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Strategic spending: The untapped potential of the EU Emissions Trading System to fund climate action

The world is facing a climate emergency. The EU must move rapidly away from fossil fuels and harmful economic activities, towards a sustainable and climate-friendly economy. This must be done in a just way, ensuring all sectors of society and all European regions move forward together.

The EU Emissions Trading System (ETS) can provide considerable funding for climate action. Building on the *Smart Cash for Climate* WWF report, this briefing analyses ETS revenue data for 2016 to 2018 to inform recommendations to deliver further carbon reductions through the market tool.

We find that ETS revenue has increased dramatically and will continue to grow, but significant untapped potential remains for Member States to maximise revenue and to rationally optimise its use to deliver even greater greenhouse gas savings.

Maximising the positive climate impacts of the ETS can also support Union social objectives by ensuring the transition leaves no-one behind and even reduces inequalities within society. By financing climate action - notably with regards to energy efficiency measures - the ETS can and must support a just transition to a sustainable future.

The clean and sustainable energy transition is expected to be economically positive overall, bringing long-term benefits to society in terms of health, prosperity and environment. However, significantly higher capital investment will be needed versus a business as usual pathway: the European

Commission says that around €260 billion more investment per year is needed to reach net zero emissions by 2050.

The EU Emissions Trading System (ETS) provides a significant source of revenue for this task. It

establishes a cap-and-trade system under which a limited number of emission allowances are available by requiring companies to bid and pay for emission allowances. The increasing cost of pollution drives a reduction of CO₂ on the one hand, whilst on the other hand, the revenue from the sale of allowances provide European Union (EU) Member States fresh money which can be used to invest in a just transition to a sustainable economy.

In her Political Guidelines for 2019-2024, European Commission President Ursula von der Leyen committed to increase the 2030 greenhouse gas emissions (GHG) reduction target to 50%, or even 55%, and to revise the ETS within the first hundred days of her term¹. She also backs the idea of a carbon border adjustment which would effectively protect European industries at risk of carbon leakage in lieu of the current free allocation system.

At the same time, there is increasing attention on the need for additional support to be given to countries facing the steepest transitions, as well as a growing recognition of the need to proactively manage the transition in order to leave no one behind (the ‘just transition’). In response, the Commission will propose a Just Transition Mechanism which will include a new EU fund for just transition. The majority of the targeted €100 billion, however, will come from leveraging loans and other EU, national and private sources will be essential to complement any fund.

In December 2016, the MaxiMiseR project, carried out by WWF European Policy Office, published the “Smart Cash for the Climate” report². This presented an overview of the 2013-2015 revenue streams from auctioning in the EU ETS and their use by EU Member States, offering options for improvement. The report found that Member States earned almost €12 billion from auctioning ETS allowances within this period, and spent, on average, 85% of this revenue on climate action. However, the report found that an additional €120 billion of potential auctioning revenue was lost as a result of the free allocation of allowances.

The report also found that the vast surplus of allowances available contributed to driving down the carbon price. Member State reporting on ETS revenue use also suffered many deficiencies; including poor transparency, inconsistencies and poor attention to detail. The low level of earmarking of ETS revenue in national budgets also meant it was hard to discern whether EU ETS revenue spending was additional to what would have otherwise been carried out through the state budget.

Since WWF’s last evaluation as part of the Maximiser project and the ETS revision in 2018 (**Box 1**), calls have mounted for further ETS reform. Expected ETS revenue increases, coupled with the demand for new financing for the just transition underlines the need to re-evaluate the tools at our disposal to facilitate the transition.

BOX 1: Key changes to the ETS Directive since the 2018 reform

In March 2018, a revised ETS Directive was adopted and the changes under the Phase 4 trading period will come into force from 2021³.

Key changes include:

1. The introduction of the Market Stability Reserve (MSR)
2. An end to free allocation to sectors not deemed at risk of significant carbon leakage by 2030, subject to a review in 2026
3. Ending the possibility to use international credits *in lieu* of ETS allowances
4. More stringent criteria for the free allocation of allowances under the derogation in Article 10c of the ETS Directive to electricity generators to finance investments
5. Introduction of the Modernisation Fund and renewal of the Innovation Fund

The MSR has already come into effect, reducing the surplus of allowances and sending a signal to the market which has pushed up the ETS allowance price, in turn raising revenue.

This report looks at the use of ETS revenue between 2016-2018, as reported by EU Member States, following developments since the previous MaxiMiseR report. Finally, it makes recommendations about how to unlock the full potential of the ETS to fund a just transition to a sustainable system.

WHAT IS THE ETS AND WHAT ARE THE RULES ON REVENUE?

Since its establishment in 2005, the ETS has become the largest carbon market in the world, operating in the EU, Iceland, Liechtenstein and Norway and covering around 45% of EU GHG emissions. Under the ETS, a cap is set on the total amount of certain greenhouse gases that can be emitted by the aviation, power and manufacturing sectors. Greenhouse gas

emitters have to pay to pollute by buying ‘emissions allowances’, representing one tonne of emitted carbon. Allowances can be traded, meaning that those that are not used can be ‘banked’ for future use, or sold to other companies.

The ETS Directive suggests at least 50% of auction revenue should be spent on climate action (as defined in **Box 2**).

BOX 2: Climate action revenue spending under the ETS Directive

The ETS Directive recommends “at least 50% of the revenues generated from the auctioning of allowances... should be used for [climate action]”.

Specifically, climate action is defined as including a list of specific actions:

- a) To reduce GHG emissions, including by contributing to the Global Energy Efficiency and Renewable Energy Fund and the Adaptation Fund.
- b) To develop renewable energies and meet Renewable Energy target, and to develop other technologies on energy efficiency.
- c) To avoid deforestation and increase afforestation and reforestation in developing countries, to transfer technologies and to facilitate adaptation in those countries.
- d) Forestry sequestration in the EU.
- e) Carbon Capture and Storage (CCS), in particular from solid fossil fuel power stations and the industrial sector, including in third countries.
- f) To encourage a shift to low-emissions and public forms of transport.
- g) To finance R&D in energy efficiency and clean tech.
- h) To improve energy efficiency, district heating systems and insulation, or to provide financial support in order to address social aspects in lower and middle-income households.
- i) To cover administrative expenses of the management of EU ETS.
- j) To finance climate actions in vulnerable third countries, including climate adaptation.

