KOBiZE

Policy Brief
2025

A Fairer ETS2

Policy options ensuring climate ambition with social balance, while addressing price risks and distributional impacts

Warsaw, October 2025

Acknowledgments

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Design, cover and editing: Robert Jeszke

Publisher and copyright © 2025 Institute of Environmental Protection - National Research Institute (IOŚ-PIB); 32 Słowicza St., 02-170 Warsaw

Preparation and design of publications - The National Centre for Emission Management (KOBiZE).
www: www.kobize.pl

ISBN 978-83-977105-0-4

Financed from the resources of the National Fund for Environmental Protection and Water Management

Funded by
NATIONAL FUND
FOR ENVIRONMENTAL PROTECTION
AND WATER MANAGEMENT

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Executive Summary

The ETS2, which is set to start in 2027, is supposed to help reduce emissions in the buildings and road transport sectors. However, the introduction of the system raises serious questions about its possible negative social and economic consequences which may lead to significant backlash. The possible negative consequences arise from:

- Significant uncertainty regarding the price of allowances and risk of extremely high prices,
- Unfairly distributed burden between different types of households,
- Unfairly distributed burden between countries and regions of different income,
- Differences in the fuel mix currently used in different countries.

In order to mitigate negative consequences of the ETS2, it is accompanied by a Social Climate Fund which will provide direct aid and investment subsidies to help vulnerable entities cope with price increases and reduce fossil fuel consumption. However, the size of the SCF is insufficient to meet all investment requirements in the transport and buildings sectors. In this policy paper, we outline the main elements of the new ETS2 system and discuss the issues that are most problematic. We then propose the following ways in which the system can be amended in order to mitigate these risks:

- Introduce a soft price corridor for the price of allowances. This temporary intervention proposal would entail auctioning a much larger amount of allowances taken from other sources such as the MSR of the ETS1 or from purchasing offsets abroad.
- Alternatively, we propose to delay the introduction of ETS2 for up to three years, while at the same time ensure the availability financing from the Social Climate Fund as early as possible.
- In order to address the problem of income differences between countries, we propose to vary the price of allowances paid by different countries, which could take the form of socially adjusted factors of surrendering allowances. The formulae for deriving country-specific factor values should be similar to the ones used for specifying country emission reduction targets under the Effort Sharing Regulation.
- Allowing offsets into the ETS2 which would be carried out by a European Central Carbon Bank.

If stricter measures that limit the price in the ETS2 are not introduced, the political backlash against the ETS2 system might result in a significant weakening of the climate agenda and possibly lead to even higher emissions. It is worth noting that the rationale behind the ETS2 system is that it should aid in reducing emissions in the non-ETS sectors. If the price of the ETS2 system is too high or does not deliver a price signal that is aligned with a country's income, it might do just the opposite. The proposed reforms are not about favouring specific Member States – they are about preserving the political and social legitimacy of the EU's climate transition as a whole. If ETS2 fails socially, the credibility of the entire European Green Deal could be at stake.

Box 1. Key Messages

- **A fair ETS2 must combine ambition with acceptance:** the system's sustainability depends on public trust as much as on emission targets.
- **Price stability is not an obstacle but a safeguard** for a credible transition.
- **Socially adjusted surrendering factors** can bridge the East–West divide and strengthen the social legitimacy of EU climate policy.
- **Early investments should be financed by EU-backed credit instruments**, not by depleting future allowance supply.

If implemented, these reforms would transform ETS2 from a politically fragile cost mechanism into a resilient, socially balanced, and future-proof carbon market – one that all Europeans can support.

1. ETS2 system at a glance

On 10 May 2023, the EU adopted the revised Directive (EU) 2023/959[1] on the EU Emissions Trading System (EU ETS), which extends emissions trading by introducing a separate ETS (ETS2) for fuels used in buildings and road transport. This aim of the new system is to foster emission reductions in these sectors, which under current policies will most probably not achieve the reduction target of 42%[2] set for 2030. The ETS2 is expected to gradually increase the price of fossil fuels, tempering the demand and reducing the number of journeys as well as motivating households to reduce energy consumption and electrify heating. The new system, which will directly affect the energy bills paid by consumers, has raised serious concerns among member states due to its strong social implications. Some of these concerns have been addressed through the creation of the Social Climate Fund, which will provide support for vulnerable households and micro-enterprises. Despite this, there is a fierce and ongoing debate regarding the final design of the ETS2 system, with various actors calling for major changes. For example the extension and strengthening of the Market Stability Reserve (MSR) and price-control mechanisms proposed in the non-paper endorsed by the 16 Member States[3] or the MEP's proposal regarding the "frontloading" of ETS2 auction revenues[4].

The Decision (EU) 2024/2951[5] set the emissions cap for 2027 at approx. 1 036 million allowances, which will be reduced by a linear reduction factor (LFR) of 5.38% from 2028. In order to ensure market liquidity, the auction for 2027 will be frontloaded by an additional 30% of allowances taken from volumes designated for 2029 to 2031. From this cap, the European Commission will allocate 150 million allowances to the Social Climate Fund, which will be auctioned in equal tranches of 25 million each year until 2032. Member States are expected to spend the remaining ETS2 revenue on climate action.

Table 1. The emission cap and the number of allowances available in the ETS2 system over the period 2027-2032 [million]

Category/years	2027	2028	2029	2030	2031	2032
ETS2 cap	1 036	981	925	869	813	758
Frontloading	+312	0	-104	-104	-104	0
SCF auction volumes	25	25	25	25	25	25
EU MS's auction volumes (excluding SCF)	1 323	956	796	740	684	733

Source: CAKE/KOBiZE.[6]

[1] *Directive (EU) 2023/959* of the European Parliament and of the Council of 10 May 2023, OJ L 130, 16.5.2023. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02023L0959-20230516

[2] Regulation (EU) 2023/857 of the European Parliament and of the Council, OJ L 111, 26.04.2023. https://eur-lex.europa.eu/eli/reg/2023/857/oj/eng

[3] *Joint non-paper by Austria, Belgium, Bulgaria, Croatia, Czechia, Estonia, Germany, Italy, Latvia, Lithuania, the Netherlands, Poland, Romania, Slovakia, Slovenia, Spain on ETS2 price uncertainties and possible improvements*

[4] A group of MEPs from various political groups (EPP, S&D, Greens, Renew), led by Peter Liese, has called on the European Commission to "frontload" ETS2 revenues, i.e. to launch investments financed from future revenues from the system even before its launch in 2027. They propose the creation of an EU lending mechanism – e.g. with the EIB or from unused RRF funds – secured by future ETS2 revenues, which would allow Member States to start spending as early as 2025.

