbon cost compensation was within the limit imposed by the EU law (up to 25% of the EU ETS revenue). However, in 2024 the 25% threshold was significantly surpassed. Member State should publish a report setting out the reasons for exceeding the designated amount of aid, in accordance with Article 10a(6) of the EU ETS. German Emissions Trading Authority has covered this issue in its report on 2023 indirect carbon cost compensations[28], attributing the discrepancy to the impact of reduction of auction revenues due to the impact of Market Stability Reserve as well as differences in projected vs actual EUA price.

Transparency of the spending from the programmes listed in the report is generally satisfactory, but mixed. Some measures have separate websites with detailed descriptions of the actions that were undertaken, or what conditions need to be met by an investment to qualify for funding (e.g. BEG programme website[29] or *National Klimaschutz Initiative* website[30]. However, for many other programmes it is very difficult to recover information about specific projects or actions that were undertaken using the EU ETS money (e.g. "Wasserstoffeinsatz in der Industrieproduktion" – the use of hydrogen in industrial production or "Transformation Wärmenetze" – transformation of heating networks).

The introduction of the requirement to spend 100% of European carbon pricing revenues on measures that support energy transition in 2023 does not seem to impact the structure of German spending from this pool, nor the reporting, since Germany has already been 'overreporting' its revenue spending, spending more than 100% of its EU ETS revenues on measures supporting the transition.

## Good practices

The most important good practice – as it is unique in the sample of researched countries – is the fact that the German EU ETS revenues are channelled directly to a special fund (KTF), that is separate from the national budget. This way Germany ensures relatively high visibility and transparency of the spending. This includes not only climate investments, but also indirect carbon cost compensation scheme. The transparency is further strengthened by the fact that some of the multiannual spending programmes that make up the KTF are regularly evaluated by the government for effectiveness (e.g. BEG programme). The German reporting also makes it evident that the country spends at least as much money as it generates from the EU ETS on climate action, which is also noteworthy.

Moreover, the eligible purposes of spending from the KTF are clearly stated in the national law, so any structural shift in the EU ETS revenue spending priorities requires legislative changes. This contributes to transparency and regular pressure to review whether areas of intervention

[28] The report is available here.
[29] See under this link.
[30] See under this link.

are consistent with wider public preferences, which in turn contributes to building public support and trust in the carbon pricing scheme.

### Challenges and areas for improvement

In the case of Germany, the extensive reporting comes not only with advantages, but also with some weaknesses: 'overreporting' blurs the landscape of actions undertaken using the EU ETS funds, limiting transparency. It also remains unclear from the reporting itself why there is more spending reported than revenues generated, and what portion of the KTF is included in the reporting.

There are also some inconsistencies in access to information, transparency and evaluation practices across the programmes within the KTF mentioned in the German report sheet. One of the reasons could be a differentiation of ministries responsible for implementation. Dedicating a single governmental agency or unit to handling the management of the KTF could streamline administrative processes and improve comparability across measures.

Regarding the KTF spending, there seem to be notable delays in disbursement of the available funds, which slow down the pace of national progress on energy transition. This problem could also be alleviated by placing the responsibility for management of the Fund within one institution. Moreover, although the spending purposes from the KTF mostly overlap with the intentions of the EU ETS Directive, there are some clear cases where these two are not aligned. One example is that the funds from the KTF's 2024-2027 budget were earmarked to subsidise the launch of the Intel Magdeburg semiconductor factory with EUR 10 billion (not paid out so far, as the project got cancelled)[31]. Such a move could be a part of broader industrial policy but does not result in climate change mitigation or help with adaptation.

Another area of potential improvement could be strengthening the national building renovation programme BEG. The programme's efficiency could be increased if it better targeted complex renovations and the vulnerable building owners. Developing adequate funding measures within BEG to stimulate deep renovations in rented properties should constitute another focus area for German policymakers. Moreover, the subsidies for hydrogen-ready gas heating systems that are possible through BEG programme should be discontinued. However, the current narratives in the political debate indicate that there is little chance of that happening in the near future. In fact, experts mention the risk of widening the scope of supported technologies to include again more fossil fuel dependent and non-renewable technologies.

The efficiency of spending of the EU ETS revenues could be further improved if electric vehicle subsidy, which is expected to be reintroduced in 2026, targets successfully the low- and middle-income households, and applies not only to new electric vehicles, but the used ones as well.

What is more, the revenue spending should be also made more consistent with „polluter pays" principle, as currently the EU ETS revenues are used not only to fund investment in energy transition, but also to grant compensation payments for operators of coal-fired power plants or to pay for indirect carbon leakage protection measures. The recent analysis by German

[31] News article about this subsidy can be found here.

Association for Sustainable Business (*Bundesverband Nachhaltige Wirtschaft,* BNW)[32] indicates that this pattern is maintained beyond 2024, as only 68% of the KTF budget will be spent on measures contributing to the climate target in 2026 (BNW classifies indirect carbon cost compensation and electricity use subsidies as measures not consistent with climate transition, the latter due to supporting consumption of electricity produced both from fossil fuel and renewable sources).

## Recommendations

- **Improve visibility and public acceptance of carbon pricing**. The EU ETS revenues could be separated from other financing streams that contribute to the KTF and be clearly channelled to programmes which support investments in clean solutions. This also applies to the future ETS2 revenues. In this case, Germany should utilise the fact that national equivalent of ETS2 already exists by using the remaining time until the start of EU-wide system to improve governance of existing BEHG revenues.
- **Make spending more consistent with „polluter pays" principle**. It should be a priority to ensure that carbon leakage protections are phased out as quickly as possible as a part of broader ETS reforms (such as introduction of the CBAM and shift from national to EU-wide carbon pricing within the ETS2).
- **Streamline administrative processes**. A separate, already existing governmental agency or unit could be tasked with management of KTF. This change could also help prevent delays in funds disbursement.
- **Strengthen BEG renovation programme**. It could be strengthened if it better targeted complex renovations and the vulnerable building owners, as well as properties in the rental market. Also, the subsidies for hydrogen-ready gas technologies should be withdrawn from it. The recommendation of a more targeted approach is crucial in the context of the ETS2 and Social Climate Fund implementation as it directly influences the building sector and the support for vulnerable households should be prioritised.

[32] Available under this link.

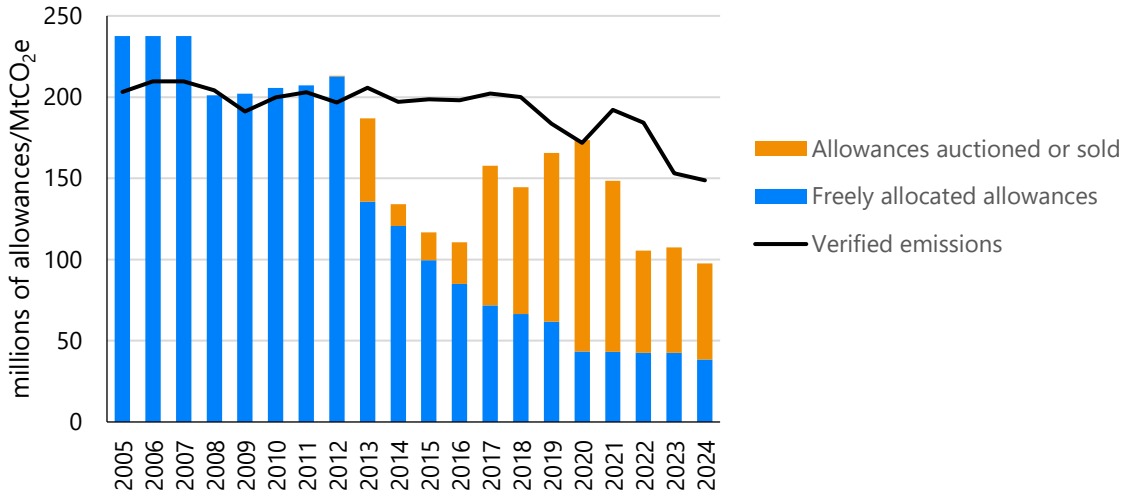
## 2.2 Poland

### Context

Poland received 10% of EU ETS revenues in 2024, amounting to EUR 3.81 billion (16% share in the allowances directly sold by the Member States). It ranked as the second in the EU in terms of the volume of auctioned allowances[33].

Poland, despite being only the sixth-largest EU economy, maintained its position as the recipient of the second-largest share of EU ETS revenues in the period from 2022 to 2024. This is explained by fact of the very high emission intensity of Poland's power sector. In 2023, Poland recorded an emission intensity of 662 $gCO_2/kWh$[34] for unit of electricity produced, while Germany (the second most emission-intensive country in the group studied) had an emission intensity of 372 $gCO_2/kWh$[35]. Moreover, among the five countries assessed, Poland auctions the highest percentage of allowances.

**Figure 9. Allocated allowances and verified EU ETS emissions in Poland, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

All EU ETS revenues flow into the general budget. The government states that, under the principle of "material unity of the budget", funds are not earmarked, meaning that EU ETS revenues are typically not tagged or traced separately. As a result, Poland reports any spending that can be interpreted as contributing to energy and climate transition objectives. Therefore, in practice, disbursement of actual EU ETS revenues from the general budget is broadly managed by the Ministry of Finance.

The scope of reported programmes is wide and lacks clearly defined spending priorities. The Polish government also interprets the ETS Directive's criteria for "leveraging financial support" very expansively. As a result, it also reports private-sector expenditures triggered by regulation – as opposed to only direct state financial contributions – as eligible spending (for example,

[33] For comparison, in 2024, according to Eurostat, the total general government revenue in Poland amounted to EUR 365 billion.
[34] Data from Ember European Electricity Review 2024.
[35] Ibidem.

the value of green certificates or the costs of contracts for difference passed on to consumers' energy bills).

The need to reinforce the governance system for allocating and managing EU ETS revenue is widely acknowledged in Poland. Since the early 2020s, successive governments have been drafting the legal framework for establishing a dedicated Energy Transition Fund intended to improve transparency and strategic use of these resources. However, competing policy demands and significant fiscal pressures following the COVID-19 pandemic and the war in Ukraine have continually delayed the final decision to launch the fund.

**Table 3. Spending reported for domestic measures as a share of EU ETS revenues generated in Poland in a given year**

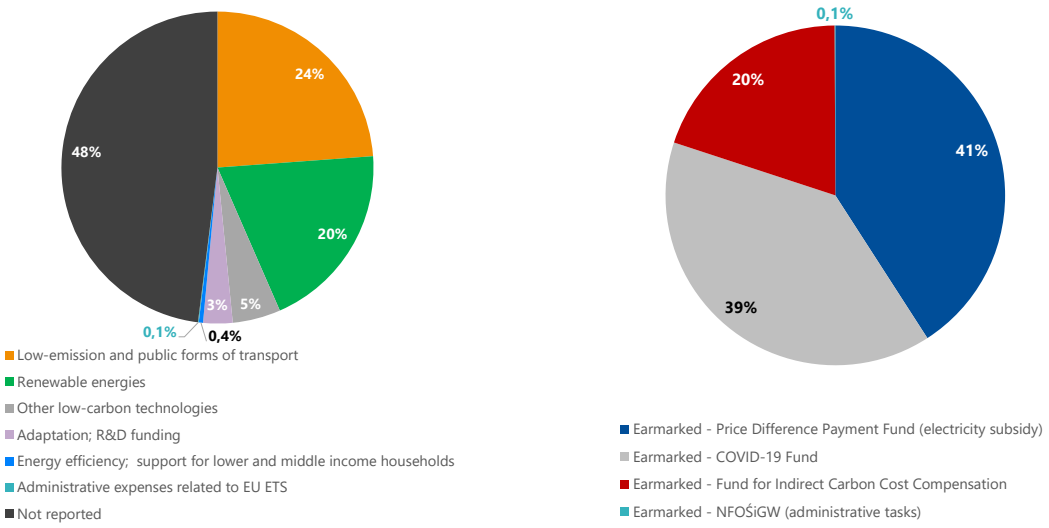
| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| 50% | 50% | 52% | 92% | 95% |

*Source: Reform Institute based on EEA Reportnet 3.*

## Key findings

An assessment of Poland's reporting practices – together with a comparison against the domestic legal framework and the actual financing flows recorded at the national level, including statutory provisions, categories of expenditure reported to the European Commission, and financial statements of institutions administering the funds[36] – shows that only a minimal overlap exists between real-world allocation decisions and what Poland formally reports.

**Figure 10. Revenue spending in Poland as reported to the European Commission (left) and as earmarked by domestic legislation (right) in 2022.**



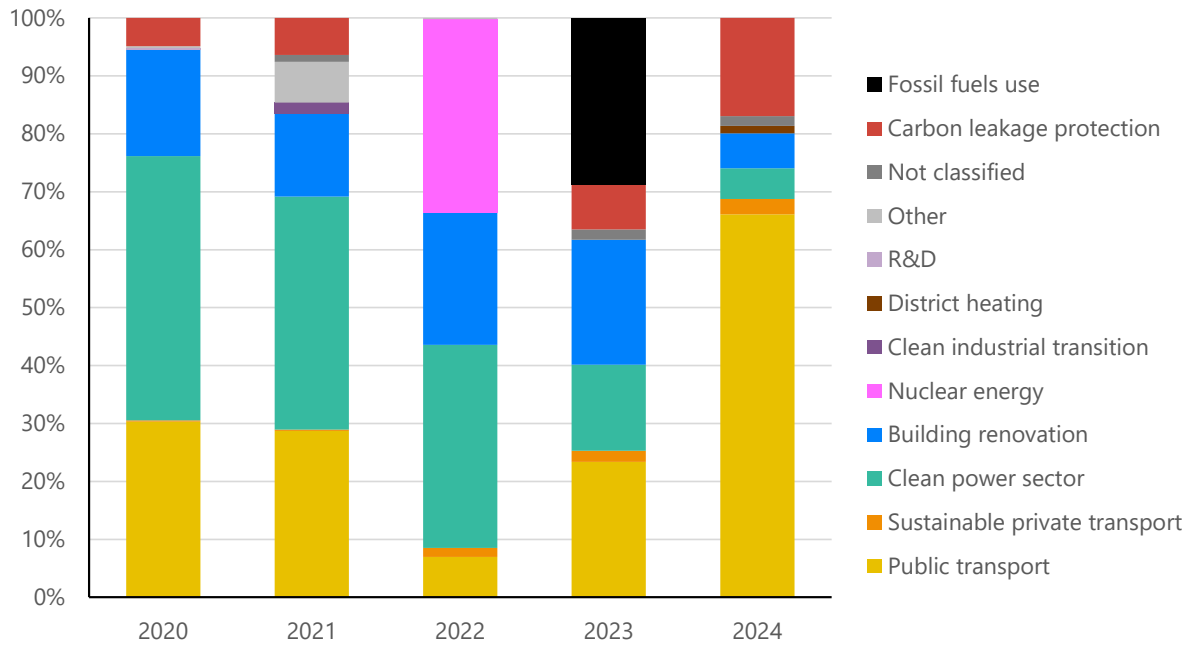

*Source: Reform Institute based on EEA Reportnet 3 and the Polish Supreme Audit Office report*

[36] See the report by the Supreme Audit Office (NIK) on the management of funds from the sale of greenhouse gas emission allowances and the the Reform Institute review of climate-related public expenditures (p. 18) for more details.

In effect, two parallel processes operate side by side: first, the internal management of EU ETS-derived financial flows within the domestic public finance system; and second, the submission of formally required figures to comply with the Directive's reporting obligations, which represent financial equivalents of EU ETS spending (as permitted by the Directive) rather than a literal account of how revenues are spent.

No consistent set of spending priorities emerges from the available evidence. Although the "Clean Air" (*Czyste Powietrze*) and "My Electricity" (*Mój Prąd*) programmes – which support single-family home renovations and photovoltaic installations for households – remain among the top ten programmes in terms of expenditure, the national fund responsible for administering these schemes (National Fund for Environmental Protection and Water Management, NFOŚiGW) has received a direct transfer of EU ETS revenues for clean investment purposes only once, in 2019. That single transfer amounted to roughly 1.2% of all EU ETS revenues accumulated by Poland during the 2013–2023 period, highlighting the very limited reported role that direct budgetary allocations have played in financing these flagship programmes.