An additional point was added after the 2018 revision to allow support facilitating a just transition:

- k) To promote skills formation and reallocation of labour in order to contribute to a just

transition to a sustainable, climate neutral economy, in particular in regions most affected by the transition of jobs, in close coordination with the social partners.

Whilst the list of actions relevant to climate is relatively comprehensive, it is not definitive and the Directive does not facilitate identification of activities which are contrary to climate action. Investments do not have to be ‘climate proof’⁵, such that they are not necessarily consistent with a strategic pathway to climate neutrality⁶. This sits in marked contrast to the direction in other political fora: in November 2019, the European Investment Bank explicitly excluded fossil fuels from its new energy lending policy, whilst the new sustainable finance taxonomy includes a possibility to add activities classified as unsustainable from 2021.

WHY SHOULD THE ETS FUND A JUST TRANSITION TO CLIMATE NEUTRALITY?

Carbon pricing and ETS revenue together generate impressive potential to drive forward the transition. Fully unlocking it will require the reinvestment of revenue into actions that will reduce emissions and facilitate a transition to climate neutrality. Moreover, not only must all revenue spending be climate proofed, it must also be deployed in ways consistent with a just transition (**see Box 3**).

The European Commission’s own analysis in the Communication “A Clean Planet for All”⁸, recognises that the costs and benefits of the transition will not be evenly distributed. Although the transition is expected to be positive for economic development and jobs overall, some regions, face a greater burden. Communities which are particularly reliant on a single extractive industry likely to be lost as a result of the transition (such as coal mining) will be amongst the worst hit by the transition. Such communities are often already quite vulnerable and therefore have a low capacity to cope with the changes.

Climate change negatively affects the poorest in society most and they are least able to adapt. Policy instruments must help by distributing the cost burden in a fair way. Whilst carbon taxes could directly burden the poorest more than the richer members of society (for instance, higher electricity

prices will be passed onto consumers, who have only a limited ability to minimise consumption); used in a rational, redistributive way, the revenue carbon taxes generate can provide the solution to the conundrum of climate action.

The ETS acts as a consumption tax and the revenue it generates should therefore be used in a redistributive way to support a just transition for communities to a sustainable energy system.

A true just transition is a sustainable transition to climate neutrality⁹. It must protect the environment for current and future generations whilst providing decent, healthy and secure jobs for workers in communities. It is estimated that around €260 billion more per year in energy system investment is required to reach net zero emissions by 2050¹⁰. ETS revenue could go a long way to leveraging the necessary private investment to achieve this. Following the 2018 revision and the introduction of the Market Stability Reserve, carbon prices skyrocketed to nearly €30 per tonne in 2019. Under Phase 4 the total value of the ETS to Member State budgets could amount to over €20 billion per year.

The 2018 revised ETS Directive specifically promotes just transition as an area of action which can be financed with ETS auction revenue. Furthermore, the Modernisation Fund introduced under Article 10d of the revised Directive and which will be generated by around 660 million allowances, also explicitly references just transition as a priority area which it can finance, while it cannot be used for fossil fuel investments¹¹. It will enter into force in 2021 alongside the new Directive.

Throughout the rest of this paper, we examine ETS revenue spending currently and in the future through the lens of whether that spending contributes to a sustainable - and just – transition.

BOX 3: summary of why the ETS should support a just transition

A just transition foresees proactive management of the impacts of climate action in order to minimise the cost of the transition, particularly for the most vulnerable, whilst maximising and equitably sharing the benefits to society. A just transition seizes the opportunities the transition presents to redress social imbalances as we transition to climate-resilient economies⁷.

The ETS behaves in a similar way to a consumption tax. It should endeavour to ensure redistribution, if only to avoid burdening most those least able to bear the costs. Ensuring redistribution can be achieved by ensuring revenue is deployed in ways consistent with a true just transition.

Deploying ETS revenue in support of climate measures consistent with a just transition would enable redistribution of funds whilst increasing the climate impact of the ETS:

- By ensuring no one is left behind, the risk of resistance to the transition is reduced.
- Actions to facilitate a just transition based on long-term, comprehensive and locally-developed strategies can reduce the costs to those least able to bear them⁷ and proactive planning will reduce the overall costs of the transition.
- Energy efficiency is the archetypal action through which to deliver redistribution and climate impact at the same time. RAP estimates that carbon savings are seven times greater if carbon taxes are reinvested in energy saving programs than if driven by price signal alone⁷.

Finally, the potential revenue is of the scale needed to leverage the capital crucial to address the challenge of the transition to climate neutrality.

CURRENT REVENUE USE AND REPORTING

ETS revenue and climate spending

Between 2015 and 2018, revenue from auctioning varied greatly. While Germany reported the highest revenue at €2.6 billion and Poland received a total of €1.2 billion, Estonia received €141 million and Sweden - which has the lowest per capita emissions of any Member State - received just €136 million.

Figure 1 displays the aggregated ETS revenue from the 28 EU Member States and the reported share of climate spending for the years 2013 to 2018.

BOX 4: Member State reports raises doubts over 'climate action' spending quality

Judging from previous ETS revenue spending reports, some ETS revenue financed actions labelled 'climate action' were potentially ineffective, or even counterproductive to climate action. Hundreds of millions of euros were allocated to energy intensive users to compensate for higher electricity prices and to reduce the risk of so-called carbon leakage, in effect suppressing the carbon price signal and providing users a free permit to pollute. Furthermore, even amongst Member States who do earmark revenue from the ETS for specific uses, it is not clear that any of the revenue was spent on climate action additional to what the Member State would otherwise have implemented.

Several actions financed with ETS revenue also support the use of biomass. Fuelwood already composes around a quarter of all forest harvesting in the EU, and recent estimates suggest that biomass crops for energy are already taking up 13% of EU agricultural land¹². At present, biomass forms no more than an eighth of overall EU energy use, but it is already competing with agricultural food production. The potential for further sustainable biomass in the energy mix is very limited and expansion will not only risk generating negligible benefits, or even cost the climate, it could drive up the cost of food for consumers - impacting those on the lowest incomes most.