[5] Regulation (EU) 2024/2951 of the European Parliament and of the Council, OJ L 202, 13.11.2024. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202402951

[6] CAKE/KOBiZE. (2025). *GO2'50. Climate. Society. Economy,* vol. 5, ISSN 2720-5320, Warsaw. https://climatecake.ios.edu.pl/wp-content/uploads/2025/03/GO250.-Climate.-Society.-Economy-vol.-5.pdf

The ETS2 includes a Market Stability Reserve mechanism containing 600 million additional allowances which will be valid until 2030[7]. When the total number of allowances in circulation (TNAC) falls below a defined lower threshold, allowances are released from the MSR and reintroduced into the market, thereby increasing supply. Conversely, if the TNAC exceeds an upper threshold, a portion of allowances is withheld from auctioning and transferred into the MSR, reducing supply. Furthermore, Article 30h of the EU ETS Directive outlines three specific mechanisms through which the MSR can be activated in response to sharp price increases:

- 20 million allowances will be released from the MSR when the average price of ETS2 allowances in the auctions exceeds €45 (in 2020 prices, adjusted for inflation) per tonne of CO2e for two consecutive months. This mechanism can be used until 31 December 2029. It is important to bear in mind that the amount of €45 per tonne of CO2e is not an absolute threshold. Crossing it only means auctioning additional allowances with the price being allowed to fluctuate freely.
- 50 million allowances will be released from the MSR when, for more than three consecutive months, the average price of allowances in the auctions is more than twice the average price of allowances compared to the six preceding consecutive months. In 2027 and 2028, the average price of allowances should be 1.5 times higher for this condition to be triggered.
- 150 million allowances will be released from the MSR when the average price of allowances is more than three times the average price of allowances compared to the six preceding consecutive months.

Finally, Article 30k of the ETS Directive introduced two mechanisms based on the price of gas and oil which would postpone the ETS2 until 2028, however it is highly unlikely that these mechanisms will be engaged.

[7] CAKE/KOBiZE. (2025). *GO2'50. Climate. Society. Economy*, vol. 5, ISSN 2720-5320, Warsaw. https://climatecake.ios.edu.pl/wp-content/uploads/2025/03/GO250.-Climate.-Society.-Economy-vol.-5.pdf

2. Social impact of ETS2 system

The implementation of ETS2, while aligned with the EU's climate objectives, will entail significant social and economic costs. Therefore, it should accompanied by appropriate protective, redistributive and institutional mechanisms, expressly targeting energy poverty. Both expert literature and our own analysis point to the risk of deepening inequalities and significantly deteriorating the financial situation of vulnerable households and microenterprises. If carbon pricing is introduced carelessly in sensitive sectors such as transport and household heating it might trigger social unrest, causing investment instability and push back the decarbonisation process further back than under less ambitious targets.

The most pertinent issues raised in the literature are the impact on low-income households and increase in transport exclusion (Wettestad, 2024[8]; Rangel Guevara, 2024[9]; EC, 2021[10]; Emmerling, Andreoni and Tavoni, 2024[11]). Referring to the "Yellow Vests" movement, the authors point out that transition may trigger social resistance not because of opposition to climate goals, but due to a perceived lack of fairness in the distribution of costs. Despite the fact that in the long term climate policy proves beneficial for nearly the entire population, the short-term costs which are disproportionately borne by poor households may lead to social resistance. Measures addressing fuel poverty through direct compensation are a popular policy used or contemplated by governments worldwide, but these need to be calibrated to target only individuals and households that are significantly less well-off as a result of rising energy prices linked to decarbonisation. Without adequate compensation and support, ETS2 risks becoming a catalyst for broader resistance to climate policy and political backlash.

The uneven social impact holds both for household heating as well as transport (see e.g., Brand & Boardman, 2008)[12]. While high-income households emit significantly more, the relative financial burden of ETS2 will be more severe for lower-income groups, as fuel cost increases represent a larger portion of their disposable income. Low-income households tend to spend a larger share of their income on mobility, are more likely to drive older and less fuel-efficient vehicles, and often reside in areas with limited access to public transport. Rural households are especially vulnerable due to their greater reliance on private cars and longer average travel distances. However, energy poverty is only partly aligned with income poverty. In all EU Member States there are energy consumers with income above the official poverty threshold that cannot afford to pay for heating, and sometimes even electricity. According to the latest data, "low-income – high costs" indicator, around 11% of Poles were energy poor in 2023[13]. Furthermore, according to the project of the Polish Social Climate Plan, the number of energy poor households may increase from 1,35 mln in 2023 to as much as 1,65 mln within a couple of years following the introduction of the ETS2[14].

[8] Wettestad, J. (2024). *EU Emissions Trading for Transport and Buildings: Saved by Synergistic Institutional Interaction?* Journal of Common Market Studies, 63(3), 915-931. Doi: 10.1111/jcms.13671

[9] Rangel Guevara, A.C. (2024). *Identifying the losers in the transport transition: evidence from Germany.* Humanities and Social Sciences Communications, 11, 741. Doi: 10.1057/s41599-024-03163-6

[10] European Commission. (2021). *Impact assessment accompanying the proposal for a directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading (SWD(2021) 601 final)*. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021SC0601

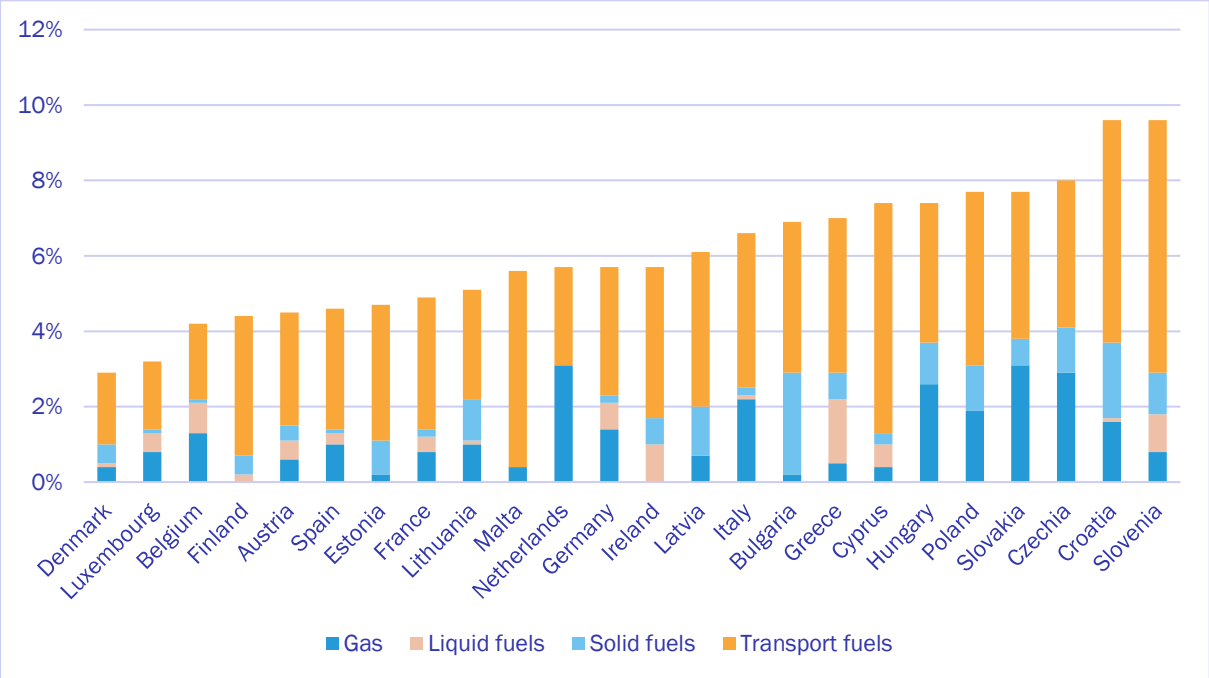
[11] Emmerling, J., Andreoni, P., & Tavoni, M. (2024). *Global inequality consequences of climate policies when accounting for avoided climate impacts.* Cell Reports Sustainability, 1(1). Doi: 10.1016/j.crsus.2023.100008