**Figure 11. The EU ETS revenue use declared by Poland as disbursed on domestic measures, by category, 2020-2024.**




*Note: Only disbursed funds were analysed in the given year. The maximum of 15 programs per year with budgets above EUR 500 000 were categorized. Spending on international and third countries' measures is not included in the analysis.*

*Source: Reform Institute based on EEA Reportnet 3*

The largest single programme reported in 2021, 2022, and 2023 was the green certificates scheme. In basic terms, this mechanism incentivises renewable electricity production by obliging large energy companies to redeem green certificates equal to a set share of their output. To meet this obligation, energy suppliers purchase certificates from renewable installations, which earn them for every unit of renewable electricity generated. These costs, therefore, arise entirely from regulatory compliance and are borne by market participants

rather than financed through the state budget. Nonetheless, Poland includes these expenditures in its reporting, categorising them as contributions to energy transition objectives despite their indirect nature and lack of direct linkage to EU ETS revenue streams.

Across the entire period reviewed, several programmes displaying very high annual expenditures appear in the reporting only sporadically, featured in a single year despite being operational across several. This pattern strongly suggests that the selection of reported programmes is not meaningfully connected to the actual use of EU ETS revenues but instead relies on selectively drawing from an already existing set of government policies that broadly correspond to climate- or energy-related objectives. This conclusion becomes even more evident when comparing funding levels and revenue sources across the years in which these programmes were active, as the data reveal no consistent or structured relationship between EU ETS inflows and reported spending.

The considerable flexibility with which Poland compiles its reports is further illustrated by the sharp fluctuations in both the volume and categories of programmes included from one year to the next. For instance, the 2023 report presented only eight programmes, a striking contrast to the approximately one hundred programmes listed in the 2022 submission. Once again, no coherent spending strategy can be discerned.

During the third EU ETS phase, Poland made extensive use of the Article 10c derogation, which enabled the free allocation of allowances to major industrial emitters. Although Poland retained the right to use the same derogation in the fourth phase, it opted instead to auction the allowances, with the government announcing its intention to establish a national Energy Transition Fund that would be financed from these revenues.

## Good practices

National Fund for Environmental Protection and Water Management (NFOŚiGW) provides a well-established institutional framework that could be used in the system of managing the EU ETS revenues on a regular basis in the country.

Even though most of the reported programmes were not strongly aligned with the objectives stated in the EU ETS Directive there were examples of model programmes achieving the objectives and beyond. Those model programmes could serve as the base for designing the systematic plan of spendings from not only EU ETS1 revenues but also in the new ETS2 system. The two most prominent programmes listed in the reporting are the "Clean Air" and "My Electricity" programmes, designed to support the PV installations in single family homes and the buildings renovation (to improve their energy efficiency). In recent years, both programmes were able to significantly speed up the energy transition in Poland and strengthen the acceptance of transition by delivering substantial socio-economic benefits. Since "My Electricity" programme launch in 2019, the number of beneficiaries surpassed 700 000[37], delivering half of the increase in number of PV prosumer installations between 2019 (nearly 150 000, c.a. 1 GW capacity) and 2024 (1.5 million, c.a. 12,7 GW capacity)[38]. Between 2018 and 2015, around 451 thousands coal fired boilers were replaced thanks to the "Clean Air"

[37] See overview of the programme evolution here.
[38] See more details in the report by Energy Regulatory Office.

programme and overall 551 thousands investments with the aim of improving the energy efficiency of the single-family houses were financed[39].

The Polish government has proven its capacity for designing a long-term policy for recycling carbon pricing revenues in an inclusive manner during the ongoing preparations of the Social Climate Plan (SCP). Despite voicing concerns about the implementation of the ETS2 system, as of December 2025 Poland is among the top performers when it comes to the quality of SCP preparation[40].

### Challenges and areas for improvement

The key challenge in the Polish system for managing the EU ETS revenues is complete lack of earmarking combined with the unstructured approach to spending the funds. While there exist some specific legal provisions or fiscal decisions regarding the allocation of the EU ETS revenues to climate-related objectives (e.g. to cover administrative costs or support a specific measure via dedicated fund) they correspond only to the marginal portion of the spending. Moreover, the lack of the earmarking further impacts the consistency of the architecture of the revenues managing system and in effect makes even the responsible authorities unable to track and connect specific revenues streams to specific spending programmes.

Current design of EU ETS revenues management allows to report the expenditures that are only induced by regulatory obligations (e.g. private purchases of green certificates), rather than actual public spending, which significantly inflates reported climate-related expenditures and undermines credibility of the whole exercise. This reporting practice does not provide an accurate account of domestic policies in the field of the energy transition and undermines the consistency and comprehensibility of the system of public sector revenues and expenditures.

The EU ETS revenues reporting submitted by the Polish state authorities vary widely both in depth and in extent to which the spending programmes are described in the reporting. Some reported programmes lack accessible data, clear specification or functioning reference links. Fragmented documentation and further data inaccessibility makes it difficult and at times impossible to retrieve information on the specific links projects or actions that were claimed as financed through EU ETS revenues.

Beyond the issues of the lack of both structure of the system for managing the EU ETS revenues and transparency of the repotting, there were cases of measures explicitly contradicting the objectives of the EU ETS policy. The most prominent case of such measure is the programme financing the "compensations for certain gas consumers" reported in 2023. Other examples include the "Clean Air" programme which has not ensured lack of support for fossil fuels in the past (by supporting both replacement of the coal-fired boilers with new ones and installation of new gas-fired boilers until programme reforms in 2022 and 2025, respectively) and other such programmes which descriptions indicate the possibility of support for the fossil fuels use (mostly entries representing individual building renovation projects predominantly reported in 2021).

Poland reported one programme "Fund for Compensation of Indirect Emission Costs" (*Fundusz Rekompensat Pośrednich Kosztów Emisji)* that could be categorised as contributing to carbon

[39] Based on the information provided by the programme operator.
[40] See Social Climate Fund Tracker coordinated by REScoop.eu and CEE Bankwatch for more details.

leakage protection via the indirect carbon cost compensation. Although the programme financing was inconsistently reported only in the years 2020 and 2021, the programme operated also in remaining reporting years. At the same time, the Polish government has not provided consistent support for measures which enable structural decarbonisation of industry, with the only programme supporting clean industry focusing on EV supply chain support.

As highlighted by the Supreme Audit Office (NIK), the current system of EU ETS revenue reporting prevents evaluation of its impact on emission reduction[41]. Lack of clear indicators or attribution to ETS revenues makes it impossible to assess the effectiveness or the value of spending for reaching the climate policy objectives. This stands in stark contrast to the domestic standard applied by NFOŚiGW, which measures environmental impacts of its investments and regularly reports it for the programmes which it manages.

### Recommendations

- **Finalise the work on launching a dedicated Energy Transition Fund financed via EU ETS revenues**. This solution can leverage existing institutional architecture in Poland (including NFOŚiGW) and enables clear traceability of carbon revenues, reduces reporting inconsistencies, and provide a stable, multi-year financing base for decarbonisation investments. Early launch of the Fund will also allow to prepare it for utilising the future ETS2 revenues. Increasing the effectiveness of the revenues spending and its visibility will help to build social acceptance for the ETS2 implementation.
- **Develop a broader strategy for utilising EU ETS and ETS2 revenue**. It can serve as a basis for the functioning of the Energy Transition Fund. Build upon the positive momentum established during the preparation of the SCP.
- **Narrow the definition of what qualifies as energy transition spending.** Especially action is needed in this are for the purposes of the reporting to the European Commission. This should exclude private sector expenditures induced solely by the regulatory obligations and measures supporting fossil fuels use.
- **Review the domestic spending on energy-related goals**. With the evaluation clear and timely pathway to phase out fossil fuel subsidies should be stablished.
- **Shift the focus of industrial support to structural decarbonisation**. Currently, the focus of the support is short-term, mainly in the form of the indirect carbon cost compensation. More ETS revenues should be directed towards co-funding investments which structurally reduce emissions in industry, including electrification.

[41] See the report by the Supreme Audit Office (NIK) on the management of funds from the sale of greenhouse gas emission allowances for more details.

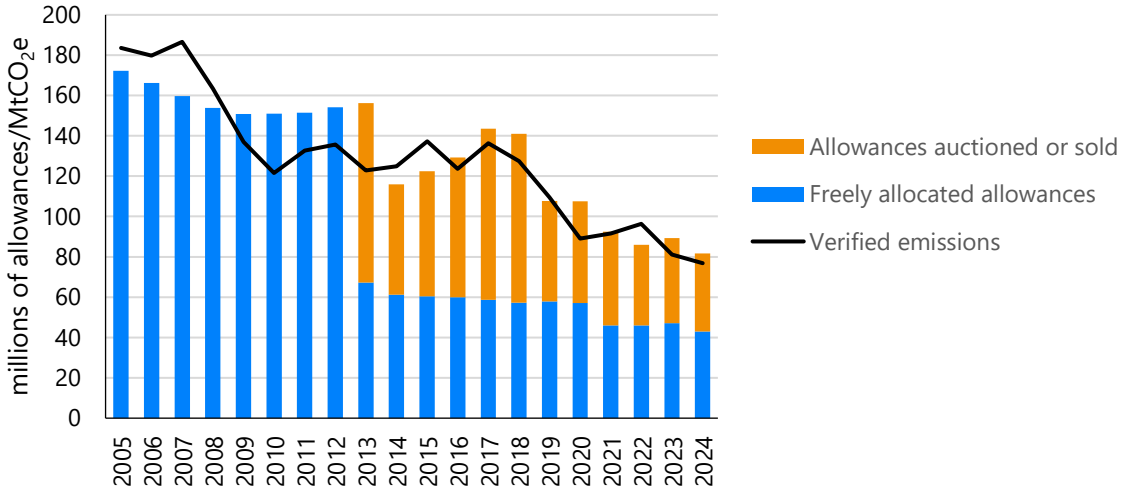
## 2.3 Spain

### Context

Spain received 7% of EU ETS revenues in 2024, amounting to EUR 2.58 billion (10% share in the allowances directly sold by the Member States). It ranked as the fourth in the EU in terms of the volume of auctioned allowances[42].

In Spain, before each year, the EU ETS revenues are estimated and earmarked for energy and climate initiatives up to a chosen limit. Until 2018, the cap equalled EUR 500 million, and after that year it was increased to EUR 1.1 billion[43]. The rest of the revenues are directed to general budget from where they may be allocated to climate-related projects[44]. Part of the revenue spending is often reported as postponed (52% for future spending from 2024 revenues[45]). It is distributed mainly by *Ministerio para la Transición Ecológica y el Reto Demográfico - Secretaría de Estado de Energía* (Ministry for the Ecological Transition and the Demographic Challenge – State Secretariat of Energy).

**Figure 12. Allocated allowances and verified EU ETS emissions in Spain, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

According to the national law, the revenues should be used for achieving the energy transition and climate action goals[46]. At least EUR 450 million must go to financing of the costs of electricity system in relation to promotion of the renewables, and a maximum of 30% of the total revenues can go to measures with a social impact that support the just and fair transition. Also, in line with the EU-level legislation (Article 10a(6) of the EU ETS Directive), 25% of the revenues can go to the compensation of indirect carbon costs as a carbon leakage protection measure.

[42] For comparison, in 2024, according to Eurostat, the total general government revenue in Spain accounted to EUR 674 billion.
[43] As noted in the Climate Action Progress Report 2022.
[44] As described in Spanish NECP.
[45] As noted in the Climate Action Progress Report 2025.
[46] Law 7/2021 of 20 May on climate change and energy transition, Art. 30(4).

**Table 4. Spending reported for domestic measures as a share of EU ETS revenues generated in Spain in a given year**

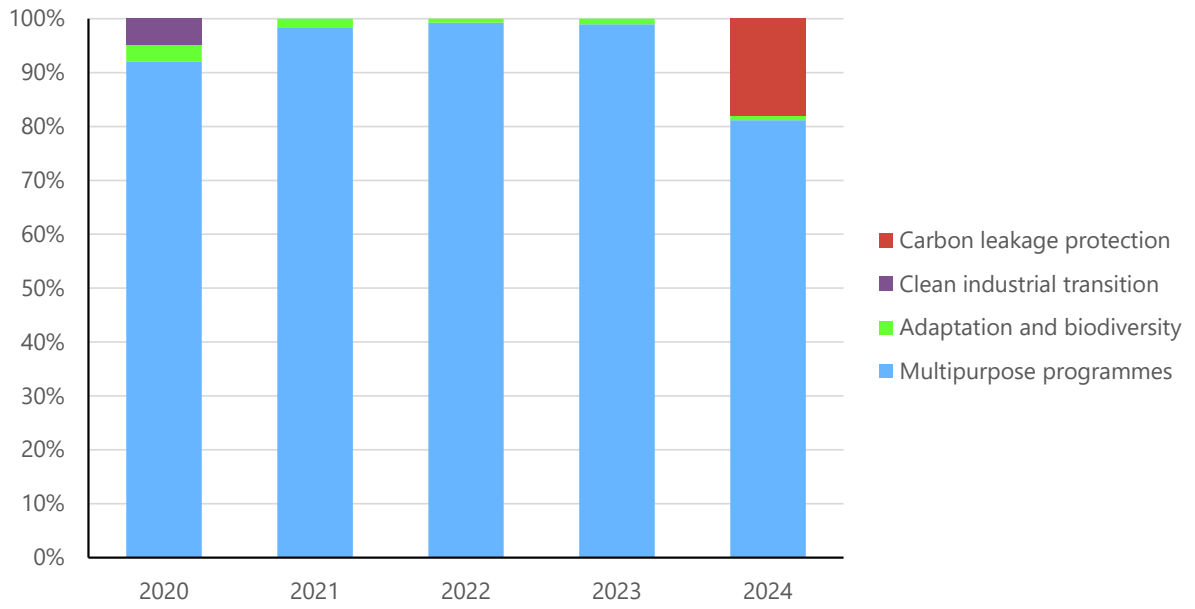
| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| 88% | 82% | 63% | 31% | 96% |

*Source: Reform Institute based on EEA Reportnet 3.*

## Key findings

In Spain's reporting covering 2020-2024, the vast majority of distributed funds (reaching 99% in 2022-2023) was reported as *Sistema Eléctrico - Energías Renovables* (Electricity System - Renewable Energy). The purpose of the programme is described consistently over the past years as "financing of the costs of the electricity system provided for in the Electricity Sector Act, relating to the promotion of renewable energies", and the type of use is noted as "development of renewable energies to meet the commitment of the Union". The reports for 2023 and 2024 categorise it as "1. Energy supply, grids and storage (e.g. renewables, self-consumers)".

**Figure 13. The EU ETS revenue use declared by Spain as disbursed on domestic measures, by category (2020-2024).**




*Note: Only disbursed funds were analysed in the given year. Spending on international and third countries' measures is not included in the analysis.*

*Source: Reform Institute based on EEA Reportnet 3*

The above-mentioned Electricity Sector Act[47] is a general legislative act that regulates the electricity market in Spain and lists wide range of eligible measures, including, among others:

[47] The Electricity Sector Act can be found here.

- compensation for transmission and distribution grid activities;
- compensation for generation from renewable energy sources, high-efficiency cogeneration and waste;
- capacity mechanisms;
- demand management measures;
- financing of the General Plan for Radioactive Waste.

Unfortunately, the reporting lacks clear information what specific measures under the name *Sistema Eléctrico – Energías Renovables* were financed in practice. The initiative was categorised as a multipurpose as its aim is defined in the frame of the Electricity Sector Law and the funds can go to different purposes inside the Law's boundaries.

The 2025 Climate Action Report[48] sheds some light on the purpose of the initiative in 2024. The European Commission's evaluation notes that in 2024 the Electricity Sector Law allocated EUR 1.1 billion for feed-in tariffs for renewable energy. This corresponds directly to the *Sistema Eléctrico - Energías Renovables* which in the reporting for 2024 had the same volume of budget allocation. However, in the previous editions of the European Commission yearly report there is no similar explanation that could lead to precise identification of the measures.