In the absence of a strategic approach based on sustainability criteria and a clear climate proofing concept¹² to ETS revenue spending, it remains uncertain that all reported climate spending is truly consistent with a socially just and sustainable pathway to climate neutrality. This concept is explored further in our deep dive on just transition.

Figure 1: ETS revenue and share of climate spending in EU Member States in 2016-2018

| Year | Auctioned allowances (millions) | Revenue spent on climate action (€ million) | Total revenue (€ million) | Average revenue share spent on climate per Member State ⁹ |
|------------|---------------------------------|---|---------------------------|--|
| 2016 | 721 | 3,295 | 3,795 | 92% |
| 2017 | 956 | 4,679 | 5,533 | 79% |
| 2018 | 922 | 9,265 | 13,895 | 64% |
| SUM | 2,599 | 17,29 | 23,223 | 79% |

2018 Slovenian data was based on 2017 data. Data as reported by Member States. Average share is an average of all percentage shares spent on climate.

Assuming a constant carbon price, revenue should increase as more allowances are auctioned. However, due to a range of factors, including the use of cheaper international credits and a massive surplus, the carbon price has generally been very low during the first half of the Phase 3 trading period and reduction of supply in new allowances has not led to increases in the allowance price. However, following the 2018 reform, carbon prices have risen significantly, resulting in considerable growth in overall ETS revenue towards the end of the trading phase

Consistently higher revenue can now be expected, even as allowances decrease. On the other hand, there is a risk that faster fossil fuel phase-out, notably coal, will result again in a surplus of allowances, overwhelming the MSR's ability to remove them, leading to a decline in the carbon price and revenue during the next trading phase¹³.

Most countries do not earmark funds. They typically report that either 100% of ETS revenue is spent on climate or they arbitrarily report climate spending at a value of 50% of revenue: the level expected by the Directive. Countries argue that climate spending in the state budget exceeds the value of their ETS revenue. Reported percentage spending on climate has fallen as auction revenue has grown; declining from 85% in 2013-15 to just 67% on average in 2018. In reality, it is hard to discern whether all reported 'climate spending' is consistent with an ambitious and cost-effective pathway to climate neutrality and it is impossible to identify whether ETS revenue spent on climate action provides additional spending than that which would otherwise have been carried

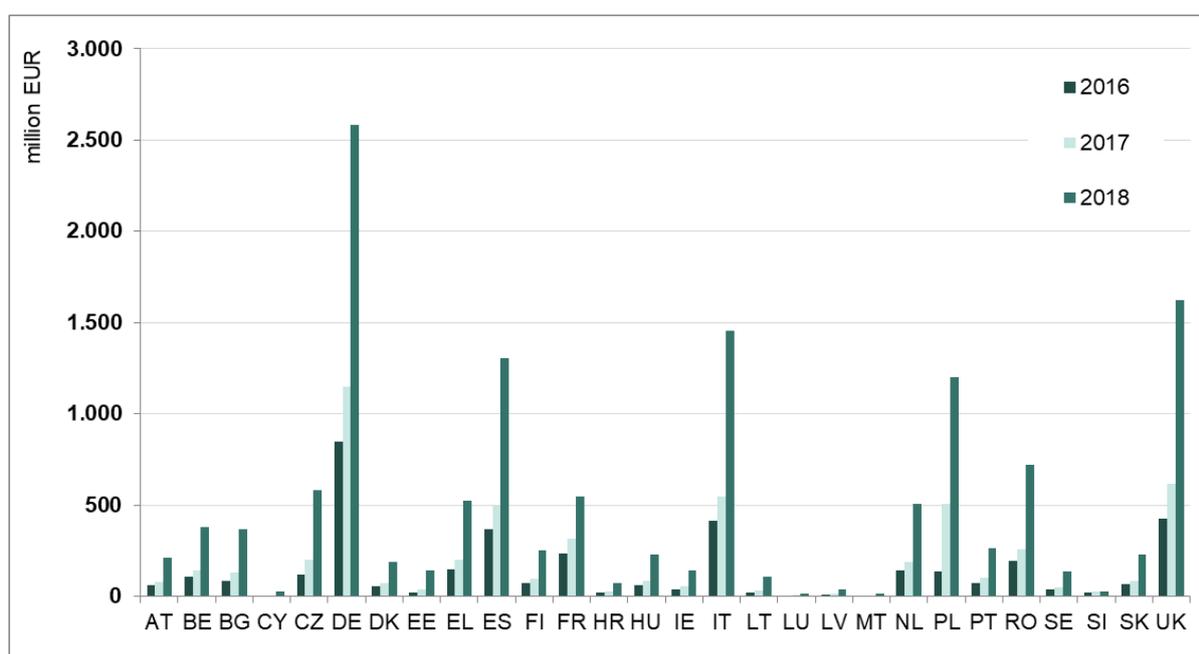
out in the state budget. RAP has recently estimated that, excluding the ETS revenue in Member States that has not specifically been earmarked, only 56% of the 2017 revenue can be considered to have truly contributed to climate action¹⁴.

Between 2016 and 2018, EU Member States generated over €23 billion from the auctioning of allowances. But the gains are not evenly split.

Figure 2 shows that a limited number of Member States account for a majority of the ETS revenue. Whilst higher ETS revenue in a Member State typically correlate with a higher population, a

significant factor in ETS revenue value is the industrial intensity of each country. Germany, the UK, Italy, Spain and Poland generate the greatest revenue. EU ETS revenue received by individual Member States has grown on average by 162% between 2017 and 2018. The big winners of this stark increase are relatively small countries: Cyprus (+306%), Estonia (+259%), and Lithuania (+235%). Comparatively, those countries for which revenue increased the least are France (+75%), Germany (+125%) and Poland (+138%), perhaps because of efforts to decarbonize sectors not subject to free allocation.

Figure 2: Total revenue from auctioning of allowances for each Member State (2016-2018)



International climate financing

Whilst we do not explore in detail international climate financing here, it is notable that Member States report a slightly reduced proportion of spending on international climate action compared to the 2013-2015 period. The reported average international climate spending as a percentage of total revenue spent on climate action for the years 2016-2018 was just 7%. When corrected to take into account that only 12 or 13 Member States reported international climate spending, the average proportion per Member State over the three years was still only 11%. This almost certainly does not reflect the true picture of international climate finance by Member States.