[12] Brand, C., & Boardman, B. (2008). *Taming of the few—The unequal distribution of greenhouse gas emissions from personal travel in the UK*. Energy Policy, 36(1), 224–238. doi: 10.1016/j.enpol.2007.08.016

[13] Sokołowski, J.,Mazurkiewicz, J. (2025). Społeczny Fundusz Klimatyczny. Jak ochronić gospodarstwa domowe przed wzrostem cen energii? IBS Policy Paper 02/2025, https://ibs.org.pl/publications/spoleczny-fundusz-klimatyczny-jak-ochronic-gospodarstwa-domowe-przed-wzrostem-cen-energii/

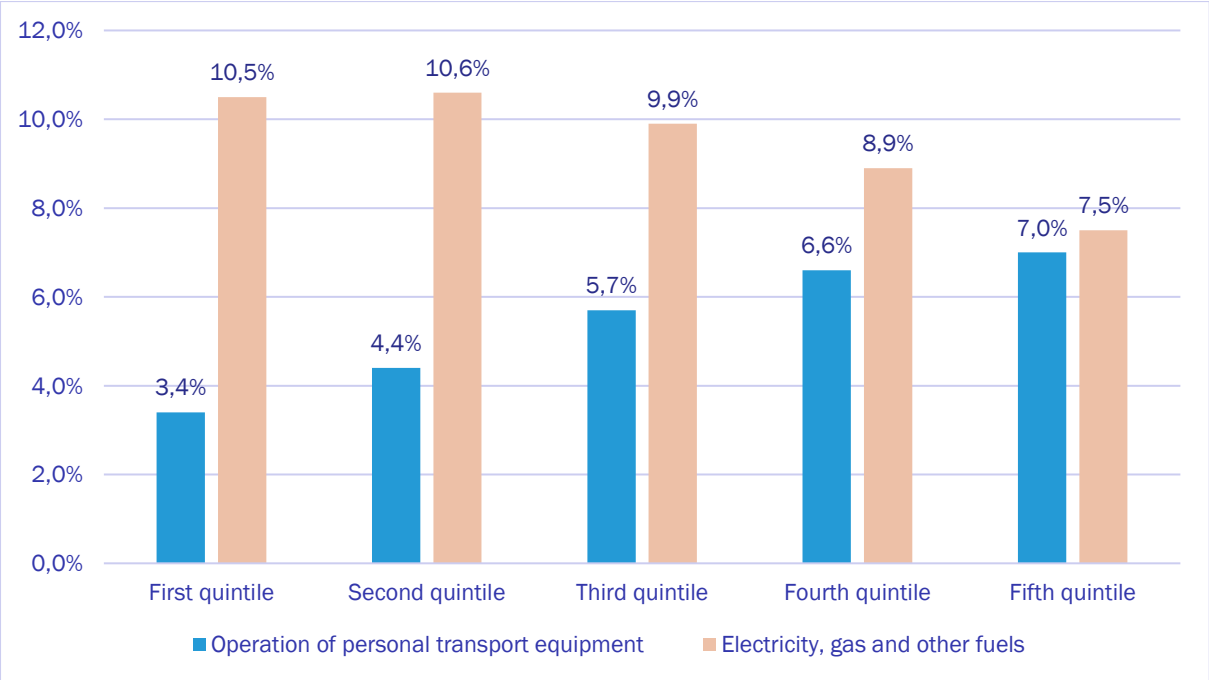
[14] Ministerstwo Funduszy i Polityki Regionalnej. *Społeczny Fundusz Klimatyczny – plan.* Fundusze Europejskie [European Funds]. Available at: https://www.funduszeeuropejskie.gov.pl/strony/o-funduszach/spoleczny-fundusz-klimatyczny/plan/

Figure 1. Share of household expenditures on fossil fuels for heating and transport in 2020.



Source: Eurostat. Structure of consumption expenditure by COICOP consumption purpose [hbs_str_t211].

Figure 2. Consumption expenditures of Polish households on transport (operation of personal transport equipment) and on energy used in housing (electricity, gas, and other fuels) in 2020 by income quintile.



Source: Eurostat. Structure of consumption expenditure by income quintile and COICOP consumption purpose [hbs_str_t223].

Micro-enterprises could also face financial difficulties in the face of increasing fuel prices. Given that in Poland they employ 40% of the workforce and generate 30% of national GDP (PKO Bank Polski Analytical Centre, 2024[15]), the implementation of ETS2 raises serious concerns about its socio-economic impact on this group of businesses. The ETS2 will directly increase fuel and heating costs (Vornicu-Chira, Sinea, Lese, & Jigălu, 2024[16]), and since they are more vulnerable to cost fluctuations than large firms they may be pushed out of the market (Rogulj, 2024[17]). The reasons for the vulnerability are limited investment capacity due to financial liquidity, restricted access to credit (Bobinaitė et al., 2025[18]) and also insufficient expertise, and low awareness of energy efficiency opportunities (Rogulj, 2024). Finally, similar to the household sector, ETS2 could have a regressive impact, which could deepen inequalities and undermine public support for climate policy (Vornicu-Chira et al., 2024).

There is also significant variation in spending on energy goods both between countries and within countries when one looks at households of different income level. Household spending on fossil fuels used for both heating and transport varies significantly across EU Member States, as shown in Figure 1. For poor households in countries with relatively lower GDP that are located in Central and Eastern Europe, expenditure on fossil fuels due to be covered by the ETS2 system represents approximately 7.3% of their expenditures, while for much richer Western European economies this value is 2.5 p.p. lower. This raise concerns that the mitigating effect of the SCF may be uneven and potentially unjust, particularly if national allocations do not reflect actual household exposure to transport fuel costs. The differences in fossil fuel expenditures within countries are also pronounced. For example, in the case of Poland, the poorest 20% of households spend a much larger share of their income on heating than rich households (Figure 2). For transport fuels, the pattern is the opposite, with the poorest quintile spending roughly three times less on transport fuels than the richest quintile.

Box 2. The Fairness Gap in ETS2

Group	Average disposable income (€/month)	Share of total household spending on fossil fuels (%)	Estimated monthly Impact of €90/t ETS2 price
Richest households in EU-15	~ 4,000 €	4.6%	+€50-60
Poorest households in CEE	~ 800 €	7.3%	+€20-30

Source: KOBiZE own calculations based on Eurostat data (HBS 2020, EU-SILC 2020).