In this report, the programme is categorised as a multipurpose as its aim is defined in the frame of the Electricity Sector Law and the revenues can be allocated to different purposes inside the Law's boundaries. In particular, based on available information, it is not possible to identify the split between: 1) a supply-side support for clean energy producers and network operators, 2) a supply-side support for conventional producers (e.g. CHP, capacity mechanisms), 3) a demand-side support measures which lower electricity bills by substituting a part of the tariff (similar to e.g. German measure which abolished EEG surcharge).

Important change is visible in reporting for 2024 which included for the first time clearly stated "compensation of indirect costs" (EUR 244 million). It decreased the overall share of revenues in 2024 dedicated to *Sistema Eléctrico – Energías Renovable* (which was the same in nominal terms – EUR 1.1 billion) to 81% from 99% in 2023. The change showed a bigger picture of the EU ETS revenues spending in Spain.

Although in the years 2020-2024 the share of funds used for the other measures reported is low, it is worth to emphasise the important role of the EU ETS revenues for continuous action towards adaptation and biodiversity in Spain. From 2020 to 2024, between EUR 8 million and EUR 35 million yearly was spent from the ETS revenues for the purpose of adaptation and biodiversity action, working towards the achievement of the objectives of the National Plan for Adaptation to Climate Change. The revenues in the PIMA projects[49] leverage actions on all administration levels through public calls available on local level and managed by diversity of public entities[50]. Another important beneficiary of the EU ETS revenues in the area is the Biodiversity Foundation which promotes more sustainable socio-economic model considering nature more significantly.

[48] See more in Climate Action Progress Report 2025.
[49] See more here.
[50] See more here.

The share of spending reported significantly increased between 2023 and 2024 (from 31% to 96%). It could be a result of the 100% requirement introduced on the EU-level in 2023, but that has not been proved. Interviewed experts did not recognise any clear change in national spending because of the requirement.

## Good practices

One of the consistently used programmes in the area of climate adaptation, which is mentioned in the Spanish NECP[51], is PIMA Adapta which is managed on two levels – not only on general state administration level but also by territorialised PIMA funds managed through the Autonomous Communities. This is an interesting, good practice in spending the ETS revenues clearly on a specific aim of climate adaptation. Also, it shows that managing the money closer to people on regional and local level is possible with ETS revenues.

Just Transition Institute has been one of the ETS revenue purposes noted in the 2023 reporting when it received EUR 24.5 million. The money was allocated with the aim of "promotion of skill formation and reallocation of labour in order to contribute to a just transition to a low carbon economy". The Institute established in 2020 helps in preparing and developing energy transition in the most dependent on fossil fuels in energy generation regions. It not only helps in the process of preparing Just Transition Strategies in the regions via technical support but also works with regional and local actors on projects that help to transition away from fossil fuel production on local level[52]. The ETS revenues spent for this purpose can bring more socially accepted transition which clearly impacts the situation of the people on ground, and by that, to increase the acceptance of carbon pricing, including ETS2.

Connected to the above measure, another good practice is the legal provision that the share of the total EU ETS revenues can go to social measures. However, the 30% limit seems too low, taking into account the growing needs in the area of just and fair transition.

Another good practice from Spain, underlined by the European Commission in its report on use of ETS revenues[53] and present in 2021 reporting, is the Carbon Fund for a Sustainable Economy (FES-$CO_2$) which supported the private sector in clean technology development by purchasing credits which represented verified emission reductions.

## Challenges and areas for improvement

Main challenge considering the Spain's ETS EU reporting is the uncertainty regarding concrete measures that are financed under *Sistema Eléctrico – Energías Renovables*. Without clear instruments noted in the reporting it is very challenging to identify the main areas of investment and compensation, as well as the beneficiaries.

The other main challenge is lack of earmarking of the revenues after reaching the EUR 1,1 billion cap as the rest of the revenues go to general budget and there is a significant drop in transparency of the reporting, making it more challenging to connect the revenues with spending.

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[51] See full text of the Spanish NECP here.

[52] More about Spain's just transition governance framework: From phasing-out to phasing-in: lessons from Spain's just transition governance framework

[53] Use of EU ETS auctioning revenues in the Member States - Publications Office of the EU

## Recommendations

- **Make the reporting more detailed.** The most important record in the reporting – the *Sistema Eléctrico – Energías Renovables* – should be divided in the more detailed entries covering smaller programmes with clear purpose and area of intervention to increase the transparency. It would help the society and the expert community in understanding of the use of revenues and what in practice do they add to sustainable development and climate action in Spain.
- **Increase the just and fair transition spending.** The 30% spending limit on social measures in the area of just and fair transition should be increased. With the increase of flexibility more measures should focus on public investments close to the citizens to increase the social acceptance of the ETS, including the implementation of the ETS2. Tangible social support financed thanks to the ETS2 for particularly vulnerable parts of society in building and transport sectors can significantly mitigate the negative effects of its implementation, permanently resolve fossil fuel dependence and tackle the issue of already existing energy and transport poverty. One of the measures should be an increase in funding from the EU ETS revenues (including ETS2) for the Just Transition Institute which is an important institution in the just transition governance in Spain.
- **Increase the cap for earmarked revenues.** Spain should review the scale and scope of the carbon pricing revenues utilisation ahead of the ETS2 introduction. The cap for earmarked revenues should be increased and the scope of activities supported should be broadened to include measures addressing sectors covered by ETS2. These changes are consistent with the recommendations described above: more granular reporting of supported programmes and more flexibility to support social measures will make it easier to plan the utilisation of the domestic revenues from the new carbon pricing system.

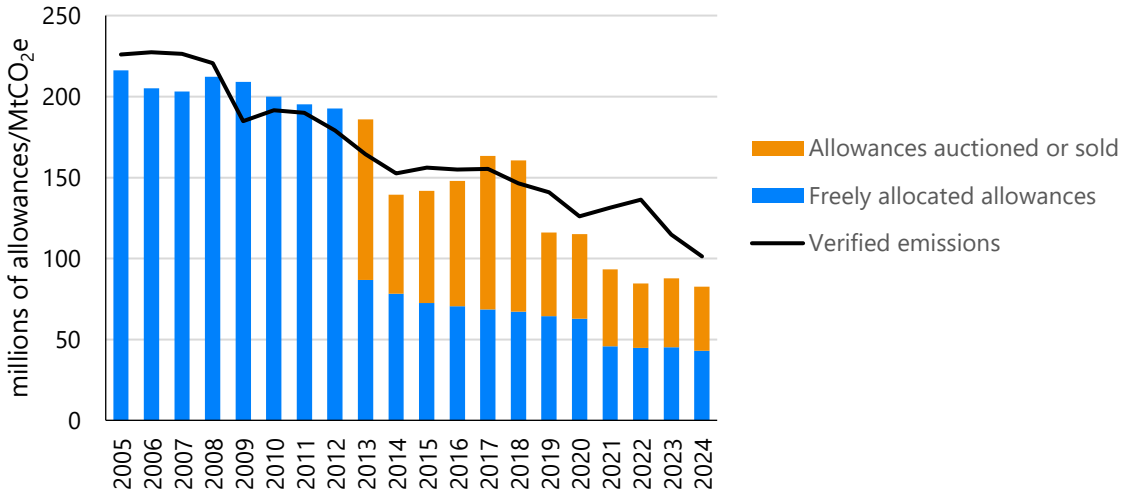
## 2.4 Italy

### Context

Italy received 7% share of EU ETS revenues in 2024 (EUR 2.56 billion, 10% share in the allowances directly sold by the Member States). It ranked third in the EU in terms of the volume of auctioned allowances[54].

The management of the auctions is entrusted to the *Gestore dei Servizi Energetici* (GSE, Energy Services Manager) – a public company, wholly owned by the Ministry of Economy and Finance. Auctions management is only one of the many areas of action for GSE, which was created in order to support the promotion of the renewable energy sources and energy efficiency, by providing data and economic analysis, issuing certificates, and offering economic incentives for renewables uptake. After the auction, GSE conducts verification measures, and then redirects the funds to specific accounts, following the national law.

**Figure 14. Allocated allowances and verified EU ETS emissions in Italy, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

Since 2013, the funds generated by the EU ETS have been clearly earmarked by Italian national legislation. In line with the EU ETS Directive provisions at the time, 50% were assigned to actions related to reduction of GHG emissions and adaptation to climate change: 35% were managed by the Ministry of the Environment, Land and Sea, and 15% - the Ministry of Economic Development. The remaining 50% of the EU ETS revenues were allocated to the Fund for the Amortisation of State Bonds.

In 2024, this allocation was changed, as the national law was revised to implement the changes in the EU ETS Directive that were adopted in 2023. However, the national revision does not take into account the key obligation in the revised Directive – to allocate 100% of resources coming from the European carbon pricing scheme for purposes related to climate change mitigation and adaptation. Italy still assigns 50% of its EU ETS revenues to Fund for the

[54] For comparison, in 2024, according to Eurostat, the total general government revenue in Italy accounted to EUR 1.0 trillion.

Amortisation of State Bonds[55] - equivalent to using the money to service public debt, which is not an eligible spending purpose under Article 10(3) of the Directive. The allocation of the remaining revenues changed only marginally after the reform. The second biggest share – 35% – is reserved for the Ministry of Environment and Energy Security (successor of the Ministry of the Environment, Land and Sea). The Ministry of Enterprise and Made in Italy (formerly the Ministry of Economic Development), and the Ministry of Infrastructure and Transport both receive an equal share of 7.5%.

Another notable aspect of the EU ETS revenue management in Italy is the fact that administrative and verification procedures related to the auction revenues are very lengthy. For that reason, the money is available to the ministries responsible for spending it no sooner than two years after it was generated[56]. What is more, the funds are often allocated across several financial years, so in fact spending is often delayed by more than two years – one of the more extreme examples is the money reported as spent in 2024 for enhancing energy efficiency in public buildings, which was generated in 2014.

**Table 5. Spending reported for domestic measures as a share of EU ETS revenues generated in Italy in a given year**

| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| 24% | 12% | 8% | 5% | 2% |

*Source: Reform Institute based on EEA Reportnet 3.*

## Key findings

The reports submitted to the European Commission by Italy contain information not only on the funds that were actually spent, but also on the allocation decision. That is why some of the programmes listed are categorised as 'disbursed', while some – as 'committed'. This is a distinctive characteristic of Italian reporting, differentiating it from other countries in the sample. Given that studies highlight a significant mismatch between the scale and the structure of spending between the funds categorised as 'committed' and 'disbursed'[57] – which indicates a planning gap in management of the funds – the spending reported as 'committed' was excluded from this analysis.

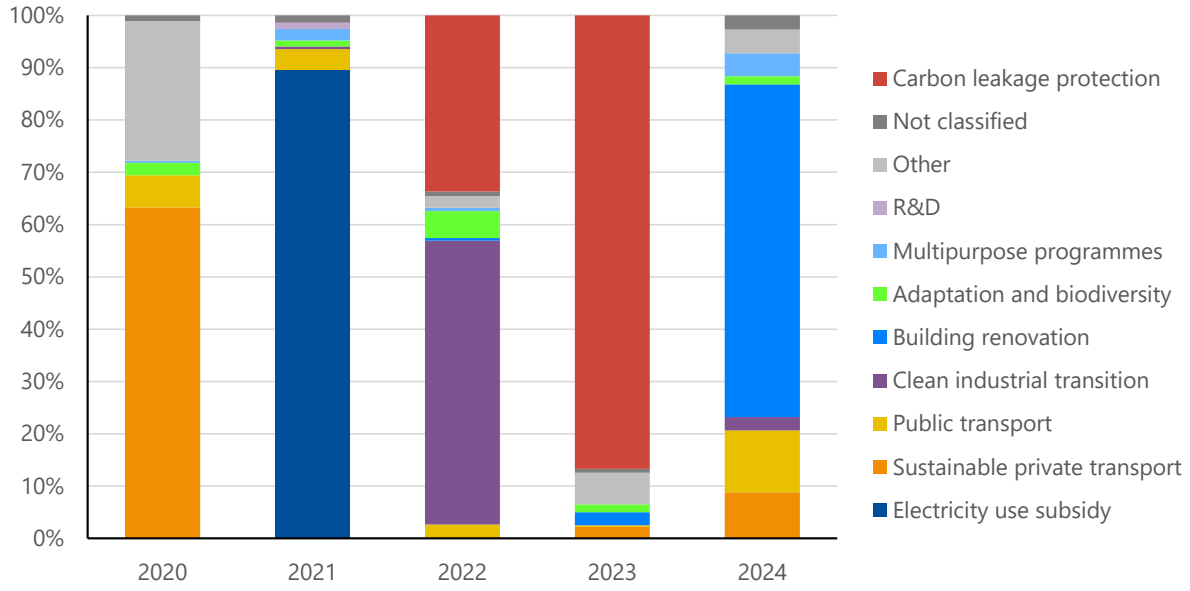
The administrative delays and the allocation of 50% of the EU ETS revenues to State Bond Amortisation Fund result in another specific feature of reporting in Italy – it covers a very small portion of the actual revenues (see table above). Up until 2023, the reports should cover expenditure equivalent to 50% of the EU ETS revenue, and after that – 100%. Meanwhile, between 2020 and 2024 there was no case when this reporting requirement was met[58]. This

[55] See more details in the revised version of the Decreto Legislativo 9 giugno 2020, n. 47.
[56] As follows from Bellisai F., Scano C. (2025), *EU ETS auctions in Italy. Transparency and traceability of revenues, ECCO, 2025*, ECCO Institute.
[57] Ibidem.
[58] As explained, the percentages in the table do not account for reported spending that was 'committed', but not 'disbursed'. However, even if it did, the reporting would still be highly insufficient, as the percent of revenues covered by reporting each year would be within the range of 4% to 38%.

problem is amplified by strict approach to intertemporal earmarking – that is, allocation of revenues generated in one year to a multiannual programme results in reporting these funds proportionally each year over the timeframe of the programme's duration. In other Member States, if revenues from a given year are allocated to a multiannual programme, they are usually only used to finance a portion of this measure in one year, and next year's revenues are then used to finance next year's contribution to the programme and so on.

However, procedural factors alone could not be responsible for very low reporting percentages in the five years assessed, with policy decisions also contributing to a very low traceability of the EU ETS revenues in Italy. It is also concerning that reporting has become less comprehensive over time, even as rising EUA prices increase revenues from the system – precisely when greater transparency and public scrutiny are needed.

**Figure 15. The EU ETS revenue use declared by Italy as disbursed on domestic measures, by category, 2020-2024.**




*Note: Only disbursed funds were analysed in the given year. The maximum of 15 programs per year with budgets above EUR 500 000 were categorized. Spending on international and third countries' measures is not included in the analysis.*

*Source: Reform Institute based on EEA Reportnet 3*

Among the reported measures in years 2020-2024, the following spending purposes take priority in Italy:

- electricity use subsidy – 24% of total reported spending,
- carbon leakage protection – 22%,
- sustainable private transport – 19%,
- clean industrial transition – 14%.

Unlike in other countries considered, the structure of reported spending is very unstable over the years. This is a partly due to reporting only a relatively small proportion of revenues generated, as then even one sizeable measure can alter the yearly structure.

That is the case of electricity use subsidy, which was paid out only in one year – 2021, but it was enough to dominate the spending structure not only in 2021, but also over the entire 2020-2024 period. The subsidy was paid out to actors in the power sector as a support mechanism during the recovery from COVID-19 pandemic crisis. The money was used to pay for incentive mechanisms for renewable energy and energy efficiency, which are covered by components of energy tariffs[59].

The carbon leakage protection measures (indirect carbon cost compensation), which were the second most prominent spending category, were also reported only over a limited time horizon – in 2022 and 2023. The money for was distributed through Energy Transition Fund for the Industrial Sector[60]. Eligible for funding were all companies which could document incurring indirect carbon emissions costs and were operating in sectors listed in European Commission's guidance document[61] (i.e. energy-intensive industry). What is more, this state aid mechanism was available also in 2024[62] and 2025[63], but the measure was not reported in 2024 submission to the European Commission.

The biggest contributor to programmes supporting sustainable individual transport was the programme "Buono Mobilità", reported in 2020. Its aim was to encourage the shift to low-emission and public forms of transport by subsidizing the purchase of bicycles, including pedal-assisted bicycles, and electric micromobility vehicles such as scooters, hoverboards, and Segways, or the use of shared mobility services. The category includes also spending for several projects involving the purchase of low-emission vehicles by the Carabinieri, but it is difficult to determine exactly which project is being referenced in the report and where the funding comes from.