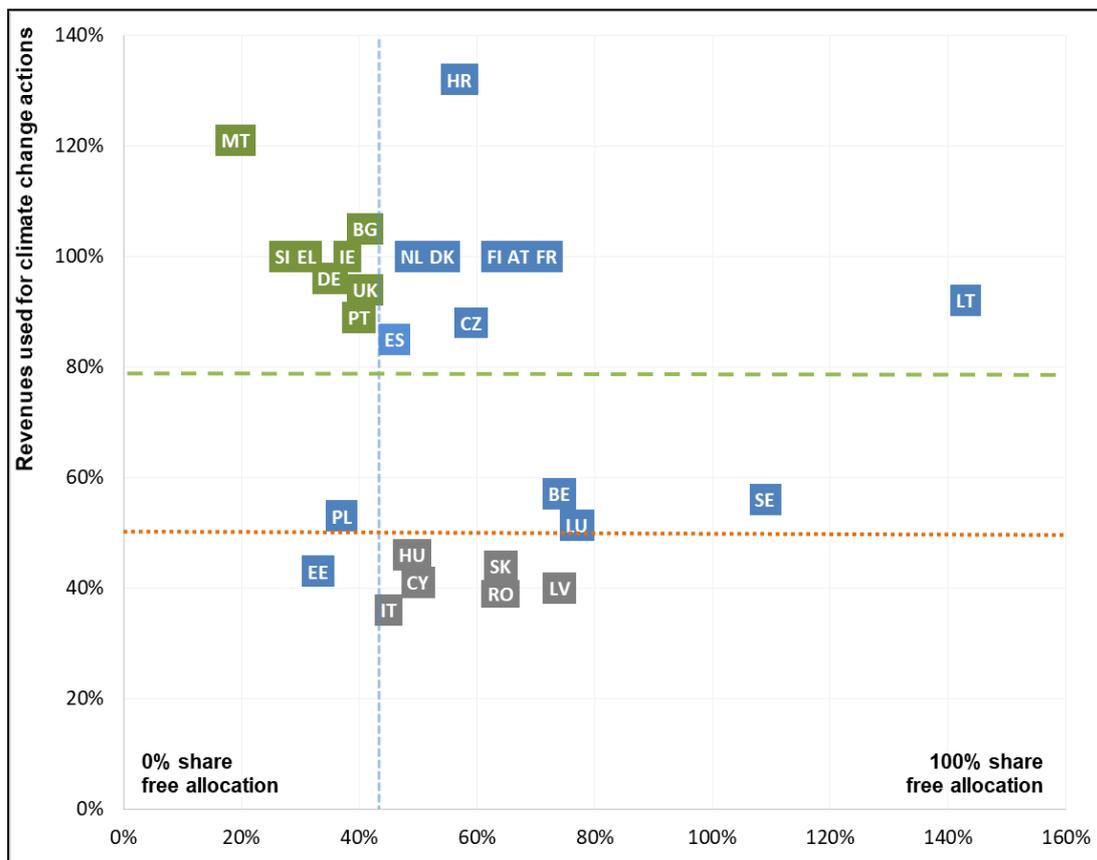
Most Member States simply do not specify whether ETS revenue is spent domestically or internationally, as they often omit to complete the relevant reporting tables. This seems to have been the case for Austria

in 2018 in spite of having reported such spending in previous years.

Foregone revenue: free allocation and irrational spending

Not only is a proportion of ETS revenue not spent on climate and a further proportion reported as spent on climate action questionable as to its true climate impact - Member States annually lose billions of euros revenue through the free allocation of emissions allowances. This deals a double blow to the climate impact of the ETS: it suppresses the price signal, and it also removes revenue which could otherwise have been used to tackle the climate crisis. At worst, free allocation may be slowing the emissions reduction rate.

Figure 3: Proportion of free allocation (as share of verified emissions) and of revenue used for climate action (as a share of all ETS revenue in a Member State) over the period 2016-2018 as reported by EU Member States



EU Member States under the orange dotted horizontal line spend less than the 50% threshold of ETS revenue on climate action. Those above the green dotted horizontal line spend more than the average 79% of ETS revenue on climate action. EU Member States on the right of the blue dotted vertical line offered free allowances at a rate higher than 43% of their verified emissions. By 2021, no more than 43% of all available allowances (auctioned and freely available) should be allocated for free. The discrepancy between available allowances and verified emissions is significant.

Figure 3 shows that in some cases total free allocation as a proportion of verified emissions actually exceeds verified emissions (Sweden and Lithuania). As an average of all allowances available per Member State, 79% of verified emissions were matched with freely allocated allowances in 2016-2018. The number of freely allocated allowances as an average of allowances (free and auctioned) across all Member States however, was 48% .

The provision of free allowances is supposed to counteract the risk of carbon leakage - the theoretical phenomenon through which energy-intensive industry relocates to escape the carbon price, moving the emissions outside the EU. Proof of the real occurrence of carbon leakage is scant¹⁵. Current evidence suggests that free allocation simply generates windfall profits for industry, who sell free allowances at times of higher prices and buy cheaper European or international allowances¹⁵. The costs of these allowances are then passed on to consumers.

The per-Member State average of auctioned allowances (as a percentage of total new allowances available) has grown since 2013, rising from around 40% to over 54% in 2017 and 2018. In 2018, free allocation as a proportion of verified emissions per Member State averaged at 67%. This remains far from the ETS Directive’s target that 57% of all allowances should be auctioned by the end of Phase 3 in 2020. However, even at 57% auctioning, free allocation results in billions of euros for the sustainable and just transition being lost every year. In total, €11.385 billion euros in ETS revenue was lost in 2018 alone as a result of free allocation - an amount which exceeds all the ETS revenue spent on climate action during the same year (see **Figure 4**).

Free allocation may arguably constitute illegal state aid. The list of sectors eligible for 100% free allocation currently includes the mining of hard coal. Its inclusion is in direct contradiction to state aid rules, as coal mining runs contrary to EU climate and energy objectives and therefore does not serve the interests of the union or its citizens.