[15] PKO Bank Polski Analytical Centre. (2024). *Micro-enterprises 2024.* Available at: https://centrumanaliz.pkobp.pl/analizy-sektorowe/mikroprzedsiebiorstwa-2024

[16] Vornicu-Chira, A., Sinea, A., Lese, M., & Jigălu, G. (2024). *Identifying the vulnerabilities to the ETS2 in Romania.* Democracy Center Foundation. https://democracycenter.ro/wp-content/uploads/2025/05/ENG-raport-21.04.pdf

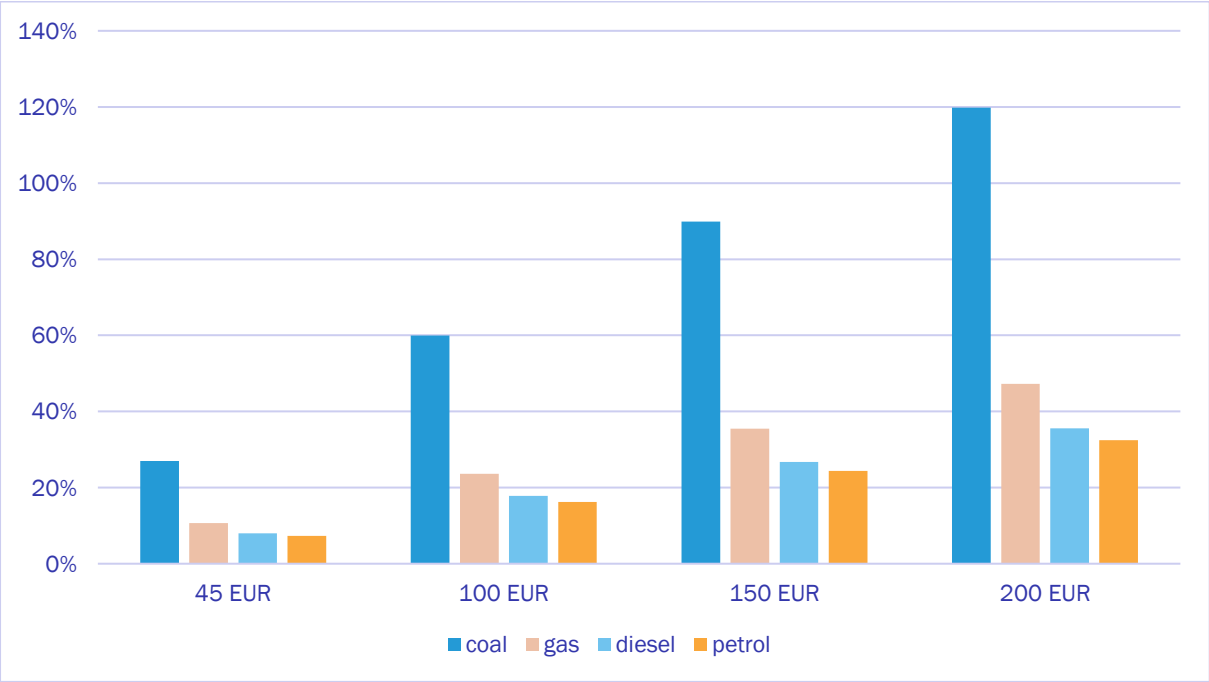
[17] Rogulj, I. (2024). *What determinants of micro-enterprises influence their energy vulnerability?* Discussion paper. Institute for European Energy and Climate Policy (IEECP). https://ieecp.org/wp-content/uploads/2024/06/Discussion-paper-on-microenterprises_Rogulj.pdf

[18] Bobinaite, V., Neniskis, E., Konstantinaviciute, I., & Tarvydas, D. (2025). *Identifying and assessing vulnerable micro-enterprises in Lithuania.* Sustainability, 17(12), 5405. Doi: 10.3390/su17125405

3. Further problematic issues around ETS2

As cap and trade system, the ETS2 sets the limit of emissions and allows prices to fluctuate freely. While there are mechanisms that safeguard against drastic increases in the price of allowances, they do not guarantee that the price does not exceed a given threshold. There is considerable uncertainty regarding future price levels, and the uncertainty alone can impose additional and unnecessary cost on the EU economy (Fuchs et al. 2024)[19]. This can be especially true for households, which are not professional market actors, as they do not have the possibility to hedge against emission price fluctuations and have limited ability to adapt to price changes. Various analytical centres, such as Veyt, Energy Aspects or BloombergNEF, estimate that the ETS2 prices could reach over 140 EUR by 2030, which is significantly more than the European Commission envisages. The relative retail price increases for the most common fossil fuels used in Poland for various ETS2 price levels is shown in Figure 3. While the increase in the price of fossil fuels is modest for the level of 45 EUR for which additional allowances are injected, the price may very well exceed this level. Higher levels of prices in the ETS2 may be problematic for at least several reasons.

Figure 3. Relative increase in the price of selected fossil fuels for different levels of price in ETS2 system with respect to average retail fuel prices in 2024 in Poland.



Source: KOBiZE own calculations.

First of all, the higher end of the price range can be difficult to cope with for vulnerable households struggling to adequately heat their homes. This is especially true for the high number of households in Poland which use coal for heating. However, what is more important, such high prices could also be unnecessary to incentivise households into investing in thermal insulation and replacing their heating source. It is enough that the price reaches a certain threshold that makes such investments

19 Fuchs, M., Stroebel, J., & Terstegge, J. (2024). Carbon vix: Carbon price uncertainty and decarbonization investments (No. w32937). National Bureau of Economic Research.

economically viable. Once such investments become viable, more households will choose to proceed with them. However, due to limited technical potential, they could be forced to wait several years before they are able to replace their heating source. For example, in Poland well over 3 million households use fossil fuels for heating, while the potential for heat pump installation is estimated to be no more than 300 000 per year, implying more than 10 years of time for these investments. During the waiting time, burdening households with increasing emission prices serves no purpose, is unfair and unjustified

Furthermore, the EU consists of countries and regions with drastically varying incomes, with the richest regions at the NUTS2 level being approximately 10 times richer than the poorest ones. This implies that the same price signal coming from a given emission price will result in a significantly heavier burden for households working in different parts of the EU. Furthermore, the emission price threshold after which a household is incentivised to invest in energy efficiency and a clean energy source will also be drastically different. Given the prevalence of threshold effects in household behaviour, the "one price fits all" policy in the case of households might be suboptimal.

Finally, given that poorer countries will most likely be last to invest in clean energy sources and energy efficiency, there is a chance that it is the residents of these countries will pay the bulk of the cost of emission allowances. Given an initial distribution of allowances between countries, this could lead to a situation in which poorer countries purchase emission allowances from richer ones[20], leading to a transfer between countries.

[20] The allowances will be allocated based on historical emissions; therefore, over time, a similar problem may arise in ETS2 as was observed in ETS1, where countries with relatively low incomes experienced allowance deficits.