In the Italian case, a notable share of revenue is allocated to multipurpose instruments. More specifically, the legal acts to which the financing is allocated often cover more than one topic, and neither the reporting nor the act itself specifies which topic the revenues should be used for. Examples of such cases include:

- Mitigation and adaptation activity in National Parks:
    - adaptation to climate change,
    - energy efficiency and renewable energy in buildings,
    - sustainable mobility services and infrastructure,
    - sustainable forest management,
    - technological innovation.
- Financing of energy efficiency interventions, sustainable mobility and adaptation in the smaller islands:
    - energy efficiency in public buildings,
    - sustainable mobility,

[59] See more details in Decreto Legge 25 maggio 2021, n. 73
[60] Ibidem.
[61] See European Commission's Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021 (2020/C 317/04)
[62] See more details here.
[63] See more details here.

    - climate change adaptation on small Italian islands not connected to the national electricity grid.
- Legislative decree n. 102/2014 (art. 15) – National Energy Efficiency Fund:
    - reduction of energy consumption in industrial processes,
    - construction and expansion of district heating networks,
    - efficiency of public services and infrastructures, including street lighting
    - building renovation.

Legislative Decree No. 102/2014 appears several times in the reporting across the period 2020–2023, with various articles from this legislation being referenced.

The revision of the EU ETS Directive and introduction of the requirement to spend 100% revenues on actions supporting transition to climate neutral economy did not bring about a substantial change in how Italy reports or spends its EU ETS revenue. There was a relatively small change in allocation of resources among the ministries responsible for managing the revenues, which came from the aforementioned amendment of national law – however, only 7.5% of revenues were assigned to a different ministry as a result.

## Good practices

The most important good practice is the fact that the EU ETS funds are clearly earmarked in the national law. Up until 2023, the earmarking was consistent with the EU law, as it allocated half of the revenues to be spent for instruments related to reduction of GHG emissions and adaptation to climate change. Even if it is hard to assess if the actual spending was aligned with the earmarking, as the transparency of spending is low, it is definitely a positive aspect of Italian management of the EU ETS funds.

In the context of reporting, when the specific legal act is mentioned as a legal base for spending the money, the reports often include information about the specific article of the relevant Decree. That is a good practice, since it makes it easier to locate the details about the instrument.

## Challenges and areas for improvement

The scope of the measures reported by Italy each year is insufficient, and the reporting becomes gradually less comprehensive. This may partly be due to procedural and reporting conventions; nevertheless, it creates a gap in transparency. There is also no indication in the reports if the funds which were not reported as spent have been transferred to the general budget and used to cover other expenses.

The transparency is further undermined by ambiguities in reporting, described in more detail above. As these ambiguities make the spending instruments difficult to identify in external sources, and therefore, study in more detail, it is also very hard to assess if the reported measures were effective, who were the beneficiaries, and whether the effects of the investment actually contribute to climate action.

There are also significant discrepancies between the years in which the revenues were generated, committed, and then finally disbursed, which indicates that planning of the spending is insufficient, and the absorption of the funds is very slow. This is partly due to the administrative procedures, which should be streamlined as soon as possible, to make sure that the money is spent optimally according to present transition needs.

The transparency of the submitted reports is low. The names of the programmes sometimes include only the information about the legal act that describes the spending purpose, so it is hard to understand what the money was used for without prior knowledge of how to access Italian legislation and without practice in reading it. Short descriptions are too concise to compensate for that, and no additional comments about the measures are provided. Several "agreements" (e.g. Agreement between Ministry of Environment and Carabinieri) have been reported between entities, yet it remains unclear what they refer to or how they are linked to specific expenditure. Moreover, given that there is no information about the original Italian name of the spending programme, and some of them are very generic (e.g. "agreement with an in-house company", reported in years 2022-2024), it is very hard to find more detailed information in external sources or identify the measure in them.

The spending priorities chosen by Italian government require revision. Firstly, the national law still states that 50% of the EU ETS revenues should be allocated to the Fund for the Amortisation of State Bonds. Secondly, the areas of intervention chosen as priority in the reported EU ETS revenue spending favour commercial and industrial actors – around half of the spending reported was distributed to them, that is measures in the areas of electricity use subsidy (which benefit also energy consumers in households), carbon leakage protection and the clean industrial transition. Moreover, at least 46% of the reported spending (electricity use subsidy and the indirect carbon leakage protection measures) were subsidies financing current expenses, and not structural investments in switch to clean technologies. To make sure that the money contributes to investments in transition to climate neutrality, and all of the citizens can benefit from the carbon pricing revenues, it is worth to consider changing the priorities, and use the resources to finance more action in the area of building renovation, public transport, and adaptation.

## Recommendations

- **Align the national regulations on the EU ETS earmarking to the EU ETS Directive**. Current national obligation of using 50% of the ETS revenues on green transition should be increased to 100%.
- **Ensure more rapid disbursement of allocated funds**. There should be more attention to administrative capacities related to the processing of the EU ETS revenues and regular review of the funds which were allocated but not disbursed for extended periods of time.
- **Increase the visibility and transparency of the EU ETS financing**. The information on supported programmes by the ETS revenues should be published online in an accessible format and introducing labels indicating that the programme was co-financed via EU ETS. This is crucial to increase the public acceptance of the ETS and the ETS2 implementation.
- **Direct more support from the EU ETS towards citizens**. The upcoming ETS2 implementation should be used to this aim, in particular low-income households, to ensure structural investments in just and fair transition.
- **Ensure that tax and tariff system aligns with decarbonisation and electrification goals**. The ETS2 implementation can be an impulse for the broader change. There are experiences that can be built on, including the COVID-19 relief for energy consumers and

similar structural measure in Germany (financing the costs of renewable energy sources and energy efficiency support mechanism via carbon pricing revenues)[64].

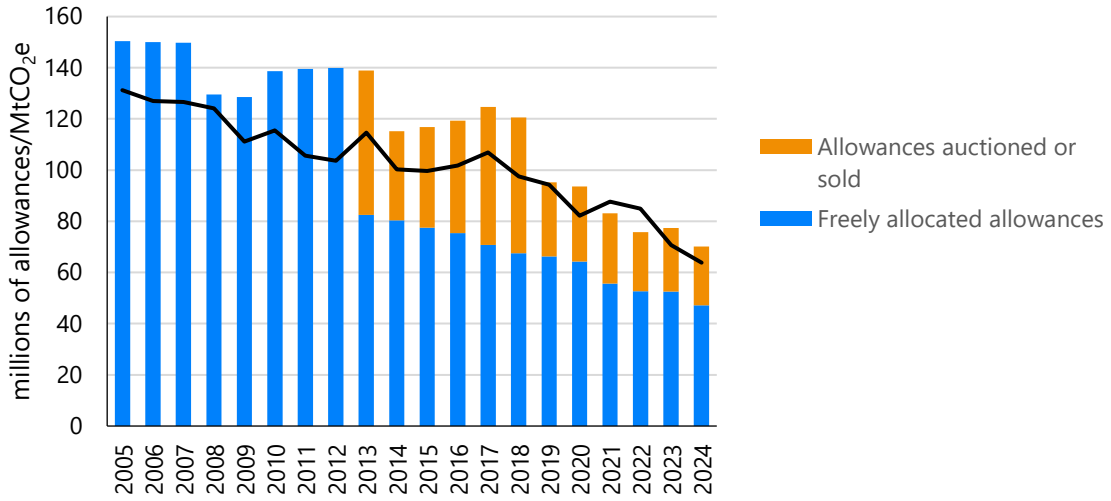
## 2.5 France

### Context

France was the recipient of 4% share of EU ETS revenues in 2024 (EUR 1.53 billion, 6% share in the allowances directly sold by the Member States). It ranked fifth in the EU in terms of the volume of auctioned allowances[65].

France reports 100% of ETS revenues as spent on the domestic climate action. The ETS revenues are earmarked up to certain limit (until 2023 the cap was EUR 420 million, currently it equals EUR 700 million), and everything above is further redistributed through national budget. Because of that, political expenditure decisions, including EU ETS revenues use, depend on French constitutional and legislation restrictions. Their major framework consists of decarbonization strategic roadmap, fr. *Stratégie Nationale Bas-Carbone* (SNBC), National Energy and Climate Plan, fr. *Plan National Intégré Énergie-Climat* (NECP, updated in 2024) and other acts of law and multi-annual energy transition programme, fr. *Programmation Pluriannuelle de l'Énergie* (PPE).

**Figure 16. Allocated allowances and verified EU ETS emissions in France, 2005-2024**




*Source: Reform Institute based on EEA EU ETS data viewer*

Strategically, public programmes covering housing, transportation, industries etc. need to align with NECP and SNBC. Responsibility for tackling the climate change is being cascaded from the highest state authorities to ministers, state agencies and even to local communities which – when they exceed the number of 50 000 residents – report their local carbon footprint and adopt local practices of decarbonisation.

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[64] Recommendation in line with Bellisai F., Scano C. (2025), EU ETS auctions in Italy. Transparency and traceability of revenues, ECCO, 2025, ECCO Institute.

[65] For comparison, in 2024, according to Eurostat, the total general government revenue in France accounted to EUR 1.5 trillion.

To better control expenditures in terms of climate goals, France introduced so-called "green budgeting" (*budget vert*) in public finances, providing the differentiation between climate-friendly and environmentally hazardous spending. Initially, in 2020, such tagging covered only part of the public finances, but it gradually spread to all areas, including state budget, public investments, fiscal instruments and strategic planning. The tagging is growing in importance, yet still it too rarely translates into political decisions – for now, green budgeting is mostly descriptive and analytical tool, considering that 91% of planned public spendings for 2026 were tagged as either climate "neutral" or not applicable[66]. At the same it does not translate into robust EU ETS revenue use transparency, as its share in the budgets of supported public programmes is either unknown or needs to be extracted from various sources.

In the recent years, France has faced political instability and fiscal challenges. The lack of a stable parliamentary majority supporting the government slows down legislative processes and makes it more difficult to introduce reforms which could improve measures financed via the EU ETS revenues.

**Table 6. Spending reported for domestic measures as a share of EU ETS revenues generated in France in a given year**

| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| 100% | 100% | 100% | 100% | 100% |

*Source: Reform Institute based on EEA Reportnet 3.*

## Key findings

In general, France applies earmarking mechanism to the EU ETS-financed expenditures, but reporting quality still needs improvement.

According to SNBC and PPE, building renovation is a priority for French climate policy. The government secures financing partly through the traditional budget and partly through EU ETS revenues. Most of the EU ETS revenues in France are directed to public programmes of renovation and insulation of residential buildings, which are crucial parts of the national decarbonization strategy.

*MaPrimeRénov* (before 2022: *Habiter Mieux*) administered by public operator ANAH (National Housing Agency, *L'agence nationale de l'habitat*), consists of majority of ETS spendings until 2024. Both programmes – especially *MaPrimeRénov'* – are long-term and highly visible public investments that enjoy broad recognition among households and stakeholders. Any modification, particularly those affecting eligibility, reimbursement rules or budget allocations, tends to attract significant public scrutiny and can at times trigger political controversy.

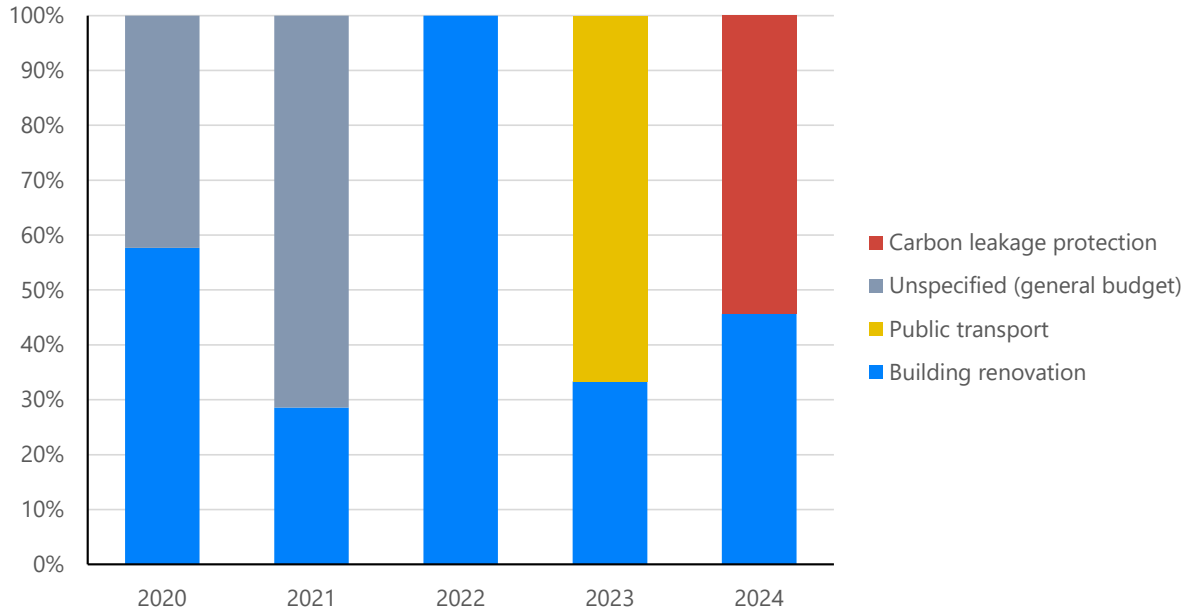
*Habiter Mieux* and *MaPrimeRénov'*, which together account for the majority of all ETS-sourced expenditures in France over the entire reporting period, finance "energy efficiency improvement in housing by providing grants for energy refurbishment, targeted in priority to low-income households". They fall under the categories in the reporting of 1) clean investments

[66] See more details in the French government's website : *Repères : actualités politiques, procédures et gestion budgétaires.*

subsidies for private technology switch (especially heating-wise: isolations, boiler replacements) with necessary technical advisory[67]. *MaPrimeRénov'* aid is one of the main pillars for advancement of energy efficiency in the context of building renovations, making it one of the crucial green targets in France's public policy[68].

In 2023, a major spending position was support for the public French railways SNCF ("aimed at improving the performance of existing networks and developing the national and European network", reported in 2024), showing France invests in clean investment in the public transport. ETS revenues provide only part of the financial support for these measures: both *MaPrimeRénov'* and SNCF receive funding from the general state budget, while *MaPrimeRénov'* was additionally supported through France Relance, the post-COVID recovery fund.

**Figure 17. The EU ETS revenue use declared by France as disbursed on domestic measures, by category, 2020-2024.**




*Source: Reform Institute based on EEA Reportnet 3*

Since 2013, domestic French regulations indicated that France's auction revenues are allocated to ANAH up to a certain limit, with the remainder going into the general state budget. That was reflected in the reporting years 2021 and 2022 when the French government declared part of ETS spending as the "general budget" category, according to above-mentioned finance laws. In the given years the limit was set to EUR 420 million. This limit later has been subject to several amendments and for 2023 and 2024 it was set at EUR 700 million[69].

Governance arrangements for these funds appear to have evolved over time, which has adversely affected reporting consistency, transparency and clarity. For example, the category labelled "general budget" was described differently across reporting years. In 2021-2022 it

[67] Until 2023/24 it was possible to obtain refunds for gas installations exchange and renovations, but it is not the case anymore – all subsidies must align with France's decarbonization goals.
[68] As follows from French NECP.
[69] As described in the French government's online publication about carbon markets.