It is reasonable to assume that a well-designed carbon border adjustment would eliminate any real or perceived risk of carbon leakage. Should such an EU border adjustment mechanism be introduced, recital 24 of the 2018 ETS Directive revision implies that a review of free allocation should be undertaken. As recognised by the recent European Green Deal Communication, such a mechanism would hence need to be conceived in relation to the ETS, providing an opportunity to end free allocation by eliminating any potential for carbon leakage.

The reported data from some Member States (notably those left of the blue dotted line and above the green dotted line) shows that in some cases, more

than 100% of the value of the revenue is spent on climate action, with relatively low free allocation. Whilst seemingly good students – especially as countries such as Germany and to a lesser extent, the UK, are highly-industrialised and would otherwise be expected to give a large number of free permits to industry - reporting quality remains patchy and there is still no guarantee spending is additional to that which would otherwise have been spent on climate action. Moreover, as will be discussed in a later section, Germany for instance spends hundreds of millions from their ETS revenue each year on electricity price subsidisation for industry – in effect muting the carbon price.

Figure 4: Untapped value of the ETS for EU Member States for the period 2016-2018

| ETS auction revenue currently spent on climate action (millions) | Potential value of ETS auction revenue if 100% were spent on climate action (millions) | Potential value of ETS revenue if 100% of emission allowances were auctioned and if 100% were spent on climate action (millions) |
|--|--|--|
| €17,303 | €23,223 | €43,647 |

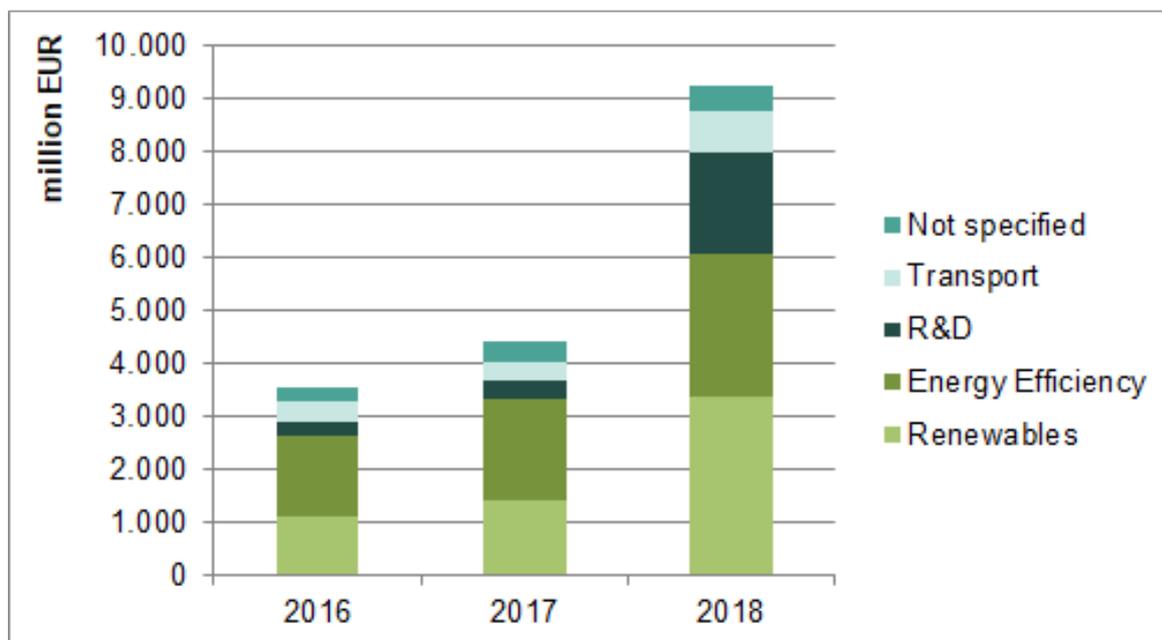
Calculations were based on the yearly average price of auction allowances. It was €5.46 in 2016, €5.79 in 2017 and €15 in 2018.

QUALITY OF REPORTING

The MaxiMiseR report, “Smart Cash for Climate” found serious issues with regards to the quality and consistency of ETS revenue use reporting by Member States. Our follow-up analysis reflects these findings.

Member States break spending into categories, such as “cross-cutting”, “renewable energy; “energy efficiency”; “research and development”, etc. **Figure 5** below highlights the share of revenue spent in the most popular categories.

Figure 5: Auctioning revenue spent on individual domestic climate actions in 2016-2018



The quality of reporting is low and appears to have declined since 2015. Spending is sometimes

attributed to categories evidently not applicable, or Member States attribute a single action to several categories of spending (risking double counting).

Another reporting problem arises from the fact that not every Member State clearly earmarks ETS auction revenue from the general state budget. In several instances, as in the case of France, Member States earmark by default, allocating all ETS revenue to one state fund. However, it is not wholly clear in any Member State whether ETS revenue simply subsidises climate-related actions the Member State would have taken anyway, or if the revenue is used for additional initiatives. If the former, the funds are currently offering no real, additional benefit to climate action.

The level of detail is also highly variable and there are numerous inconsistencies between Member States. Some provide no further details beyond the level of revenue at all, leaving reporting tables incomplete. In other Member States, values between reporting tables – perhaps in certain cases due to use of different conversion rates – are also inconsistent. It is therefore often unclear whether the spending is truly beneficial to the energy transition, or if it is at least consistent with long-term, ambitious and cost-effective strategies to reach climate neutrality.

The ETS is also only a fair mechanism insofar as the polluter bears the cost of pollution and the taxpayer's contribution is redistributed for a sustainable and just transition. While ETS revenue is currently rising, there is no guarantee that this fundamental condition is respected. In the next section, we highlight cases where spending may also be counterproductive to a just transition.

Reported spending also illustrates inconsistencies with a just transition

Although the analysis was limited due to the lack of detailed information, we estimate that in 2018, at least 5% of auction revenue reported as spent on climate action (~€480 million) could be considered counterproductive to a just transition.

Instances in which auction revenue supports fossil fuel infrastructure - thereby locking communities into polluting technology and diverting investment away from sustainable economic diversification are a prime example of financing which is counterproductive to just transition and a pathway consistent with global temperature rise of no more than 1.5°C. Other such cases include the use of revenue to fund other unsustainable technology, or where they it used in ways which suppress the carbon price and effectively subsidise polluting industries. Below, we compile examples of actions reported by

Member States which are inconsistent with a just transition.