4. Proposals to amend the ETS2

Before presenting KOBiZE's proposals to amend the ETS2, it is useful to place them in the wider context of the ongoing European debate. Over the past year, numerous institutions — including *Frontier Economics, Cep (Centrum für Europäische Politik), Transport & Environment (T&E), Carbon Market Watch, and the analytical team at BloombergNEF (BNEF)* - have published ideas aimed at improving the system's design and social acceptability. Moreover, a cross-party group of 17 Members of the European Parliament, formally called on the European Commission to establish an EU-level lending facility backed by future ETS2 revenues.

While these contributions share a common goal - avoiding social backlash and political fragmentation - they remain partial and fragmented, addressing only individual symptoms rather than the underlying design flaws of the current shape of ETS2:

- **T&E's proposal** outlines how revenues from the new ETS2 system could finance a green and just transition across the EU. It recommends returning at least 50% of ETS2 revenues as financial support, particularly to low- and middle-income households, while investing the rest - especially in the transport sector, which accounts for most ETS2 emissions.
- **Carbon Market Watch** advocates to start ETS2 auctions in mid-2026 by spreading the 2027 auction volume over 1,5 years without increasing the total number of allowances.
- **BloombergNEF** has modelled possible price paths for ETS2, warning that without any changes in stabilisation mechanisms - e.g. MSR and art. 30h of EU ETS Directive mechanisms[21] (very similar proposition was introduced by Frontier Economics), allowance prices could exceed **€122/tCO_2 by 2030**, far above the level compatible with social acceptance.
- Finally, **a cross-party group of 17 MEPs** (Liese, Chahim, Bloss, Lövin, Wölken, among others) urged the Commission to create an EU-level lending facility (via the EIB or RRF) backed by future ETS2 revenues (a very similar proposition was introduced by Frontier Economics, T&E's and CepStudy). This would allow pre-2027 investments in renovation and transport without increasing national debt. Politically appealing and socially proactive - but economically ambiguous, as it could alter price expectations and requires robust governance to remain credible.

[21] BNEF calculates that with additional supply from MSR, ETS2 prices may fall to about €78/tCO_2. BNEF also calculates other measures like subsidies for electrification which can accelerate consumer adoption, boost supply, and lower costs, bringing the average carbon price down to around €88/ tCO_2 by 2030 or measure like strong emission standards and energy performance targets which could push it further to €86/tCO_2.

Box 4. Comparative overview of existing ETS2 reform proposals

Source / Institution	Core idea	Main limitation
T&E (2025)	Targeted green and just transition use of ETS2 revenues	Success depends on effective coordination and implementation by MS's, which could vary widely
Carbon Market Watch	Early ETS2 auctions in 2026	Risk of ETS2 allowances being bought by speculators before real market demand emerges.
BloombergNEF, Frontier (2025)	Stabilisation mechanisms (MSR, art. 30h) reform to avoid €122/tCO_2 levels	Risk of too many mechanisms that may lead to oversupply in the system – would need a comprehensive governance by one institution (e.g. ECCB)
17 MEPs Letter, Frontier, T&E's, Cep (2025)	EU lending facility backed by future ETS2 revenues (via EIB/RRF)	Creates implicit intertemporal debt; depends on effective revenues spending.

Source: KOBiZE own elaboration.

Against this backdrop, KOBiZE's proposals aim to combine these perspectives into a coherent framework — one that introduces **systemic fairness and predictability within the ETS2 design itself**, rather than treating them as afterthoughts.

In order to address the issues laid out in the previous chapters, we propose the following measures which could mitigate the negative social impacts of the ETS2, while at the same time incentivising clean energy and energy efficiency investments:

- Introduce soft price corridor for the price of allowances;
- Postpone the start of the system without delaying the start of the SCF;
- Introduce socially adjusted factors of surrendering allowances for different Member States;
- Allow high quality international offsets into ETS2 system.

In what follows we discuss each of the proposals in detail.

A. Soft price corridor

In response to the uncertainty and possibility of extremely high prices in the ETS2 system, we propose introducing a soft price corridor (or "price collar") for ETS2[22]. In particular, we propose to modify the current mechanism which foresees releasing 20 million allowances if the price exceeds 45 EUR. The modification would entail continuous sale of allowances if the price exceeds a given threshold. The threshold could remain at the level of 45 EUR[23], or be altered in the process of negotiation. The additional allowances could be drawn from the following sources:

- **Allowances in the MSR reserve in the ETS2 system**. According to current regulations, allowances not injected into the market will be invalidated after 2030. Our projections show, that at least 300 million allowances will be invalidated. These allowances should be injected into the system in order to keep prices at acceptable levels.
- **Allowances that have been invalidated in the MSR reserve in the ETS1 system until 2030** under the so-called invalidated mechanism (according to our estimates this amounts to 3,4 billion allowances[24])
- **Unallocated allowances from the ETS1 in the years 2021-2030**. According to our calculations this amounts to approx. 340 million allowances.
- **The 3% buffer for free allowance allocation in ETS1**. These allowances will most probably not be used and they amount to approx. 360 million.
- **Purchase of offsets abroad by an institution like the European Central Carbon Bank (ECCB)**.

The above-described sources of allowances for possible market intervention could allow participants to 'survive' the first years of the ETS2 system's operation without bearing excessive burdens. Additionally, part of the proposals based on the use of allowances from ETS1 constitutes a kind of flexibility mechanism between the two systems, which are currently intended to operate separately.

After 2030, however, a much higher maximum price could be considered, such as the EUR 290 price proposed by the European Commission in its Impact Assessment. This level was not set arbitrarily by the EC, but corresponds to the marginal abatement costs in ETS1 and ETS2 for 2040 specified in scenario S3 in the European Commission's impact assessment. This mechanism would work in such a way that if the price limit were exceeded, additional allowances or offset units would automatically be placed on the market, which could contribute to a significant reduction in ETS2 prices and their stabilisation. Alternatively, a progressive price mechanism could be considered, whereby the number of allowances placed on the market would be gradually increased as successive price thresholds – for example from EUR 150 to EUR 290 – are exceeded, in order to respond to changing market conditions in a more flexible and balanced manner. Both solutions would operate on the basis of pre-defined rules, while ensuring predictability and protection against excessive socio-economic costs.

[22] Due to the fact that high prices are a much bigger concern than low prices, we will concentrate on the discussion of the price ceiling.
[23] 45 EUR in 2020 prices. The nominal amount will be adjusted for inflation.
[24] According to the communication of the EC, 3.2 billion allowances have been invalidated from the MSR so far.

This approach of a soft price corridor combines the benefits of a traditional ETS system with the stability and predictability of price controls. Under normal conditions, the ETS would function as usual, providing a clear and cost-effective emission reduction pathway across countries. The corridor would only come into play in exceptional circumstances, when prices move outside the agreed range. While it is possible that the desired reduction in emissions due to ETS2 could be lower than under a strict cap and trade system with a fixed level of emissions, we believe this is a price worth paying to ensure support for the continued decarbonisation efforts.

