

ENERGY & CLIMATE

BRIEF October 2021

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The author would like to thank Marine Cornelis, Andreas Eisl, Namita Kambli, Klervi Kerneis, Phuc-Vinh Nguyen, Thomas Pellerin-Carlin, Adeline Rochet, Eulalia Rubio, Louise Sunderland and Karin Thalberg for their valuable comments on this text.





The social concerns triggered by soaring energy prices across Europe come as a reminder of the negative economic and social consequences of the current polluting fossil fuel system. It also implicitly underlines that any successful green transition must be a 'just' transition, or it will not materialize because of political backlashes. The EU Social Climate Fund Regulation the European Commission proposed as part of the 2021 Fitfor55 climate package is its attempt to ensure fair burden-sharing across society of the forthcoming energy price increases that would stem from the creation of a new EU carbon market on emissions from the building and road transport sectors (Emissions Trading System 2, "ETS2").

This policy brief outlines three overarching reflections on the challenges and opportunities to finance a just transition through the Social Climate Fund. First, it argues that an EU price on carbon emissions from buildings and road transportation would worsen existing social challenges associated with the energy transition. An increase in price has very little influence on individual consumers' energy consumption. Rising energy bills due to the ETS2 potentially could have large social consequences for European families, for limited decarbonization benefits. Second, this policy brief contends that the Social Climate Fund as currently proposed will not be enough to mitigate the negative and unfair effects of the ETS2 on Europeans, leading to a high risk of social unrest. Third, the Council and the Parliament should therefore bury the ETS2 proposed by the Commission. However, the Social Climate Fund has the potential to send a strong signal of the EU's commitment to a just transition for all, which in turn could increase the social acceptability of the EU Green Deal.

To ensure a just green transition, the ETS2 must be abandoned and the Social Climate Fund should instead be established with financing from the existing carbon market ("ETS1"). Finally, this policy brief concludes that the Social Climate Fund should be redirected to finance green investments in housing and mobility for those who need it the most.



1 - The social challenges inherent to the energy transition would be worsened by a new EU carbon market on building and road transportation emissions (the ETS2)

The EU aims to reach climate neutrality by 2050. As for now, 71% of the European energy mix is still based on coal, oil and gas. The fast pace that will be required to reach the climate goals within the next 28 years 10% lowest income families spend almost will undoubtably increase the costs of the transition and bring underlying social challenges to the surface. In the words of economist Jean-Pisani-Ferry (2021): "Decades of procrastination have turned the expected smooth transition into what is likely to be an abrupt one"¹.

The transition will not succeed unless it is socially fair and inclusive, leaving no one **behind².** This requires appropriate public policy measures to mitigate and alleviate existing energy poverty. For example, many national governments choose to finance the development of renewable energy by increasing electricity taxes. Price reductions through social electricity tariffs are a common measure to mitigate part of the impact on vulnerable consumers. Some families would otherwise be more heavily affected if they spend high shares of their income on energy

bills, and have limited financial resources to shield themselves from increasing prices, be it by producing their own renewable energy or insulating their dwelling³. In the EU, the 10% of their income on energy, without even taking transportation costs into account⁴ However, a truly just transition requires deeper structural change, for example through green investments targeted at lowincome, energy poor or otherwise vulnerable families, that goes beyond palliative shortterm income support. The creation of such ETS2 would bring additional social challenges, by increasing heating prices and fuel expenses for ordinary Europeans.

A market-based mechanism such as the ETS leads to price uncertainty, since the carbon price is determined by the supply of and demand for carbon allowances. On the already existing EU carbon market (ETS1), the CO2 price has varied from 5€ to 60€ per ton within the last five years (see figure below).

FIGURE 1 - Carbon allowance price on EU ETS (2005 - 2021)



While provisions are in place to ease under the new ETS2 as greater costs are price pressures, they might prove to be involved in the decarbonisation of the insufficient to avoid price levels that would buildings and transport sectors compared to trigger social unrest⁵ (see Annex 1). Prices the sectors covered by the ETS1. are expected to reach even higher levels

BOX 1 How the EU carbon market works

ETS1 covers the greenhouse gas emissions of large businesses in the power and manufacturing sectors. These companies are compelled to measure and report the emissions stemming from their production. They are obliged to use carbon credits (allowances) accordingly. They either buy such allowances on the ETS1, or use allowances that were handed out to them for free, as it is the case for many industrial sectors like steel and cement production.