- Germany, Greece, Belgium and Slovakia together spent €344 million to compensate for electricity price increases for power-intensive companies resulting from the carbon price. The intended effect is to prevent production cost increases that could push companies to relocate. In reality, where increases in costs are observed, costs are still passed onto consumers whilst subsidies simply contribute to windfall profits.
- In several countries multiple programmes offer support to thermomodernisation. While from a purely energy efficiency perspective, this should be considered consistent with a just transition, in many Member States, such programmes are based heavily on the use of biomass. Excessive biomass use is not only ecologically unsustainable, unscrupulous demand for biomass can drive competition between biofuel and food production on Europe's limited agricultural land resources, driving up food prices; an impact most keenly felt by those on the lowest incomes. Without strict criteria and a holistic, system-wide impact assessment, thermomodernisation programmes based on biomass represent inefficient spending at best and can lock communities into unsustainable technology.
 - In Austria, the “get out of oil bonus” provides support for wood pellet heating systems, but there is no clear indication that system-wide sustainability checks are applied.
 - In Poland, over €4 million was spent on thermomodernisation in 2018 using ETS revenue. An analysis of the programmes suggests a heavy reliance on biomass, without system-wide impact assessment, or sustainability checks¹⁶. Worse, in many cases, it is possible to finance replacements of existing boilers with new fossil fuel ones.
 - Hungary funneled over €4 million into the replacement of heating systems with gas converters under the “Warmth of Home” (*Otthon Melege*) scheme. Other funds under the same scheme however offer to replace large appliances for energy efficiency and are thus very consistent with a just transition.
- In 2017, Poland included several “Clean Air programmes” (*Czyste Powietrze*) as climate-related spending. These well-funded programmes support the replacement of heating

systems with “a source with higher heat production efficiency”, including with class 5 coal boilers. Whilst such coal boilers are more energy efficient, they will not solve energy poverty as they lock users into polluting fossil fuels and can by no means be considered the most cost-effective in the near medium or long-term. At least €9.2 million was identified to finance these programmes in 2018¹⁷.

- The UK offered €550,000 to CCS research. Support to CCS or CCUS schemes is not yet

BOX 3: ‘Better practices’ of ETS revenue spending in relation to a just transition

- Belgium reports on a number of activities which may be consistent with a just transition. For instance, in 2017 the ‘Pack Energie’ received €40 million for free energy coaching to SMEs. This is an example of retraining/reskilling in preparation for a transition, assisting those least able to make the financial investments to adapt to new requirements to make changes. However, it does not appear to fit into a wider strategy and the spending did not appear to be continued in 2018 using ETS revenue (although investments in energy efficiency companies were made); nor does it necessarily address the skills base in the profound and strategic way needed for economic restructuring.
- In France, all revenue from the ETS (€550 million in 2018) are allocated to the ‘Habiter Mieux’ Programme¹⁹, managed by the National Agency for Housing. ‘Habiter Mieux’ aims to tackle fuel poverty, offering grants to low-income households to finance energetic and building renovation works. On the other hand, the programme doesn't exclude the replacement of heating systems with biomass or gas boilers and therefore still risks locking communities into increasingly expensive and climate commitment incompatible fossil fuels. Furthermore, it is likely that France would fund this programme even without ETS revenue²⁰, thus conferring no additional value to the ETS.
- Slovakia finances its Green Savings Programmes with ETS revenue. In 2018, it spent or committed over €39 million to energy efficiency projects in public buildings and €150,000 to a low carbon development strategy. This should enable long-term planning for the transition and the most cost-effective approach to be developed in a holistic context.

widespread in the use of ETS revenue. The technology has proven expensive and is not capable of capturing all emissions, especially on a commercial scale. It is therefore reasonable to assume it is not consistent with a just transition on the basis that it will not lead to a real reduction in emissions whilst in parallel, it encourages the continued investment in and use of fossil fuels, diverting funds which could be spent on other activities.

The above figures are likely a massive underestimate of the real spending in Member States counterproductive to a just transition. Reported detail was largely insufficient to determine whether most programmes are truly consistent with and do not undermine the just transition. Furthermore, many Member States continue to direct vast hidden subsidies to their fossil fuel industries¹⁸.

Evidence of good practice: using ETS revenue for a just transition

Examples of good practice are harder to identify definitively. Several potential programmes were observed, but none demonstrably and incontestably contribute to a defined, long-term just transition strategy to a sustainable system (see **Box 3**). An exception is perhaps Slovakia's investment in the creation of a low carbon development strategy, which was allocated a total of around €750,000 in 2017 and 2018, as well as the Czech “New Green Savings Programme”. It is rarely clear however that programmes are additional to what a Member State would have funded in the absence of the ETS.

2021-2027 OUTLOOK

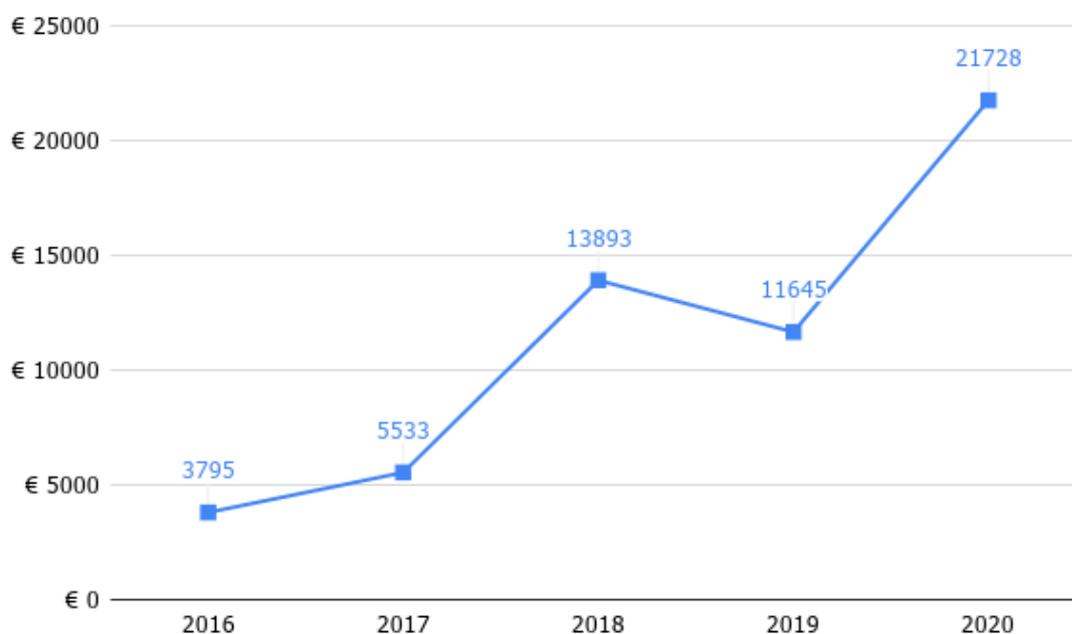
Phase 4 of the ETS will begin in 2021 (see **Box 1** for an overview of key changes). In the following section, we discuss the implications this will have on ETS revenue.