The floor price gives investors in low-carbon technologies, particularly energy efficiency and low-carbon energy, confidence that decarbonization will remain economically viable even if allowance demand collapses (for example, during recessions or energy crises). The ceiling price reassures international investors that the EU economy will remain on a sustainable growth path, even if decarbonization proves more difficult than expected (e.g., due to delays in the commercialization of e-fuels or carbon dioxide removal technologies). In addition, by limiting extreme cost pass-through to consumers – particularly in heating and transport – the corridor reduces the risk of political backlash that could undermine the ETS2.

Box 5. Introduce a transparent soft price corridor (price collar)

To limit excessive volatility and restore investor confidence, ETS2 should operate within a defined maximum price – for example, **€45/tCO_2 till 2030 and 150–€290/tCO_2 after 2030**– with automatic supply adjustments when the ceiling is reached. Additional allowances could be sourced from the **MSR, unallocated EUA reserves, or offsets purchased by a future European Central Carbon Bank (ECCB).**

This mechanism would ensure predictability for households and investors alike, while maintaining an effective carbon price signal and avoiding destabilising spikes that could erode political support.

In our view, the corridor would be simpler and more robust than the current Market Stability Reserve (MSR), which may become increasingly complex as the system approaches near-zero auctionable allowances. A clear floor and ceiling would provide automatic and transparent stabilization, reducing the need for discretionary interventions.

The soft price corridor would address concerns about large financial transfers between countries. When prices hit the ceiling, local emitters would purchase allowances directly from their own governments, eliminating the need for cross-border allowance purchases and reducing resource outflows. At the lower bound, similar mechanisms could apply, although the transfers would be relatively small and thus less of a concern.

B. Postpone the start of the system while ensuring financing for clean energy investments

An alternative to price controls, such as those outlined in the previous paragraph, is the postponement of the ETS2 system by up to three years. This would provide households and small businesses with crucial time to prepare for the expected increase in energy and fuel costs, helping to avoid disproportionate financial burdens on vulnerable populations and limiting societal backlash. The additional time should be devoted to the expansion of affordable clean alternatives, such as energy-efficient building renovations and low-emission mobility solutions, which are currently insufficient in many regions. By aligning the ETS2 rollout with broader infrastructure and policy readiness, the EU can support more equitable and effective decarbonisation.

Regardless of the decision to postpone the start of the ETS2 system, it is crucial that clean energy and energy efficiency investments are initiated and scaled up as early as possible. This means that as much financing should be made available for programs which promote such investments for households and micro-enterprises. A review of such programs can be found in a recent report by the European Commission (2025)[25]. Member States should not delay the introduction of the Social Climate Fund. The SCF and any other investment funds devoted for building renovations, heat pumps, and low-emission mobility could be made available through EU-backed loans guaranteed by future ETS2 revenues – not by frontloading or borrowing allowances from future years, which would tighten supply and push prices higher later on. These funds would ensure that clean investments are conducted as early as possible, thus reducing demand for allowances in the future and driving down their prices.

C. Apply socially adjusted surrendering factors across Member States

The aim of this proposal is to differentiate the burden of the ETS2 among countries of different income levels. Such an approach recognizes that Member States have different capacities to pursue climate objectives and ensures fairness. In order to do so, we propose to vary the factors at which entities in specific countries surrender allowances for their emissions, with entities in poorer countries being permitted to surrender fewer allowances per unit of carbon dioxide emissions than those in richer countries. These factors should be calculated based on the level of GDP per capita.

We propose to use a similar method of calculation to the one used for the derivation of country emission reduction targets in the Effort Sharing Regulation (ESR). Such a mechanism would insure a uniform, income-adjusted price signal (contrary to a uniform price signal, which does not take differences in living standards into account) across the EU, thus contributing to a more robust transition that will have more widespread support.

It should be emphasized that the sectors covered by ETS2 remain part of the non-ETS and are still subject to the emission reduction targets imposed on Member States. As the ETS2 system has a more ambitious greenhouse gas reduction target for 2030 than the non-ETS sectors, the burden resulting from ETS2 should be distributed similarly to the ESR mechanism. It is also worth noting that the sectors covered by ETS2 constitute a significant share of the non-ETS area (approximately 50%).

[25] European Commission: Directorate-General for Climate Action, Ricardo and Öko-Institut e.V. (2025). *A study of supporting measures promoting decarbonisation in the sectors covered by ETS2:*, Publications Office of the European Union. Doi: https://data.europa.eu/doi/10.2834/2777563

Concept for determining socially adjusted surrendering factors

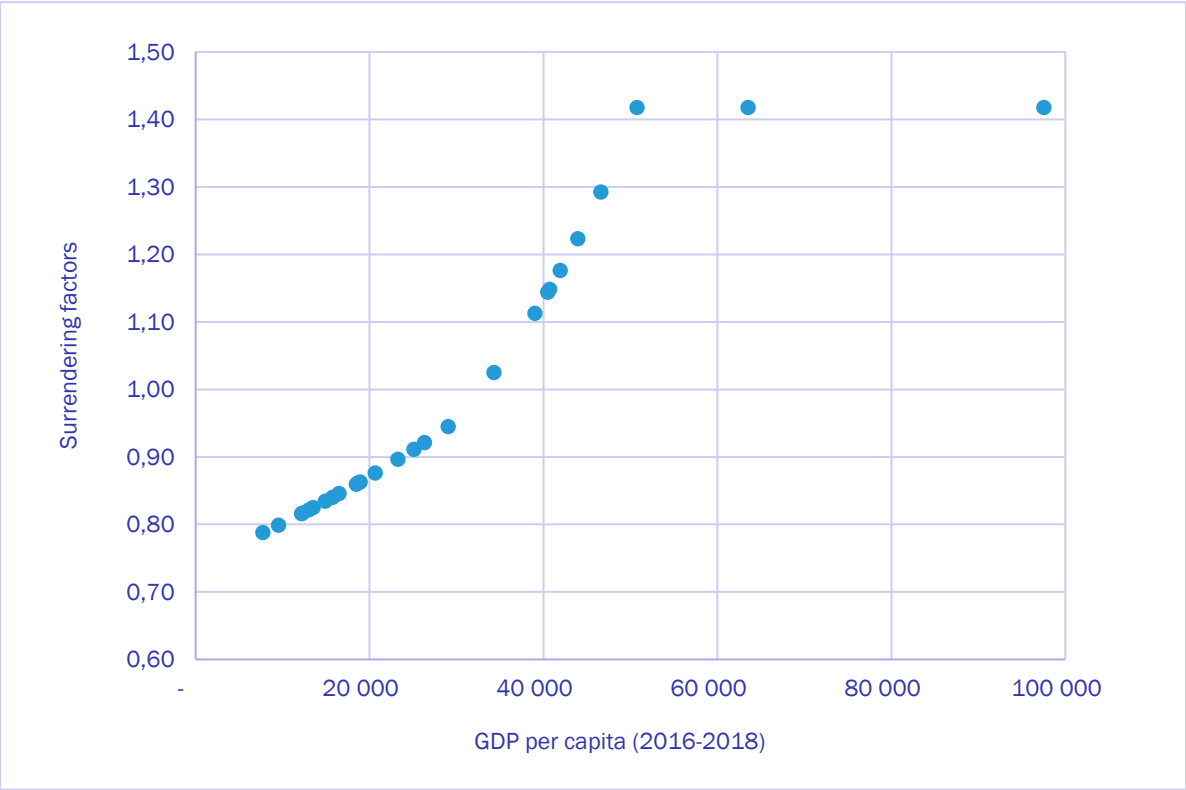
Following the approach of the Effort Sharing Regulation (ESR), a methodology has been proposed for determining surrendering factors under the ETS2 system.