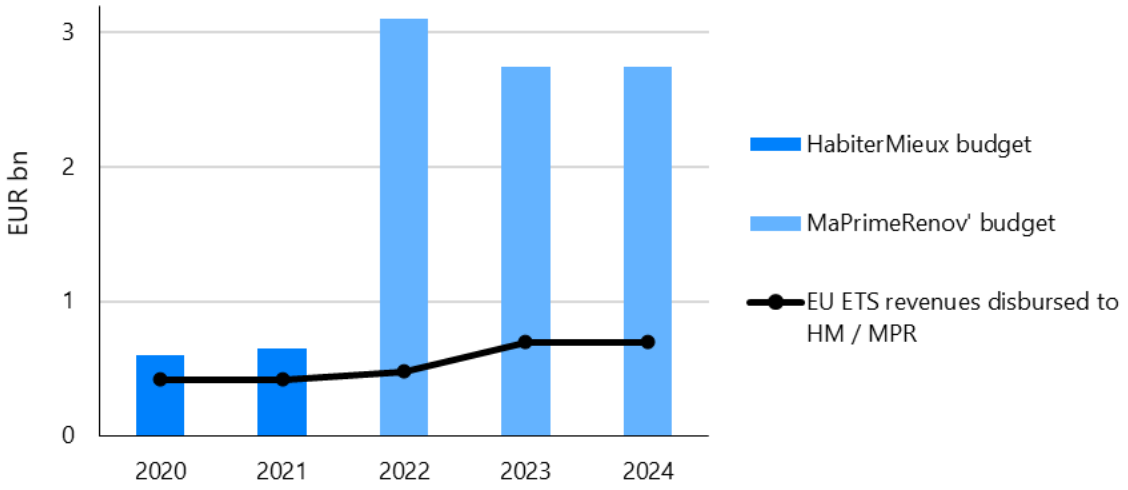
appeared as a standalone heading without any detailed breakdown of expenditures, whereas in 2023, the same label was used to designate funds associated with the *MaPrimeRénov'* programme (accompanied by the clarification that these resources were not formally earmarked as *MaPrimeRénov'*), yet were nonetheless spent on the programme through the general budget. At the same time, funds above the limit prescribed for ANAH in theory should be spent on other green investments (renewable energy, low-emission mobility, innovation), but they are not specified in the reporting, even though such programmes are described on the governmental site on climate policies, collecting information from Ministry of Ecological Transition, Biodiversity and International Negotiations on Climate and Nature, Ministry of Territorial Development and Decentralization, Ministry of Transport and Ministry of Urban Affairs and Housing.

According to the government report[70], the auditors recommend greater transparency and reporting of the ETS's share in individual programmes. A full annual breakdown of actual share of ETS-sourced funds in *MaPrimeRenov'* is lacking, but data from ANAH reports suggest that ETS revenues remain a key source for sustaining this programme[71]. Moreover, in December 2022 France obtained approval from the European Commission to use ETS revenues for state aid aimed at indirect carbon leakage protection. The measure's maximum total value was set to EUR 13.5 billion, with an aim to compensate the costs incurred by the companies between 2021 and 2030[72]. This scheme was implemented in 2023 (including the reimbursement of costs from 2021 and 2022). However, in the Reportnet data for the 2023 there is no additional information or reference to this spending. In 2024, the measure was reported, but the figures indicate that the share allocated to this purpose exceeded the permitted ratio compared to the EU ETS revenues generated by France in this year – the share stood at 44.1%, while the allowed value is 25%. In the obligatory explanation submitted to the Commission, France quoted low auctioning revenues due to low-carbon electricity generation, paired with relatively high share of electro-intensive industries as the reason for surpassing the 25% threshold[73].

Given that all the EU ETS revenues are directed to the general budget, and then are further redistributed, the question of additionality (whether availability of carbon pricing revenue increased green public spending or led only to reshuffling of funds) is difficult to resolve. On one hand, these resources funded pre-existing policy priorities, which have received funding also from other sources. On the other hand, the budgets of programmes for which France reported co-financing via EU ETS grew over the period, which supports the case for additionality. To complicate analysis further, there is no information provided by the French government on whether redirection of the EU ETS revenues to general budget had any impact on the decisions regarding increase in climate-friendly expenditures.

[70] Ibidem.
[71] Ibidem.
[72] More information available in the European Commission's press release.
[73] More information in the European Commission's Report on the functioning of the European carbon market in 2024.

**Figure 18. EU ETS revenues disbursed to support the French building renovation programmes and their total budgets, 2020-2024.**




*Source: Reform Institute based on EEA Reportnet 3 and ANAH yearly reports*

As a result, France's reporting on ETS revenues, while generally straightforward and adjusted over time, remains inconsistent. The categories used vary from year to year, making longitudinal comparisons difficult. Certain expenditures would benefit from clearer categorisation and more detailed descriptions, while some categories appear to be missing entirely. This lack of uniformity not only complicates trend analysis but also limits transparency regarding the allocation of ETS funds across policy priorities. Introducing standardised reporting templates or harmonised category definitions could significantly improve comparability and accountability.

## Good practices

In general, the information on how the EU ETS revenues are used in France is accessible. Main programmes are governed in a transparent manner, with relevant data and results of evaluations published online. There is plethora of various sources, including governmental materials, expert analysis and media commentary, that enables understanding of the public finance governance. Presented materials are often intersectoral, combining data and expertise across ministries, public agencies and knowledge domains. Such levels of transparency and commitment to public debate make climate policies better rooted and allow the public to participate in reshaping such policies.

Another good practice is *budget vert*. As the mechanism aligned with climate governance laws like SNBC, NECP or PPE, green budgeting is a tool that encourages strategic planning and shows intersection between climate and other public policies. Thanks to it French authorities track, describe and analyse public spending on a more descriptive level compared to many other Member States.

Programmes such as *Habiter Mieux* and *MaPrimeRénov'* were appreciated by the public. In our qualitative research, national experts highlighted both initiatives as key components of national support frameworks for energy transition, emphasizing their significant role in promoting energy efficiency and social equity.

In non-representative evaluation of *Habiter Mieux* it was established that majority of beneficiaries were content with scope and effect (especially living comfort level) of renovations, as well as the administrative side of it[74] – and about half of them implemented the renovation works beyond the scope possible to finance from their own resources. Later, *Habiter Mieux* was merged with *MaPrimeRénov*' and then expanded in scale – there was high social interest in housing insulation renovations and the results in terms of energy efficiency were appreciated.

Similarly to the case of *Habiter Mieux, MaPrimeRénov*' proved to be successful in terms of just transition – most of its beneficiaries were able to conduct renovations impossible to them without such public aid. It reached high numbers of French population: by September 2025, 2.7 million households received support for renovation thanks to the programme since its launch with almost 90% of satisfied beneficiaries[75].

### Challenges and areas for improvement

Experts interviewed during the study noted that transparency remains the area for improvement, particularly regarding the accuracy and granularity of data that would allow tracking how ETS revenues are allocated and what share they represent within programme budgets. Potential measures include either establishing a dedicated budget line for ETS-funded activities or introducing more robust accounting standards to ensure traceability of fund flows.

Another persistent challenge concerns incentivising comprehensive renovations rather than isolated minor works. For many beneficiaries, the upfront cost of applying for *MaPrimeRénov*' – even with state aid covering up to 90% of the total service price – is high. Due to that, some of low-income households' owners opt out completely, which creates class gap between potential beneficiaries[76]. Majority of others apply only for incremental improvements over several years, a process that is slow and discouraging in the long term, ultimately reducing the likelihood of achieving deep energy retrofits. Moreover, the experts identified regional inequalities in the accessibility of the programme[77].

While *MaPrimeRénov*' achieved broad uptake, its flexible design – including wide eligibility thresholds and simplified procedures – resulted in certain inefficiencies. There are not enough incentives for comprehensive deep renovations. As a result, a large share of supported projects focused on minor works: for example, in 2021 individual improvements and small repairs accounted for 86% of all interventions. This limited the programme's overall climate impact, as e.g. beneficiaries who replaced only leaky windows were often reluctant to undertake more comprehensive renovations later. As noted by the French Senate, "the results of *MaPrimeRénov*' are significant in terms of greenhouse gas reduction, but they are insufficient with regard to overall renovation as well as the reduction of energy consumption"[78]. In response, starting in 2024 the programme is being reoriented towards 'global renovations', with development of a new path "MaPrimeRénov' Parcours Accompagné" dedicated to applications for more extensive investments – such as full heating system replacements – strongly prioritised.

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[74] See evaluation of the Habiter Mieux programme for more details.

[75] Data comes from the review of MaPrimeRénov' programme in the third trimester of 2025

[76] See Vailles, C., Ousaci, S., (2024), *Observatory of conditions of access to the ecological transition, 2024 edition*, I4CE.

[77] Ibidem.

[78] Information comes from the French Senate's report on effectiveness of public policies on energy renovation.

*MaPrimeRénov*' faced several challenges as well. One of the most critical issues included multiple cases of frauds, with construction companies inflating the costs of construction services performed on the behalf of the program. Only in 2024, 44 000 applications were rejected because of it. ANAH made many efforts to prevent the frauds, but in result programme became complicated administration-wise, and the renovation companies, mostly small businesses, suffered from delays in the renovation's reimbursements. As demand for programme increased without any according budget adjustment, in 2024 the funds were already spent in the middle of the year[79]. In general, the pace of renovations and their total annual numbers are lower comparing to targets announced by government mostly due to above-mentioned administrative delays, leading to 38 court cases against ANAH, although in the end resolved in its favor[80]. These issues caused a temporary suspension of *MaPrimeRénov*' in 2025. On that occasion IPSOS run an opinion poll which results nevertheless expressed widespread public acclaim for the programme reaching 75% of research sample[81]. The programme responds to societal needs accurately, at the same time suffering mostly on the level of administrative efficiency.

## Recommendations

- **Review the governance of the carbon pricing revenues ahead of the ETS2 introduction**. The ETS2 revenues will mean a sharp increase in scale of funds to be disbursed. Even before this increase, the approach based on capped allocation of funds to a small number of funding schemes has led France to repeatedly redirect the revenues to general budget, departing from the logic of green budgeting and transparent revenue recycling. New governance arrangements such as a dedicated climate fund or significant expansion of the list of supported programmes need to be considered.
- **Make the reporting of the EU ETS revenues spending more consistent and descriptive.** The reporting should be more in line with the information found in other official sources on the EU ETS revenues published by the French government. Some of the expenditure streams are reported simply as allocated to national budget, it doesn't allow the reader to follow actual changes in the financing schemes. Report the measures financed from the EU ETS in a more descriptive way will allow the society and experts to follow the actual changes in the public policies enabled by the carbon pricing revenues and build the public acceptance of the ETS as a revenue-generating instruments.
- **Clearer and more transparent reporting of carbon leakage protection**. The absence of detailed data in this area prevents a robust assessment of the effectiveness of green public finance and raises concerns that such support may preserve high-emitting industrial activity without delivering corresponding environmental benefits.
- **Use a part of the upcoming ETS2 revenues on *MaPrimeRénov'***. Due to significant scale of *MaPrimeRénov'* and the fluctuation of the EU ETS revenues, the need for diversification of the renovation programme's funding sources is growing. Part of the upcoming ETS2 revenues can be used for this purpose, given that the scope of the new system corresponds with *MaPrimeRénov'* objectives. Socially rooted green transformation is the most sustainable and hence – systematically efficient one.

[79] More information available in the news report by France Info.
[80] This information comes from ANAH's press release.
[81] As follows from the opinion poll conducted by IPSOS.

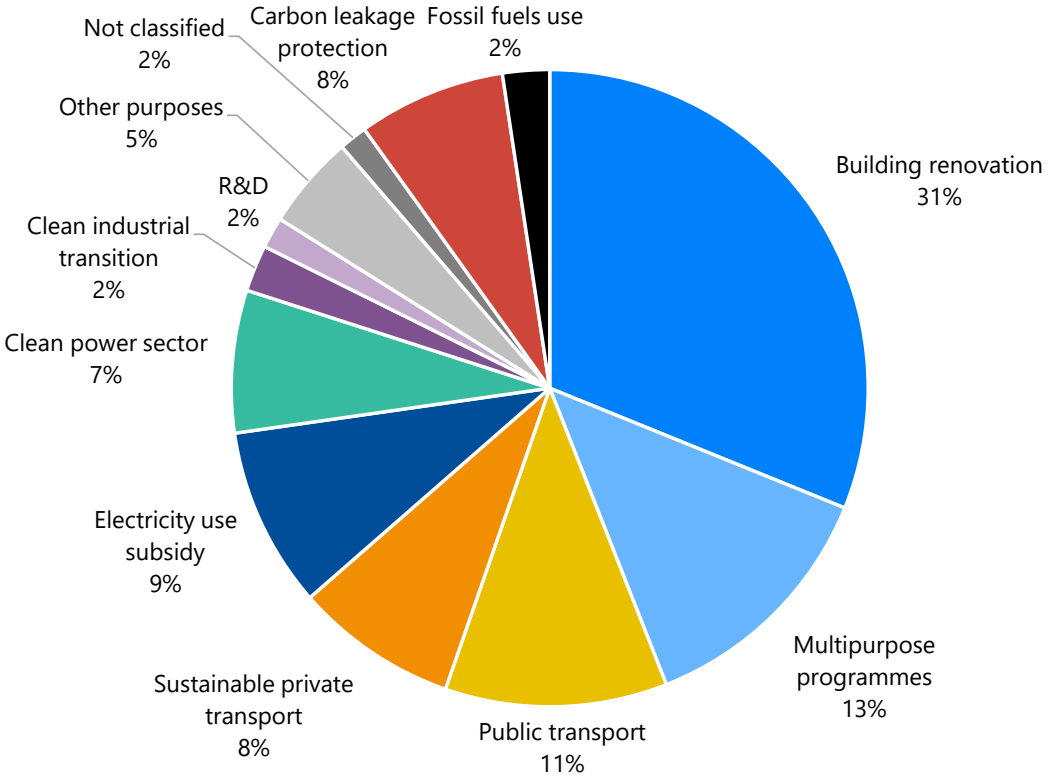
# 3. Comparison of the five assessed Member States

The EU ETS revenue management and spending among Germany, Poland, Spain, Italy and France shows significant variability in terms of spending patterns, the governance of the revenues and reporting practices.

## 3.1 Spending patterns

While assessing the spending of the five selected Member States jointly, it should be taken into account that a simple aggregate of the reported values would be heavily affected by the spending reported in Germany, which significantly exceeds the revenues from the EU ETS generated in this country. Thus, for the purposes of assessment in this chapter, the figures for five countries were aggregated, **the values for Germany had been adjusted to not exceed 100% revenue use while maintaining reported spending structure**.

**Figure 19. The total EU ETS revenue use declared by five assessed countries (DE, PL, ES, IT, FR) as disbursed on domestic measures, by category, total for 2020-2024**




*Notes: 1) values for Germany are adjusted to not exceed 100% revenue use while maintaining reported spending structure, 2) Clean power sector = Clean supply and transmission of electricity, phase out of fossil power plants; Other purposes = Unspecified (general budget), Nuclear energy, Adaptation and biodiversity, District heating, Other.*

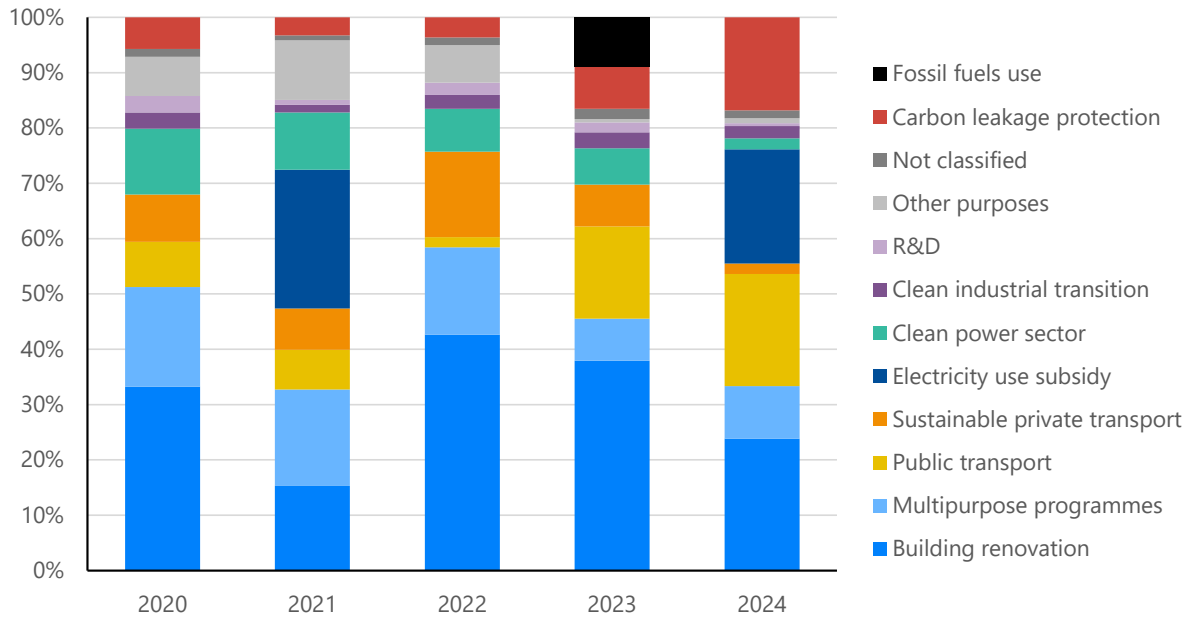
*Source: Reform Institute based on EEA Reportnet 3.*

When analysed jointly, the structure of reported spending in all of the five countries over the period between 2020 and 2024 is relatively stable, but sensitive to current market conditions, as the increases in electricity prices affected the composition of spending, resulting in higher share of electricity use subsidy in 2021 and 2024. The main area of intervention in the five

countries was building renovation, with 31% of total reported expenditures reported as allocated to this purpose. The second most prominent spending category was multipurpose programmes, and the third – public transport. Their respective shares were equal to 13% and 11% of the total spending reported.