The Market Stability Reserve began operating at the start of 2019. By the end of August, it had removed 265 million allowances and will continue to remove 24% of the surplus until 2023. This has led to an observable increase in the carbon price. Combined with a proposed reduction in free allocation and an end to the use of international credits within the ETS, revenue can reasonably be expected to rise further. Indeed, ETS revenue is expected to be worth over €200 billion from 2021 to 2030 by growing to an estimated €20 billion a year by 2020 (see **figure 6**)²¹.

The downside of this stark increase is that unless measures are taken to address an expected explosion in the surplus during the period due to reductions in emissions - largely due to coal phase-outs - the

greatest potential over the trading period might not be realised as the carbon price will drop again if the MSR cannot remove adequate allowance volumes and if these removed allowances are not cancelled²².

Figure 6: EU28 ETS auction revenue for the period 2016-2020 (millions EUR)



Yearly average price of auction allowances for 2019 and 2020 were estimated respectively €25 and €30. For these two years, the share of allowances to be auctioned was estimated at 57%.

Free allocation in the next trading period should decline, but vast potential revenue will still be lost

The number of free ‘permits to pollute’ will decline over the next trading phase. For sectors not at risk of carbon leakage, free allowances cannot exceed 30% of those available. The ETS Directive intends a complete phase-out of free allocation from 2026 to 2030, subject to review. However, free allowances will still be available for all emissions in sectors considered at risk of carbon leakage.

63 sectors and sub-sectors, or around 94% of industrial emissions, are covered by the new carbon leakage list. The ETS will therefore have very limited, real impact on industrial emissions. Should all allowances be auctioned, this would instead almost double ETS revenue, releasing fresh money for the just transition to climate neutral economies.

Free allocation under the infamous Article 10c²³, under which some Member States can give a number of free allowances to existing power plants for modernisation, will also be more limited during Phase 4. Projects over €12.5 million must be selected via a transparent, criteria-based and competitive

bidding process for investments. It will be harder for Article 10c allocations to fund projects that could be counterproductive to the transition. Selected projects must not contribute to, or improve, the financial viability of emission-intensive electricity generation or increase dependency on emission-intensive fossil fuels. They must contribute instead, for example, to energy mix diversification.

No Member State will use the Article 10c allocation during the phase 4 trading period, possibly due to the new complexities under the 2018 ETS reform and outlined above. 5 Member States have instead decided to reallocate these allowances into the new Modernisation Fund (Croatia, Czechia, Lithuania, Romania and Slovakia).

The Modernisation Fund under Article 10d of the revised ETS Directive will support investment in the ten lowest income Member States. This fund cannot support energy production using solid fossil fuels and spending oversight is provided by an investment committee, involving the participation of the European Investment Bank. At least 70% of the Fund’s resources should go to ‘priority projects’ as listed in the Directive, including just transition.

Under the reformed ETS Directive, the Modernisation Fund is generated by the auctioning of at least 2% of all allowances available. This means it could provide €7.9 to €11 billion from 2021 to 2030 given expected carbon prices. Moreover, five Member States have recently decided to transfer additional allowances into the Fund using flexibility under article 10(d)§4 of the ETS Directive, with the result of doubling its financial capacity to around €20 billion. If all available funds were transferred into it, it could exceed €40 billion²⁴.

On the other hand, there is currently no guidance as to what precisely constitutes a just transition project, nor do projects need to fit into a wider strategy, although this may change with the introduction of territorial transition plans in the just transition mechanism. It also remains unclear how projects will be assessed. Moreover, it currently appears unlikely that most Member States will opt to use the Modernisation Fund for just transition purposes.

BOX 4: Gamechanger? Opportunities for an ETS review

Commission President Ursula von der Leyen and Executive Vice-President-designate for the European Green Deal, Frans Timmermans, intend to revise the ETS in order to match an increase in the 2030 climate targets. Plans are under consideration to expand the ETS to international aviation and maritime shipping, and to increase aviation auctioning. Revenue from auctioned aviation allowances could potentially be channeled directly to top-up the Just Transition Fund.

Furthermore, von der Leyen has also committed to introduce a “Carbon Border Adjustment”²⁵. Although a policy proposal has yet to materialise, it is already clear that imported products could not, under international trade law, be subject to different and more stringent treatment than the EU applies to its own products. A carbon border adjustment would thus provide an opportunity to end free allocation, while eliminating any potential risk of carbon leakage.

RECOMMENDATIONS TO IMPROVE ETS PERFORMANCE

In view of the above analysis and the urgent need to invest now to tackle the climate crisis, WWF recommends the following steps are considered in the proposed review and reform of the ETS. Some steps are also possible to implement immediately:

1. Improve Member State reporting quality and consistency

Detailed templates, value checks and guidance on how to report activities would support improved reporting by Member States, facilitating better tracking of spending. The Commission should also follow-up cases of incomplete or inconsistent data, increasing spending scrutiny with the objective of encouraging spending quality.

The Commission should make efforts to improve transparency of, and public accountability for, revenue use by Member States – such as by making space for civil society to engage in the review of Member State reporting and programme improvements. This is particularly important if the ETS is to fulfil the role of a redistributive system.