The objective is to ensure that the EU achieves the emission reduction target defined by the ETS2 cap for 2030, while differentiating national burdens according to income levels. The socially adjusted surrendering factors reflect this differentiation, they are lower for countries with below-average GDP per capita and higher for wealthier ones, thereby ensuring the collective achievement of the ETS2 target.

Two methodological variants are proposed:

- Option 1 (extended): the factors depend both on GDP per capita and on the national reduction targets established under the ESR. The indicators are updated annually based on verified ETS2 emission data. A detailed description of the methodology is provided in Annex I.

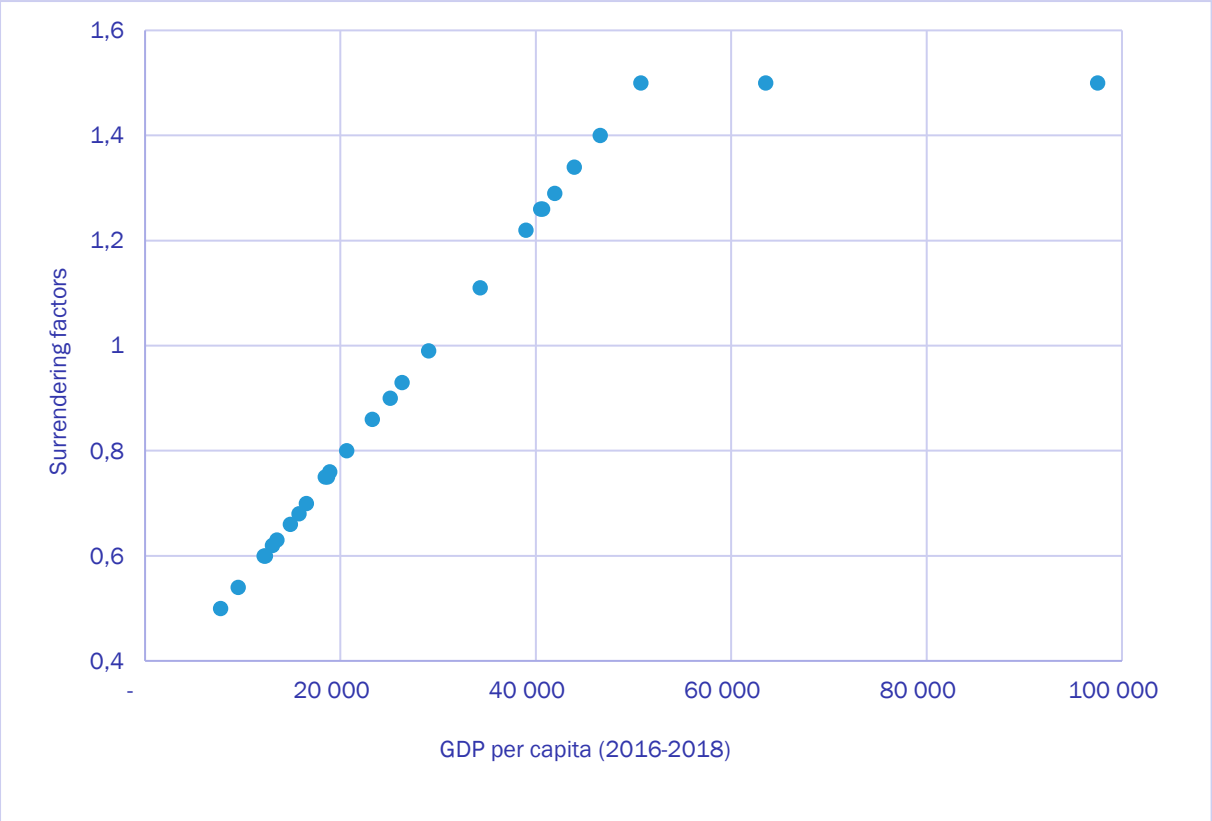
Figure 4. Socially adjusted surrendering factors based on GDP per capita and on the national reduction targets established under the ESR.



Source: KOBiZE own calculations.

- Option 2 (simplified): the factors depend solely on GDP per capita and are derived as a capped linear function.

Figure 5. Socially adjusted surrendering factors based on GDP per capita.



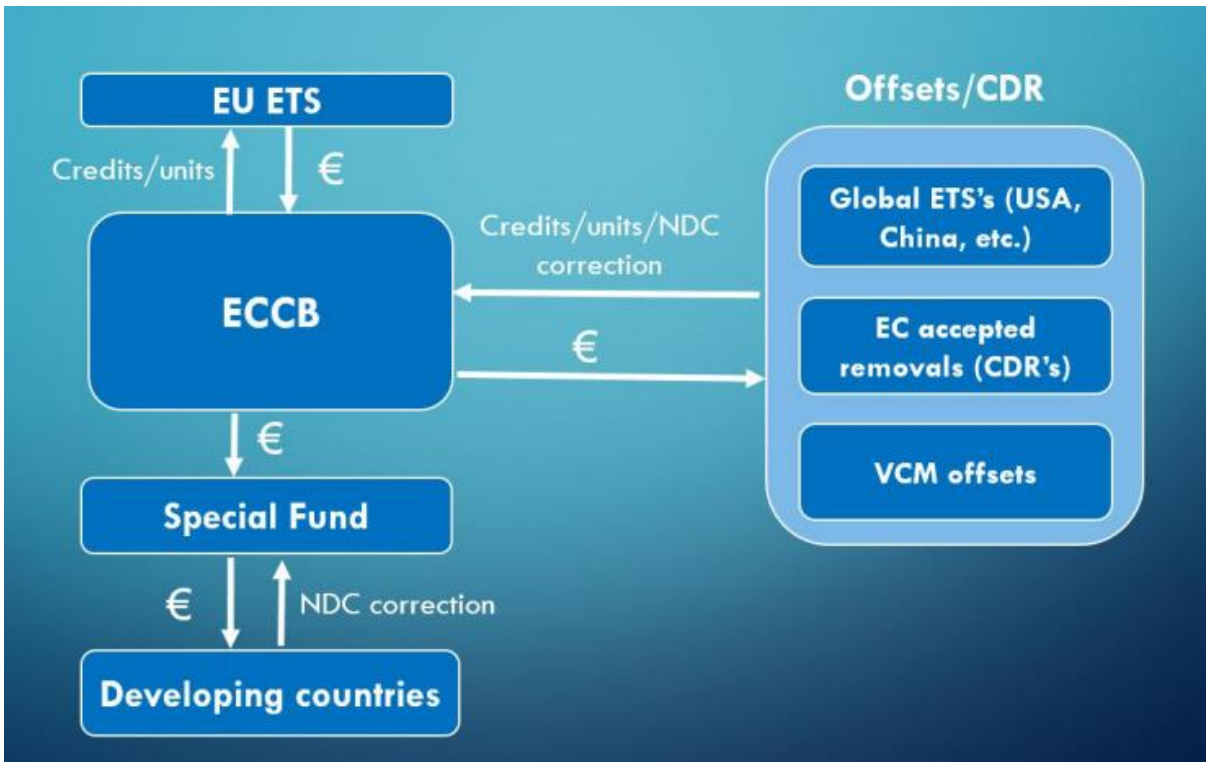
Source: KOBiZE own calculations.