Sustainable private transport is also a significant revenue use category, to which the group of analysed countries allocated 8% of the total reported spending, and electricity use subsidy, which featured only in 2021 and 2024, with allocation of 9% reported revenues.

**Figure 20. The EU ETS revenue use declared by five assessed countries (DE, PL, ES, IT, FR) as disbursed on domestic measures, by category and year, 2020-2024.**




*Notes: 1) values for Germany are adjusted to not exceed 100% revenue use while maintaining reported spending structure, 2) Clean power sector = Clean supply and transmission of electricity, phase out of fossil power plants; Other purposes = Unspecified (general budget), Nuclear energy, Adaptation and biodiversity, District heating, Other.*

Source: Reform Institute based on EEA Reportnet 3.

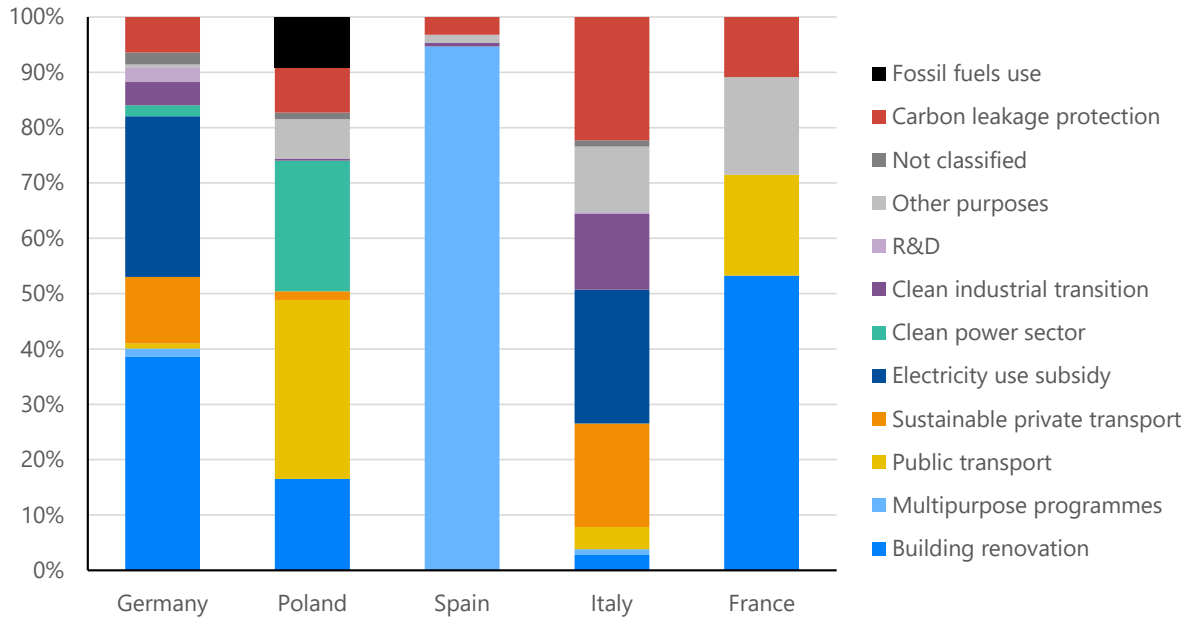
District heating and adaptation and biodiversity were among the least popular priorities of spending (respectively 0.24% and 0.35% of spending reported). They were followed by spending on nuclear energy (0.64%) and fossil fuels use (1.1%) reported only by Poland, as well as R&D (1.95%) and clean industrial transition (3.4%). It is worth noting that besides one programme implemented by Poland in 2023, hardly any of the reported measures was declared as a subsidy to fossil fuels use or infrastructure. However, verification in external sources of the details of some of the programmes reveals that sometimes actions with overall positive contribution to climate change mitigation have also components that can be associated with a fossil fuel lock-in risk. Examples of such programmes include: "Czyste Powietrze" ("Clean Air") programme in Poland (which mostly subsidises switch to clean technologies in heating, but for some periods during its duration could be used to finance installation of a gas boiler) or "Nationales Flottenerneuerungsprogramm für Nutzfahrzeuge" ("National fleet renewal programme for commercial vehicles") in Germany which subsidised a purchase of commercial

vehicles that are not only hydrogen- or battery-powered, but could also use fossil fuel engines, as long as they were compliant with Euro VI standard.

In most of the studied Member States, the latest revision of the EU ETS Directive did not bring about significant changes in spending or reporting practices. However, two of the countries – Spain and France – reported spending EU ETS revenues on carbon leakage protection for the first time in 2024, which could indicate that the introduction of the requirement of spending 100% of the EU ETS revenues on climate action was not easy to meet by the Member States in this year, and they had to report carbon leakage protection to align reporting with the threshold.

The last year of the analysed period – 2024 – is also the year when expenditure on indirect carbon leakage protection measures for two of the five assessed countries – France and Germany – exceeded the allowed threshold of 25% of total annual revenues generated in the EU ETS in the previous year. In such case, Member States should submit an additional report to the European Commission to explain reasons for infringement. In this context, France quoted relatively low auction revenues – due to relatively low-carbon electricity generation – compared to country's share of electro-intensive industries as the reason for surpassing the threshold, while Germany attributed higher aid amounts to the increase in allowance prices and impact of MSR[82].

**Figure 21. The EU ETS revenue use declared by five assessed countries (DE, PL, ES, IT, FR) as disbursed on domestic measures, by country and category, total for 2020-2024.**




*Note: Clean power sector = Clean supply and transmission of electricity, phase out of fossil power plants; Other purposes = Unspecified (general budget), Nuclear energy, Adaptation and biodiversity, District heating, Other.*

*Source: Reform Institute based on EEA Reportnet 3.*

[82] More information in the European Commission's report on the functioning of the European carbon market in 2024.

Comparison of the structure of reported spending among the five selected Member States unveils that for most of the countries, national spending priorities have been rather stable over the last five years (with the exception of Italy, where the composition of reported spending is very unstable each year due to underreporting of spending). However, the structures differ widely:

- in Germany, building renovation, electricity use subsidies and sustainable private transport combined amount each year to at least two thirds of the reported spending,
- in Poland, public transport, clean supply and transmission of electricity, and building renovation programmes comprise the base of spending, with a combined share of at least 60% each year,
- in Spain, a multipurpose programme with a focus on power sector clearly dominates the spending,
- in France, building renovation programmes feature prominently each year.

Ideally, the funds from the EU ETS should be used to fund investments in energy transition instead of the current expenditure, and be channelled back to citizens to support the most vulnerable actors and help build broad public support for carbon pricing mechanisms. In this light, the overall spending priorities in the inspected countries could be considered generally aligned with these principles, although significant improvements can be made by deprioritizing such areas of intervention as indirect carbon leakage protection. However, an important caveat to this conclusion is the fact that because of the limited transparency of the spending and reporting, it is not possible to assess if actual spending effectively targets the declared areas of intervention.

## 3.2 Governance of the revenues

The five analysed Member States apply different governance frameworks to the EU ETS revenues. Even though in most cases at least partial earmarking is in place, visibility of the funds often gets lost after they are transferred to the national budgets.

Only in Spain and Germany the earmarking is consistent with the provisions of the revised EU ETS Directive. In France national law only partly addresses the spending of the EU ETS revenues, while in Italy and Poland earmarking in the national legislation strictly contradicts the EU law. Both France and Poland in their reporting refer to the principle of fungibility of resources in their national budgets to explain why they refrain from earmarking the funds generated through European carbon pricing.

In terms of tracking whether Member States actually follow through with the intentions expressed by the earmarking, Germany stands out as a clear frontrunner: all of the revenues from the EU ETS are directed to a special fund whose role is to finance projects advancing climate change mitigation and adaptation. While some visibility is lost since the fund comprises a few other financing streams as well, it is still a very good solution that ensures that the European carbon pricing revenues cannot be used to finance actions which are not aligned with the KTF's mission.

In all other analysed countries, at least some portion of the revenues is transferred to the national budget, which severely limits visibility of the funds and the analysis of complying with the principle of additionality.

**Table 7. Comparison of the EU ETS revenues governance in 5 assessed Member States**

| | Funds earmarking in national law | Visibility in the national accounts |
|---|---|---|
| **Germany** | 100% of EU ETS revenues is earmarked for climate action | All EU ETS revenues are channelled to a special fund (KTF) dedicated to financing investment in energy transition and climate protection. |
| **Poland** | Partial earmarking for various measures over the years (including COVID-19 Fund, energy subsidies), implemented with no connection to the reporting to the EU (equivalent financial values are reported) | Marginal shares of EU ETS revenues are channelled to the national environmental fund (NFOŚiGW).<br>Revenues used to compensate indirect carbon costs are channelled to a separate fund.<br>Most of the revenues are channelled to the national budget. |
| **Spain** | Revenues are earmarked for achieving the energy transition and climate action goals<br>At least EUR 450 million earmarked for financing of the costs of electricity system in the context of promotion of the renewables<br>Up to 30% of the total revenues can be allocated to measures supporting just and fair transition, up to 25% - to compensation of indirect carbon costs. | Before each year, the EU ETS revenues are estimated and allocated to certain energy and climate initiatives up to a predefined limit (EUR 1.1 billion in 2024)<br>Revenues above the limit channelled to national budget (potentially to be spent on climate action) |
| **Italy** | 50% of EU ETS revenues is earmarked for climate action<br>50% of EU ETS revenues is earmarked for Fund for the Amortisation of State Bonds | 50% of the EU ETS revenues are channelled to the national budget.<br>50% of EU ETS revenues are channelled to the Fund for the Amortisation of State Bonds |
| **France** | Revenues are allocated to the National Housing Agency (ANAH) up to a certain limit (subject to revisions, expressed in an absolute value – EUR 700 million in 2024).<br>No earmarking is in place for the remainder of revenues | Certain allocation is channelled to ANAH.<br>Revenues above the ANAH allocation threshold are channelled to the national budget. |

*Source: Reform Institute*

## 3.3 Reporting practices

The most extreme difference in reporting practices among the selected Member States concerns the proportion of the revenue spending which is reported back to the European Commission.

Italy is on the one end of the spectrum, as in each of the last five years the scope of the revenues covered by the reporting did not surpass 24%. This is partly the consequence of lengthy administrative procedures that hinder funds absorption, partly due to allocation of 50% of revenues for servicing public debt, and partly the result of the strict intertemporal earmarking (e.g. funds earmarked for spending on a 5-year programme in one year will be reported as disbursed in portions over the whole 5-year horizon). However, these factors alone could not be responsible for very low reporting percentages in the last five years, so likely also political decisions account for low traceability of the EU ETS revenues in Italy.

On the other end of the spectrum is Germany, which reports spending much more money than the country received from the EU ETS. That is because the Germany includes in the reporting all of the actual spending from KTF – national fund for supporting measures that contribute to energy transition, to which EU ETS revenues are directly channelled. Although this practice makes reporting much more detailed and comprehensive than in other countries, it also makes it difficult to assess what the EU ETS revenues were exactly used for, as the KTF budget is supported by financial flows from other sources as well.

**Table 8. Spending reported as a share of revenues generated each year in each of the assessed countries**

| | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Germany** | 190% | 397% | 202% | 264% | 741% |
| **Poland** | 50% | 50% | 52% | 92% | 95% |
| **Spain** | 88% | 82% | 63% | 31% | 96% |
| **Italy** | 24% | 12% | 8% | 5% | 2% |
| **France** | 100% | 100% | 100% | 100% | 100% |

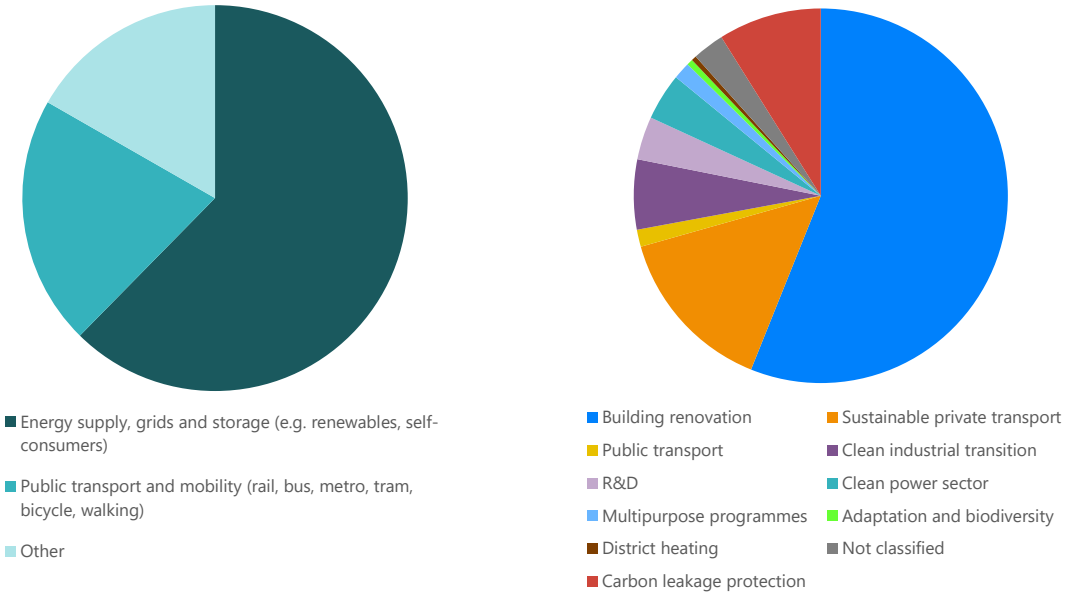
*Source: Reform Institute based on EEA Reportnet 3*

What is more, even though France always reports spending exactly as much money as was generated by the EU ETS, it is also hard to consider it a good practice. The reason for that is that France declares channelling most of its revenues from the system to the general budget, after reserving some portion for the budget of ANAH – national energy agency. For that reason, reported numbers do not follow actual spending, but are rather represent equivalent financial value of the revenues which had been spent from the national budget. Polish case is similar in this respect, as money from the carbon pricing in Poland is always channelled to the national

budget as well. However, Poland follows a more minimalistic approach, by reporting each year only as much expenditure as is requested to be spent on climate action by the EU ETS Directive: about 50% of the revenues generated by 2023, close to 100% afterwards. Meanwhile, Spain usually reports spending of a high proportion of its revenues, with the exception of 2023, when the percentage dropped to 31%.

Another example of inconsistent reporting practice is the application of spending categories, which were introduced in 2023. There seems to be no consistent understanding among the reporting Members States of what these categories should entail. An example could be Germany, which greatly simplified national spending structure (see figure below) by assigning every measure to one of only three categories. This resulted in assigning its building renovation programme to "energy supply, grids and storage" instead "energy efficiency, heating and cooling in buildings" in 2023. This category in general seems to be understood very broadly, as Poland assigned to it both "My Heat" programme, which subsidizes heat pump installation, as well as excise tax on electricity exemption.