2. Set in place and enforce a 100% climate spending requirement, mandatory earmarking and ensure spending is additional

In the future review of the ETS, the language on spending should be changed to reflect that Member States must spend 100% of ETS revenue on climate action. The Modernisation Fund should also be used 100% for priority projects.

Member States should ensure that ETS revenue spending is additional to state budget spending that would otherwise have taken place. Mandatory earmarking of all ETS revenue from the general state budget would be a first step to ensure that ETS revenue is deployed in support of a sustainable just transition to a climate neutral system.

Earmarking alone will not, however, in most cases, ensure that climate actions financed through the ETS are additional to those Member States would otherwise have taken. To support the additional investments required by a transition to a climate neutral system by mid-century²⁶, indicators should be introduced to show how ETS revenue is spent on climate action projects additional to those that would have been financed by the state budget of Member States. The European Commission has a role to publicly highlight non-additionality, whilst potentially praising model cases.

The Commission could also consider moving towards direct management of ETS revenue, re-allocating revenue to dedicated projects to guarantee

additionality and transparency. This should be the default option for revenue from auctioned aviation allowances.

3. End free allocation of allowances

Member States annually lose billions of euros that could drive carbon reductions by providing allowances to high-intensity emitters for free. Free allocation is supposed to counteract any risk of carbon-leakage, even though the existence of the phenomenon remains unproven.

The near-term possibilities for controlling excessive use of free allocation lie largely in political will. Benchmarks should be revised to reflect ambition and true best available techniques: the objective should be to drive ambition in industrial sectors.

As it is outlined in the European Green Deal Communication, the introduction of a new carbon border adjustment must also bring into question the ongoing existence of free allocation. Any Regulation should take into account the likely inconsistency with World Trade Organisation rules of ongoing free allocation in combination with a carbon border tax.

A more profound review of the carbon leakage list²⁷ and the underlying legislative provisions governing it should be undertaken as soon as possible. 94% of industrial emissions at present qualify for free allocation. A review of the list and legislation should evaluate the actual risks of carbon leakage based on an assessment on the possibility a sector could realistically relocate and increase the threshold for inclusion. A review to ensure consistency with EU climate and energy objectives should also take into account that the current list includes sectors such as hard coal, which in any other circumstance would be classified as illegal state aid.

Furthermore, Member States should end free allocation to any sector not deemed at risk of carbon leakage. Although free allocation to these sectors has been limited to 30% with a view to ending it completely by 2030, any form of free allocation represents lost revenue and lost impact of the ETS.

4. Exclude fossil fuel investment from ETS revenue spending

Investing in fossil fuels (including switching to natural gas from coal, on the assumption that it leads to lower emissions²⁸) delays the transition and locks in fossil fuel infrastructure that will continue polluting for years to come. It furthermore prevents communities from 'leapfrogging' towards a sustainable economy and energy system and is therefore not consistent with the just transition.

5. Definitively remove excess ETS allowances from the market and lower the cap

Removing excess ETS allowances from the market ensures a more consistent carbon price. In turn, this can support long-term planning through ensuring consistent finance streams for the transition. Long-term, comprehensive, local-level strategic plans, developed with the local community, are vital to the implementation of an effective just transition. Long-term policy certainty and public financing are key enablers to ensure the full implementation of such plans.

While the MSR is proving efficient to remove the surplus of emission allowances, it is not clear whether this mechanism could cope with a sudden influx of allowances following a rapid coal phase-out (as reflected by recent announcements²⁹), or indeed other future events such as the withdrawal of a Member State from the EU, or another economic crisis. Voices are growing louder on the urgent need to cancel allowances in line with fossil fuel plant closures and to strengthen the MSR further²⁸.

Furthermore, lowering the ETS cap, as recommended in the previous MaxiMiseR report, should be a priority in any future revision of the ETS. This recommendation was recently echoed in a report by the Öko Institute which calls for a reduction of 205 million allowances as early as possible and no later than 2026³⁰.

Whilst from 2021, a higher linear reduction factor will be introduced (2.2% from 1.76%), this remains too low. The Öko Institute also estimates that to be consistent with a 60% GHG reduction target for 2030, the linear reduction factor for allowances should be increased to 3.63% from 2021 onwards or to 5.07% from 2026 onwards.

6. Introduce sustainability and climate proofing criteria to ETS spending

Member State reporting lacks sufficient detail to determine whether actions financed by ETS revenue genuinely support climate action, or are consistent with a transition aligned with the need to maintain global temperatures below 1.5°C. In order for actions to be truly consistent with a sustainable just transition, actions should also be climate proofed. 'Energy efficiency first' measures should be considered before investments in infrastructure are made. More generally, investments should be embedded in ambitious, comprehensive and long-term strategic plans that are consistent with a pathway to limit warming to no more than 1.5°C.

No action financed via ETS revenue should support fossil fuels, including gas.

Finally, additional measures can support the ETS to further deliver on the just transition towards a sustainable, climate neutral economy. **Box 5** contains recommendations to this effect.

BOX 5: Specific to the just transition, WWF recommends:

1. Clear guidance on what constitutes an activity in support of the just transition and what constitutes activities that are not compatible with a just transition.

In the absence of a clear definition of ‘just transition’, this would facilitate the selection of projects by Member States to ensure that only projects consistent with a just transition can be financed with ETS revenue.

An early opportunity to develop such guidance is presented through the adoption of an Implementing Act by the Commission for the operation of the Modernisation Fund from 2021.

2. Dedicated just transition strategies consistent with, and integrated into, NECPs and long-term strategies at national and regional levels

A strategic plan would strengthen NECPs, increase investor certainty, and provide a framework within which projects and climate-related spending can be evaluated to ensure they are consistent with a just transition. This could be built into the definition of a ‘just transition project’, by requiring that such projects fall within a strategy and are consistent with a pathway to climate neutrality, limiting global warming to no more than 1.5°C.

The just transition can gain further traction through national long-term strategies which foresee an impact assessment of the socio-economic aspects of decarbonisation to 2050.

The ETS provides tremendous potential to support the just transition. To unlock this potential, EU Member States must further reform the ETS to improve its focus and implementation within a broader policy context of reaching climate neutrality by 2050. To do so will support the necessary sustainable investments needed to make the transition happen in a socially fair way.

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