This proposal could be amended in several ways. For example, instead of having 27 different country-specific factors, countries can be grouped according to their income and share a common factor. Finally, the factors could converge to unity over time in order to unify the system and react to converging incomes across Member States.

D. Allow high quality international offsets into ETS2 system

Using international offset units in ETS2 after 2030 could provide an important source of flexibility for the system. Allowing international credits would enable the EU to reduce the cost of compliance, particularly in sectors where decarbonisation options are limited. This approach would mitigate strong price increases in ETS2 allowances and ensure greater market liquidity. As the system is expected to encounter volatility and supply constraints by the end of this decade, integrating offsets from 2031 could stabilise market dynamics. However, strict oversight would be essential to guarantee that such credits meet high environmental standards and deliver genuine reductions in emissions. Proposals have therefore been made for the establishment of an independent body, such as a European Central Carbon Bank, to oversee the use of international offsets. This institution would oversee quality control, monitor supply and demand, and intervene when necessary to stabilise ETS2 prices.

Figure 6. ECCB financial flows and offset integration with international climate finance.



Source: KOBIZE Policy Brief: "Introducing the ECCB as the new institution to manage the future EU carbon market", Warsaw, June 2025.

In practice, the ECCB would operate much like a central bank: it could purchase international offsets at lower prices on external markets and later release them into the ETS2 at a controlled pace to prevent sudden price shocks. Revenues generated from this process could be reinvested through a Green Investment Fund to support EU climate priorities and international climate finance in developing countries[26].

[26] KOBIZE Policy Brief: "Introducing the ECCB as the new institution to manage the future EU carbon market", Warsaw, June 2025

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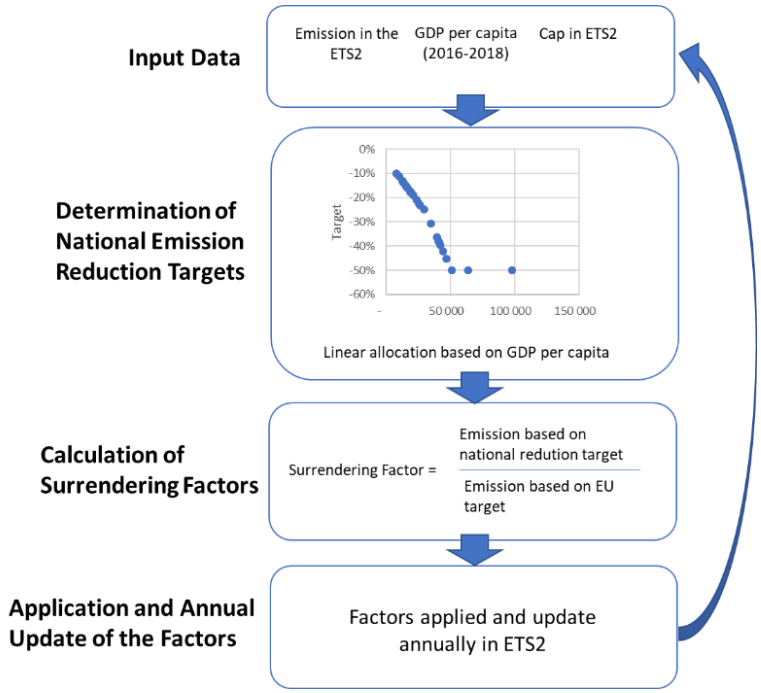
Annex I – Methodology for determining socially adjusted surrendering factors – Option 1

The objective of the proposed methodology is to determine surrendering factors for EU Member States under the ETS2, so that the EU as a whole achieves the established emissions cap by 2030, while taking into account differences in the economic capacity of Member States. This methodology is based on an approach similar to that of the Effort Sharing Regulation (ESR), but adapted for the ETS2 mechanism.

Figure 7. Methodology for determining socially adjusted surrendering factors



Source: KOBIZE

Input data

The following data were used to calculate the socially adjusted surrendering factors:

- Average emissions in ETS2 sectors for each Member State for the period 2016–2018 (emission baseline),
- GDP per capita for each Member State over the same period,
- The total emissions cap for 2030 derived from EU policy, corresponding to a reduction of approximately 30% relative to the 2016–2018 average emissions.

Determination of national emission reduction targets

Based on these data, preliminary national emission reduction targets for 2030 were established, ranging from -10% for Member States with the lowest GDP per capita to -50% for those with the highest GDP per capita. These targets were assigned linearly according to GDP per capita:

- Member States with GDP per capita below the EU average receive increasing reduction targets from -10% up to a value X% corresponding to the EU average GDP per capita,
- Member States with GDP per capita above the EU average receive increasing targets from X% at the EU average GDP per capita up to a maximum of -50%.

Initially, the national reduction targets are distributed evenly along a single line from the minimum (-10%) to the maximum (-50%). Subsequently, to ensure that the EU as a whole achieves a -30% reduction by 2030 (the ETS2 cap), the point corresponding to X% at the EU average GDP per capita is adjusted. This results in two separate lines with different slopes for Member States below and above the EU average GDP per capita, ensuring that the total EU target is met. To avoid excessive burden on the wealthiest Member States, it is assumed that the three states with the highest GDP per capita adopt the maximum target of -50%.

Calculation of socially adjusted surrendering factors

Based on the established national targets, surrendering factors for each Member State are calculated by dividing the country-specific target in tonnes of CO_2 by the hypothetical emissions that the country would have if it were to implement the EU average reduction target (30% reduction relative to the 2016–2018 average by 2030).

This produces a factor that is less than one for Member States with GDP per capita below the EU average and greater than one for Member States with GDP per capita above the EU average. Under such a system total emissions might not be equal to the number of allowances, however over time it the factors will converge to unity and total emissions will converge to the cap.

Application and annual update of the factors

The factors are applied annually by Member States to determine the number of allowances to be surrendered. They are subject to yearly revision, which involves replacing the 2016–2018 average emissions in the formula with the most recent verified emissions available for ETS2. This approach allows different levels of surrendering relative to actual emissions in each country while ensuring that the EU as a whole meets the ETS2 cap in 2030.

Final outcome

The methodology ensures:

- Fair allocation of emissions burdens among Member States according to economic capacity,
- Proportional adjustment of surrendering requirements for countries with different GDP per capita levels,
- Achievement of the EU-wide emissions cap in 2030, with flexibility maintained through annual updates of the factors.