**Figure 22. Revenue spending in Germany in 2023 by self-assigned categories (left) and by expert categorisation by the Reform Institute (right) in 2023**




*Source: Reform Institute based on EEA Reportnet 3*

Another reporting issue is that there is also no alignment among the analysed countries on whether carbon leakage protection measures should be reported or not, and there are examples of Member States that report them in some, but not all of the years when the measure was in place (e.g. France did not report in 2023, but did so in 2024 and Italy conversely, did report the measure in 2022 and 2023, but not in 2024).

Among the analysed countries, only Italy reports not only spending disbursed, but also the fact of committing the funds to finance a certain policy instrument, which is likely a consequence of specific national fund management and reporting convention (see also chapter 2.4). This could potentially be a helpful tool to identify future spending priorities in the light of scarce

information about the spending already disbursed, but given that studies[83] show that spending commitment does not correspond to an equivalent expenditure often enough, its practical usefulness is limited.

The reporting Member States are also not consistent in using national language and English. Germany, Spain and Poland use national languages, while France and Italy report in English. In case of reporting in English, not all of the countries provide original name of the spending programme in national language as well, as otherwise it is hard to identify policy instrument in external sourced. Short descriptions are also inconsistent: in some case they explain the logic behind the measure and describe actions that were funded, but sometimes they are very concise, just repeat the programme's name, or quote legal base for its introduction. A good practice – used most consistently by Poland – is to include a link to the website of the measure in a "short description" section, to enable identification of the spending purpose in other sources and further research. Preferably, short descriptions should consist of both – a short explanation of the measure's concept and a link to the website.

In spite of complex checking procedures, in some infrequent cases it is possible to spot obvious mistakes in reporting (e.g. reporting over EUR 2500 billion of revenues generated in Italy in 2021). What is more, there are some discrepancies between the values reported by the Member States to the EEA and the values quoted by the Commission in the European carbon market report[84].

**Table 9. Discrepancies between data reported by the five analyzed Member States and data cited by the Commission.**

| | Total revenues generated in 2023 – reported | Total revenues generated in 2023 – cited by the Commission | Indirect carbon leakage measures in 2024 – reported | Indirect carbon leakage measures in 2024 – cited by the Commission |
|---|---|---|---|---|
| **Germany** | 7645 | 7583 | 2505 | 2395 |
| **Poland** | 5372 | 5407 | 615 | 615 |
| **Spain** | 3584 | 3514 | 244 | 3584 |
| **Italy** | 3547 | 3547 | not reported | 166 |
| **France** | 2100 | 2060 | 834 | 909 |

*Source: Reform Institute based on EEA Reportnet 3* and European Commission's *Report on the functioning of the European carbon market in 2024*.

[83] Such as Bellisai F., Scano C. (2025), EU ETS auctions in Italy. Transparency and traceability of revenues, ECCO, 2025, ECCO Institute.

[84] European Commission's Report on the functioning of the European carbon market in 2024.

# 4. The good and bad practices

## 4.1 Spending patterns

### Good practices

- **Alignment with energy transition goals.** In many cases, the spending is generally consistent with EU climate targets. Among funded goals, there were building renovations, sustainable mobility (Germany, Poland, France, Greece), electricity price affordability (Germany, Poland) or climate adaption funds (Spain, Greece). The reports at times highlight initiatives often overlooked in climate strategies, such as measures aimed at biodiversity protection (Spain).
- **Social inclusion and just and fair transition.** Analysis of expenditures covered with ETS revenues shows that EU climate policies are not purely technocratic, as some of reported programs work on the grassroot level, helping fight energy poverty (France, Germany, Poland) and making climate adaptation more affordable in general. In case of Spain ETS revenues helped to establish the Just Transition Institute that supports skills development and labour reallocation in coal-dependent regions. Such actions promote socially accepted decarbonization.
- **Adaptation and innovation**. ETS revenues are increasingly used to stimulate technological change. Spain's Carbon Fund for a Sustainable Economy (FES-$CO_2$) created incentives for private-sector investment in clean technologies. Similarly, German Climate and Transformation Fund (KTF) finances programs accelerating energy transition, such as large-scale building renovation and sustainable mobility initiatives. These approaches demonstrate how ETS revenues can act as catalysts for structural long-term innovation, beyond short-term compliance measures.

### Bad practices

- **Misalignment with climate objectives.** ETS revenues are sometimes allocated to projects with limited or no direct climate benefits, prioritizing industrial or economic goals over decarbonization. Examples include subsidies for large-scale industrial investments (Germany, Italy) and measures that do not contribute to emissions reduction or adaptation. Such practices weaken the link between carbon pricing and climate action.
- **Short-term subsidies instead of structural investments.** A significant share of ETS revenues in some countries is used for operational cost relief rather than transformative projects. Electricity price subsidies and indirect carbon leakage protection account for a significant share of ETS spending in Italy and, to some extent, in Spain, while similar compensatory measures are also present in Poland, Germany, and France. The observed share of carbon leakage protection in latest reports is significant, despite the intended supportive role of this instrument in ETS system. These allocations provide temporary benefits but fail to accelerate systemic transition.
- **Support for fossil-dependent technologies.** Certain programs continue to incentivize technologies incompatible with climate neutrality, undermining long-term goals. Examples include subsidies for hydrogen-ready gas heating systems under renovation schemes (Germany) or compensatory measures for energy-intensive industries. Such spending contradicts the "polluter pays" principle and risks locking in carbon-intensive pathways.

## 4.2 Governance of the revenues and reporting practices

### Good practices

- **Dedicated funds and legal national frameworks.** In several countries, like Germany, Italy or Spain, the ETS revenues' purpose is legally defined. At times – like in case of German KTF – legal structures result in separate budgets and agencies formed to manage expenditures. Such approach ensures high visibility and transparency of spending, reduces vulnerability to short-term political shifts (which is usually the case when revenues are channelled through states' budgets) and improves traceability and accountability, especially in long term.
- **Evaluation and strategic planning.** In several countries, like Germany with multiannual programs or France with green budgeting, the allocation of EU ETS revenues reflects long-term climate policy planning and is embedded in pre-defined national objectives. Such an approach enhances the efficiency of ETS revenue management, safeguards continuity in climate governance and integrates it into fiscal planning, encourages cross-sectoral strategic thinking and strengthens alignment between EU and national policies.
- **Decentralized management.** One of the most original approaches identified during the study was introduction of democratic governance of the ETS revenues. This happens in case of Spain, which manages a part of adaptation funds (PIMA Adapta) at regional levels. Such approach enhances responsiveness to local needs and demonstrates feasibility of territorialized governance. It allows the society members to be co-responsible for execution of climate policies and thus strengthening their support and accountability.

### Bad practices

- **Fragmented and opaque reporting.** Each of analysed Member States has their own style of reporting, making input data challenging to understand and analyze. Reports may lack granular data and details on recounted actions or even whole expenses categories (France, Italy, Spain), some expenditure descriptions are vague or insufficient, which makes it difficult to track fund flows and assess impact. On the other hand, there is problem of "overreporting" (Germany) – excessive detail blurs the link between revenues and actions. Reporting suffers from inconsistencies as well (Germany, Italy), making overall image of ETS revenues governance unclear.
- **Delays in decision-making and structural weaknesses in planning.** Reporting highlights systemic inefficiencies in spending policies. In Italy, pronounced gaps between revenue generation, budgetary commitment, and actual disbursement point to slow fund absorption and governance shortcomings at the executive level. Similarly, Poland's reporting reveals frequent shifts in spending priorities from year to year, suggesting inadequate long-term planning and a reliance on ad hoc decision-making rather than strategic allocation.
- **Insufficient traceability and transparency.** Reporting quality and comprehensiveness seldom allows tracing the expenditures and thus, assessment of long-term efficacy and consistency of spending management. It results directly from disbursing ETS revenues in the state budgets – in Spain and France it happens with funds exceeding certain revenue cap, in Poland – with all the revenues. Surplus funds revert to general budget without earmarking. In some cases, the information on funds beneficiaries is missing, and the comprehensiveness of reporting declines over time, which undermines accountability.

# 5. Conclusions and recommendations

## 5.1 What impacts the most ETS revenue spending purpose and transparency?

The comparison of the EU ETS revenues use across Germany, France, Spain, Italy, and Poland reveals substantial differences in spending patterns, governance systems, and reporting practices. Nevertheless, several broader trends emerge. Building decarbonisation is the largest spending category (31%), followed by multipurpose programmes (13%) – whose share declines over the years – and public transport (11%). Some programmes nominally aligned with climate goals nonetheless include components that risk fossil-fuel lock-in, such as Poland's "Clean Air" scheme or Germany's commercial trucks fleet renewal programme. Although most countries maintain relatively stable spending priorities, the structures of their reported spending differ significantly: Spain allocates most resources into a multipurpose power-sector fund, Germany emphasises building renovation and electricity subsidies, France consistently prioritises building renovation, and Poland focuses on public transport, clean electricity supply, and building improvements.

Governance arrangements also vary, especially regarding earmarking and transparency. Germany stands out for transferring all the EU ETS revenues into a dedicated climate fund (KTF), ensuring clear tracking and alignment with climate objectives. Spain earmarks the revenues in line with EU law, whereas France, Italy, and Poland either apply insufficient earmarking or non-compliant with the EU law, often channelling large shares of the EU ETS revenues to national budgets, with limited transparency and visibility of the funds. These inconsistencies extend into reporting: Germany reports all spending from its climate fund (even beyond the EU ETS revenues) while Italy reports only a small fraction of actual revenue use. France and Poland treat reported expenditures more as accounting equivalents than as reflections of true spending, and Member States apply spending categories inconsistently or change practices year-to-year. Differences in language use, variation in programme descriptions, and occasional reporting errors further complicate comparability.

Overall, while officially most countries of the analyzed countries broadly direct the EU ETS revenues toward climate-related purposes, substantial improvements in transparency and visibility are needed to verify if that is actually the case. In particular, ensuring that reported spending corresponds to additional energy transition investments and revision of spending priorities is necessary to better align national practices with the intent of the EU ETS and strengthen public trust in carbon pricing.

## 5.2 Recommendations for the Member States

### Management and reporting

Create a dedicated fund to manage the EU ETS revenues

A comprehensive review of the governance of carbon pricing revenues at the national level should be conducted before the introduction of ETS2. This review should lead to the development of a broader strategy for the effective use of both EU ETS and future ETS2 revenues.

The EU ETS revenues (including future ETS2 revenues) and the national allocation of the SCF should be separated from other financing streams that contribute to general green transition policies. To achieve this, consideration should be given to managing EU ETS revenues via a dedicated national fund (building on the German KTF model). It would enable clear traceability of carbon revenues, and be a basis for providing a stable, multi-year financing base for decarbonisation investments.

The creation of the fund should be tied to the national obligation to earmark all the revenues for the aim of green and socially acceptable transition. The implementation of the ETS2 should increase the flow of the revenues from the fund towards decarbonisation of building and transport sectors.

Increase transparency and visibility of reporting

The revenues should be clearly channelled to programmes which support investments in line with green transition, consistent with just and fair principles. To ensure transparency, reported programmes should be broken down into smaller, clearly defined entries, each with a specific purpose and area of intervention.

To further enhance accessibility of the EU ETS spending reporting, programme names should always go beyond generic labels or references to legal acts, offering concrete details on the actual use of funds. Short descriptions and additional comments in Reportnet should provide a clear overview of the programme's objectives, measures, and beneficiaries. More granular reporting of supported programmes will help in the effective planning and use of domestic revenues from ETS2.

Information about supported programmes should be published online in an accessible, user-friendly format. Each programme should be clearly labelled to indicate it was co-financed through EU ETS revenues. This would help the public and experts better understand how the revenues are being used, and what tangible contributions they make to sustainable development and climate action. It could be be a crucial change helping to build public acceptance of the existing ETS and the upcoming ETS2 implementation.

Clearly assign responsibility for the management and increase administrative capacity

A clearly stated agency, unit or department should be assigned the responsibility of managing all ETS revenues at the national level. This would enhance the coherence of reporting and streamline administrative processes.

Special attention should also be given to strengthening administrative capacities related to the processing and management of EU ETS revenues. Financing a dedicated state agency using EU

ETS revenues could be a viable approach to building this capacity, drawing on the Polish example of the KOBiZE agency.

## Spending purposes

Ensure full compliance with the EU 100% spending obligation

Although the ETS Directive obliges Member States to spend 100% of ETS revenues to support the green transition, including measures to address its social impacts, still not all the Member States adhere to it in practice and report it transparently.

Redirect industrial support towards structural decarbonisation

Current spending often prioritises indirect carbon-leakage protection instead of long-term emissions reductions. A larger share of ETS revenues should co-fund investments that permanently decarbonise industrial processes.

Even if carbon leakage protection is temporarily needed, it should be clearly reported to increase transparency and make it possible to track its phasing out. The absence of detailed data in this area raises concerns that such support may preserve high-emitting industrial activity for too long and without a clear strategy to tackle the issue.

Increase just and fair transition support

More support from the EU ETS should more directly benefit citizens, including through social measures. With the increase of flexibility more measures should focus on public investments to increase the social acceptance of the ETS system. Especially the upcoming ETS2 implementation should be used to this aim, in particular for low-income households, to ensure structural investments in just and fair transition. The revenues should flow more in the direction of the accessible and affordable building renovations and public transport. Particularly, the building renovation programmes should target more complex renovations and primarily vulnerable building owners.

Align tax and tariff system with decarbonisation and electrification

The ETS2 implementation and the EU ETS revenue spending review, offer an opportunity to align broader fiscal systems with EU green transition. There are experiences that can be built on, including the response to COVID-19 distortions in the form of relief measures for energy consumers and similar structural measure in Germany (financing the costs of renewable energy sources and energy efficiency support mechanism via carbon pricing revenues).

**Greece – ETS2 and Social Climate Fund implementation**

The study published by The Green Tank and Facets on recommendations to mitigate ETS2 implementation impacts[85] is an important case study when thinking about the EU ETS revenues use and ETS2 and SCF implementation.

**The report identifies challenges linked to the ETS2 implementation**. It identifies that in Greece 26.5% of the population is "energy-vulnerable" and 13.9% is "transport-vulnerable" households, and that the implementation of the ETS2 will be an additional challenge for these groups (it could increase the number of energy-vulnerable households by 0.9-1.5% and transport-vulnerable by 1.1-2.1%).

However, it also **presents the estimation amount of funds available for Greece to tackle the challenges** from: 1) the SCF – EUR 4.78 billion, 2) the remaining ETS2 revenues - EUR 2.75-6.34 billion (allowance price between 45 EUR/t and 84 EUR/t), 3) 50% of the ETS1 revenues – EUR 4.33 billion (according to the projections of the Climact6 model, by the end of the 2030, including the Modernization Fund, assuming 75 EUR/t average allowance price).

**The Green Tank and Facets study presents concrete recommendations concerning the listed above available funds use in Greece**. The ETS2 revenues should be used transparently and equitably for the needs of society, ensuring broad social acceptance for the transition, and primarily they should support the most vulnerable households. Longterm measures are crucial to tackle energy and transport vulnerability at its root.

Measures in the building sector financed by the ETS revenues should improve energy efficiency, promote decarbonization, and popularise renewable energy sources. The measures to be financed by the ETS1 and ETS2 revenues and SCF should vary looking at the different: geographical location; dwelling type; heating medium; urbanity; household characteristics. The study considered several measures: deep and shallow renovations; replacement of oil heating systems with heat pumps; meeting electricity needs via photovoltaic systems installed either by individual households or by energy communities.

According to the report, the additional burden on vulnerable to ETS2 vulnerable households should be covered through direct income support payments (in Greece, its cost corresponds to 15.5%-29.7% of the SCF allocation). On of the important measures identified to alleviate the issue that could be financed through the ETS revenues was social housing.

To alleviate transport vulnerability in Greece, the revenues should be used to upgrade transport infrastructure by promoting and improving public transport, including improving railways and streamlining bus transportation (additional EUR 3.2-4.3 billion). The measures to be considered included: a discount on unlimited travel cards, free tickets for these households' minors, subsidization of electric vehicle leasing for particularly transport-vulnerable households.

The study highlights **the importance of the formulation of an effective SCP** to make the EU ETS system a strategic instrument for the green transition. SCP should clearly identify the vulnerable, as well as the socio-economic impacts of the ETS2. Also, it should develop targeted policies to mitigate the challenges, by utilizing available funding resources.

[85] Gakis, N., Lalas, D., Mirasgedis, S., Sarafidis, G., Mantzaris, N., Souka, I. (2025). *Recommendations for policies and measure to mitigate ETS2 implementation impacts in Greece*, Facets and The Green Tank, carried out within the framework of the LIFE Effect project.

## 5.3 Recommendations for the EU institutions

Increase resources for verification of reporting

More institutional capacity, including greater financial and human resources within the European Commission and the European Environment Agency, is essential to reinforce the verification of Member States' reporting and to detect discrepancies between reported data and the complex reality. The introduction of ETS2 will significantly increase the already heavy verification workload for EU institutions. The ETS2 implementation should therefore also support strengthening existing ETS verification procedures.

Increase the pressure for reporting transparency

Particularly in the case of ETS2, stricter requirements are needed for clearer earmarking of the ETS revenues for green and socially fair transition. Reporting based on financial equivalents should not be allowed, apart from very narrowly defined cases agreed upon by the European Commission. Also, the transparency of carbon leakage protection reporting should be enhanced as it is crucial to mitigate any unnecessary fossil fuels lock-in risk. Justifications presented by the Member States for exceeding the 25% limit of aid paid relative to revenues should be easily accessible and publicly available.

Facilitate exchange of good practices and finance independent studies on ETS revenues

The EU should increase support for initiatives that improve governance of ETS revenues and clarify effective spending strategies. More active facilitation of good-practice exchange among Member States would help demonstrate how ETS revenues can drive both green and socially just transitions. In addition, more independent, publicly available studies at both national and EU level are needed, as current expertise on ETS revenue use remains limited.

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# Annex 1. Methodological note

The study employes a mixed-methods approach combining quantitative and qualitative methods, including data analysis, stakeholder interviews, and comparative policy evaluation to ensure robust and actionable insights into the use of EU ETS revenues in Germany, France, Poland, Italy and Spain. Additionally, the analysis includes the insights from the Greek case study[86].

The 2020-2024 data from 2021-2025 reporting on the EU ETS revenues use (available in the EEA Reportnet 3[87]) for the selected Member States was analysed, focusing on programmes on which the revenues were reported as "disbursed" (the ones only "committed" were omitted) and domestic spending (third country and international spending was not included).

To identify the main spending purposes priorities of the selected Member States, 15 biggest programmes in terms of volume of spending (over EUR 500 thousand) for the given year were analysed in detail. In the case of Germany, the number of programs per year which was taken into account varies from 15 to 22, to make sure that sufficient percentage of reported spending was represented.

**Table A1.1. Percentage of disbursed revenues reported which was covered in the analysis by country.**

| | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Germany** | 96.7% | 98.7% | 97.2% | 97.2% | 98% |
| **Poland** | 100% | 98.8% | 100% | 98.2% | 98.3% |
| **Spain** | 100% | 100% | 100% | 100% | 100% |
| **Italy** | 98.9% | 98.6% | 99.1% | 99.2% | 97.2% |
| **France** | 100% | 100% | 100% | 100% | 100% |

*Source: Reform Institute*

The chosen programmes for each country and each year were classified into the following categories:

- R&D,
- Adaptation&biodiversity,
- Sustainable private transport (including cycling and walking),

[86] Gakis, N., Lalas, D., Mirasgedis, S., Sarafidis, G., Mantzaris, N., Souka, I. (2025). *Recommendations for policies and measure to mitigate ETS2 implementation impacts in Greece*, Facets and The Green Tank, carried out within the framework of the LIFE Effect project.

[87] EEA Reportnet 3 website available here.

- Public transport,
- Building renovation (including PV household installations),
- Clean Industrial Transition,
- Fossil fuel use,
- Clean supply and transmission of electricity, phase out of fossil generation,
- District heating,
- Carbon leakage protection[88],
- Electricity use subsidy,
- Nuclear energy,
- Multipurpose programs (more than one clearly stated sector supported),
- Other,
- Unspecified (for example general budget).

Additionally, deep-dive interviews were conducted with relevant national experts and stakeholders from Germany, Poland, Spain, Italy, France and the EU institutions on the experiences of the national EU ETS revenues utilisation. These in-depth interviews allowed to capture nuanced, country-specific insights into spending practices that could not be identified through data analysis alone. The interviews were also used to verify information identified during the desk research.

[88] Includes mostly indirect carbon cost compensation in line with the EU ETS Directive, but also measures linked to the national carbon pricing scheme in Germany.

# Annex 2. Top 3 programmes reported by each country in 2020-2024

**Table A2.1. Top 3 programmes reported by Germany in 2020-2024 in terms of the amount of disbursed EU ETS revenues**

| Programme | Category | Revenues disbursed (mln EUR) |
|---|---|---|
| **2020** | | |
| CO2-Gebäudesanierungsprogramm<br>(CO2 building renovation program) | Building renovation | 1 821 |
| Zuschüsse zum Kauf elektrisch betriebener Fahrzeuge<br>(Subsidies for the purchase of electrically powered vehicles) | Sustainable private transport | 652 |
| Markteinführungsprogramm zur Förderung des Einsatzes Erneuerbarer Energien<br>(Market launch programme to promote the use of renewable energies) | Building renovation | 614 |
| **2021** | | |
| Zuschüsse zur Entlastung beim Strompreis<br>(Subsidies to reduce electricity prices) | Electricity use subsidy | 10 800 |
| Förderung von Maßnahmen der Energieeffizienz und erneuerbarer Energien im Gebäudebereich<br>(Promotion of energy efficiency and renewable energy in the building sector) | Building renovation | 3 863 |
| Zuschüsse zum Kauf von Elektrofahrzeugen<br>(Subsidies for the purchase of electric vehicles) | Sustainable private transport | 3 085 |
| **2022** | | |
| Förderung von Maßnahmen der Energieeffizienz und erneuerbarer Energien im Gebäudebereich<br>(Promotion of energy efficiency and renewable energy in the building sector) | Building renovation | 6 501 |
| Zuschüsse zum Kauf elektrisch betriebener Fahrzeuge<br>(Subsidies for the purchase of electrically powered vehicles) | Sustainable private transport | 3 464 |
| Zuschüsse an stromintensive Unternehmen zum Ausgleich von emissionshandelsbedingten Strompreiserhöhungen<br>(Subsidies to energy-intensive companies to offset electricity price increases caused by emissions trading) | Carbon leakage protection | 806 |
| **2023** | | |
| Förderung von Maßnahmen der Energieeffizienz und erneuerbarer Energien im Gebäudebereich<br>(Promotion of energy efficiency and renewable energy in the building sector) | Building renovation | 11 049 |
| Zuschüsse zum Kauf elektrisch betriebener Fahrzeuge<br>(Subsidies for the purchase of electrically powered vehicles) | Sustainable private transport | 2 599 |
| Zuschüsse an stromintensive Unternehmen zum Ausgleich von emissionshandelsbedingten Strompreiserhöhungen<br>(Subsidies to energy-intensive companies to offset electricity price increases caused by emissions trading) | Carbon leakage protection | 1 643 |
| **2024** | | |
| Zuschüsse zur Entlastung beim Strompreis<br>(Subsidies to reduce electricity prices) | Electricity use subsidy | 18 489 |
| Förderung von Maßnahmen der Energieeffizienz und erneuerbarer Energien im Gebäudebereich<br>(Promotion of energy efficiency and renewable energy in the building sector) | Building renovation | 14 117 |
| Zuschüsse an stromintensive Unternehmen zum Ausgleich von emissionshandelsbedingten Strompreiserhöhungen<br>(Subsidies to energy-intensive companies to offset electricity price increases caused by emissions trading) | Carbon leakage protection | 2 398 |

*Source: Reform Institute based on EEA Reportnet 3*

## Table A2.2. Top 3 programmes reported by Poland in 2020-2024 in terms of the amount of disbursed EU ETS revenues

| Programme | Category | Revenues disbursed (mln EUR) |
|---|---|---|
| **2020** | | |
| Wsparcie na rzecz wytwórców energii ze źródeł odnawialnych, odpowiadające wartości rynkowej zielonych certyfikatów umorzonych w roku 2020 (Support for renewable energy producers, corresponding to the market value of green certificates redeemed in 2020) | Clean supply and transmission of electricity, phase out of fossil generation | 690 |
| Dofinansowanie kolejowych pasażerskich przewozów międzywojewódzkich i międzynarodowych (Subsidies for regional and international passenger rail transport) | Public transport | 444 |
| Program priorytetowy "Czyste powietrze" ("Clean Air" Programme) | Building renovation | 164 |
| **2021** | | |
| Wsparcie wytwarzania energii ze źródeł odnawialnych, odpowiadająca wartości rynkowej zielonych certyfikatów umorzonych w roku 2021 (Support for energy production from renewable sources, corresponding to the market value of green certificates redeemed in 2021) | Clean supply and transmission of electricity, phase out of fossil generation | 1 053 |
| Dofinansowanie kolejowych pasażerskich przewozów międzywojewódzkich i międzynarodowych w formie dotacji z budżetu państwa (Subsidies for regional and international passenger rail transport) | Public transport | 348 |
| Program priorytetowy "Czyste powietrze" ("Clean Air Programme") | Building renovation | 236 |
| **2022** | | |
| Wsparcie wytwarzania energii ze źródeł odnawialnych, odpowiadające wartości rynkowej zielonych certyfikatów umorzonych w roku 2022 (Support for energy production from renewable sources, corresponding to the market value of green certificates redeemed in 2022) | Clean supply and transmission of electricity, phase out of fossil generation | 871 |
| Wsparcie rozwoju energetyki jądrowej (Support for the development of nuclear energy) | Nuclear energy | 850 |
| Program priorytetowy "Czyste powietrze" ("Clean Air Programme") | Building renovation | 460 |
| **2023** | | |
| Rekompensaty dla niektórych odbiorców paliw gazowych (Compensation for certain gas consumers) | Fossil Fuels use | 1 425 |
| Program priorytetowy "Czyste powietrze" ("Clean Air Programme") | Building renovation | 855 |
| Wsparcie wytwarzania energii ze źródeł odnawialnych, odpowiadające wartości rynkowej zielonych certyfikatów umorzonych w roku 2023 (Support for energy production from renewable sources, corresponding to the market value of green certificates redeemed in 2023) | Clean supply and transmission of electricity, phase out of fossil generation | 713 |
| **2024** | | |
| **Rządowy Program wsparcia zadań zarządców infrastruktury kolejowej, w tym w zakresie utrzymania i remontów, do 2028 roku (Government program to support the tasks of railway infrastructure managers, including maintenance and repairs, until 2028)** | Public transport | 894 |
| System rekompensaty kosztów pośrednich dla sektorów i podsektorów energochłonnych (Indirect cost compensation system for energy-intensive sectors and subsectors) | Carbon leakage protection | 615 |
| Dofinansowanie kolejowych pasażerskich przewozów międzywojewódzkich i międzynarodowych w formie dotacji z budżetu państwa (Subsidies for interprovincial and international passenger rail transport in the form of grants from the state budget) | Public transport | 438 |

*Note: value for "Clean Air Programme" is an aggregate of values reported by regional funds*
*Source: Reform Institute based on EEA Reportnet 3*

**Table A2.3. Top 3 programmes reported by Spain in 2020-2024 in terms of the amount of disbursed EU ETS revenues**

| Programme | Draft category | Revenues disbursed (mln EUR) |
|---|---|---|
| **2020** | | |
| Sistema Eléctrico - Energías Renovables (Electrical System - Renewable Energies) | Multipurpose programs | 1 000 |
| Lucha contra el cambio climático - FES CO2 (Carbon Fund for a Sustainable Economy: Climate Projects) | Clean Industrial Transition | 53 |
| Lucha contra el cambio climático - PIMA ADAPTA (Combating Climate Change - PIMA ADAPTA) | Adaptation&biodiversity | 19 |
| **2021** | | |
| Sistema Eléctrico - Energías Renovables (Electrical System - Renewable Energies) | Multipurpose programs | 2 000 |
| Lucha contra el cambio climático - PIMA ADAPTA (Combating Climate Change - PIMA ADAPTA) | Adaptation&biodiversity | 29 |
| Lucha contra el cambio climático - PIMA RESIDUOS (Combating Climate Change – PIMA RESIDUOS) | Adaptation&biodiversity | 3 |
| **2022** | | |
| Sistema Eléctrico - Energías Renovables (Electrical System - Renewable Energies) | Multipurpose programs | 1980 |
| Transición Justa (Just Transition) | Other | 25 |
| Incendios forestales (Forest fires) | Adaptation&biodiversity | 9 |
| **2023** | | |
| Sistema Eléctrico - Energías Renovables (Electrical System - Renewable Energies) | Multipurpose programs | 1 100 |
| Lucha contra el cambio climático - PIMA Refugios Climáticos (Combating Climate Change - Climate Refuges) | Adaptation&biodiversity | 8 |
| Lucha contra el cambio climático - Fundación Biodiversidad (Combating Climate Change - Biodiversity Foundation) | Adaptation&biodiversity | 3 |
| **2024** | | |
| Sistema Eléctrico - Energías Renovables (Electrical System - Renewable Energies) | Multipurpose programs | 1 100 |
| Compensación de costes indirectos (Indirect costs compensation) | Carbon leakage protection | 244 |
| Lucha contra el cambio climático - Efectos Adversos (Combating Climate Change - Adverse effects) | Adaptation&biodiversity | 8 |

*Source: Reform Institute based on EEA Reportnet 3*

**Table A2.4. Top 3 programmes reported by Italy in 2020-2024 in terms of the amount of disbursed EU ETS revenues**

| Program | Category | Revenues disbursed (mln EUR) |
|---|---|---|
| **2020** | | |
| Programme "Buono Mobilità" | Sustainable private transport | 195 |
| Mitigation and adaptation activity in National Parks | Multipurpose programmes | 71 |
| National programme on sustainable mobility | Public transport | 10 |
| **2021** | | |
| Decreto Legge 25 maggio 2021, n. 73 (art. 5-bis) - support of the measures incentives for renewable energies and efficiency energy, which are covered by energy tariffs | Electricity use subsidy | 190 |
| Decreto Legge 25 maggio 2021, n. 73 (art. 5-bis) - support of the measures incentives for renewable energies and efficiency energy, which are covered by energy tariffs | Electricity use subsidy | 71 |
| Programme on sustainable mobility | Public transport | 7 |
| **2022** | | |
| Law Decree no. 17/2022 (art. 17) | Clean industrial transition | 145 |
| Fund for the energy transition in the industrial sector | Carbon leakage protection | 90 |
| Program of interventions for adaptation to climate change in the urban environment | Adaptation & biodiversity | 13 |
| **2023** | | |
| Fondo Tesi | Carbon leakage protection | 151 |
| Multilateral Funds | Multipurpose programmes | 7 |
| Agreement between Ministry of Environment and Carabinieri | Sustainable individual transport | 4 |
| **2024** | | |
| Legislative decree n. 102/2014 (art. 5) | Building renovation | 16 |
| Legislative decree n. 102/2014 (art. 5) | Building renovation | 4 |
| Legislative decree n. 102/2014 (art. 5) | Building renovation | 4 |

*Source: Reform Institute based on EEA Reportnet 3*

**Table A2.5. Top 3 programmes reported by France in 2020-2024 in terms of the amount of disbursed EU ETS revenues**

| Programme | Category | Revenues disbursed (mln EUR) |
|---|---|---|
| **2020** | | |
| ANAH - Habiter Mieux (Grants for energy retrofitting for low-income owners) | Building renovation | 420 |
| General Budget | Unspecified | 308 |
| **2021** | | |
| General Budget | Unspecified | 1 049 |
| ANAH - Habiter Mieux | Building renovation | 420 |
| **2022** | | |
| MaPrimeRénov | Building renovation | 1 373 |
| MaPrimeRénov | Building renovation | 481 |
| **2023** | | |
| Railways | Public transport | 1 400 |
| MaPrimeRénov | Building renovation | 700 |
| **2024** | | |
| Indirect Carbon Costs Compensation | Carbon leakage protection | 833 |
| MaPrimeRénov | Building renovation | 700 |

*Source: Reform Institute based on EEA Reportnet 3*