Conversely, in the EU buildings and road transport sectors, 70% of the emissions come from households. Given the complexity involved in compelling 200 million families to report on the emissions from their residential heating and individual cars, reporting and monitoring obligations under the ETS2 would fall on fossil fuel suppliers.

Under the ETS1 and the proposed ETS2, companies pass the costs of their emissions on to the final consumers. However, in the case of the ETS2, the investment decisions will largely rest on consumers since the decarbonisation of buildings and road transportation concerns, for example, switching to low-carbon heating systems, refurbishing energy-inefficient homes, and switching to low-emissions modes of transport. Yet, alternatives to fossil fuels may not be available for all families, for example due to a lack of access to financial resources to undertake an energy renovation, poor access to public transport (distance or quality), missing charging infrastructure in sparsely populated areas – not to mention issues of affordability when it comes to electric cars.

A high EU carbon price on building and road households are more vulnerable since the transportation fuels risks pushing more price would represent a higher share of their people into energy poverty due to a lack of access to readily available alternatives to fossil fuels⁶. On average, a CO2 price of 100€ per ton would lead to an increase of around 25% of road transportation and heating fuel bills in the EU⁷. This could have dramatic consequences for those living in poorly insulated homes that rely on fossil-based heating supply or those living in rural or peri-urban areas that are highly dependent on petrol and diesel cars for dayto-day transport. Today, at least 35 million (7%) Europeans cannot afford proper indoor thermal comfort⁸, and 90 million (20%) EU-citizens face difficulties when it comes to income family living in well-insulated social access to public transport^{9, 10}.

Furthermore, due to already existing inequalities, the impact on Europeans of the proposed ETS2 will not be evenly distributed. These inequalities can be both horizontal (based on income) and vertical (stemming from differences in heating supply, location, climate, etc.). Low-income



income¹¹. For example, for the 20% least affluent households in Poland, a CO2 price of 100€ per ton would translate into a 52% increase in spending on heating, i.e. twice the EU average. This is due to low annual income (below 5000 €), and the high share of coal in Poland's heating supply (high carbon content)¹². On the other hand, **the increase** in price of road transport would hit both low- and middle-class households in rural areas where inhabitants often are required to travel longer distances and furthermore lack alternatives to individual cars. Local geographics indeed matter: an urban lowhousing would be less vulnerable to an EU carbon price than a rural middle-income family in an energy-inefficient single-family house with poor access to quality public transport infrastructure. In the absence of successful counterbalancing measures, the ETS2 could thus prove to be socially and thus politically unsustainable.



Due to the social impacts of high energy bills, the way the revenues of carbon pricing schemes are put to use is key to social acceptability and fairness¹³. It is now widely acknowledged that revenues should be redistributed to citizens and businesses to finance **green investment and social** compensation¹⁴:

- When it comes to green investments, the full transformative impact will not be immediate. The process of project identification, preparation, and financing needs time before final implementation can be executed¹⁵
- · As for social compensation, while it does not lead to structural change in infrastructure (as green investments will), it will be a central policy tool especially in the onset of the energy transition to avoid

overburdening Europeans as long as they lack access to affordable low-carbon heating systems and transportation.

Qualitative studies have shown the importance of distributional concerns for citizens¹⁶, and the broad support to address distributional effects through social cushioning against the adverse impacts of carbon pricing¹⁷. Thus, when the revenues of carbon pricing schemes are used to benefit low-income and vulnerable Europeans through social compensation, the carbon price can contribute to alleviating inequalities with an immediate effect, while green investments targeted at energy poor families mitigate inequalities in the longer term, and helps to control carbon prices by decreasing the demand for carbon allowances¹⁸.

2 - Assessing the European Commissions' proposal: the Social Climate Fund is a major step forward but would still fall short of ensuring social fairness

The Social Climate Fund proposed by the First of all, by proposing a Social Climate European Commission would support Member States in financing measures to alleviate the social impacts of the ETS2, both under the form of social compensation (temporary income support) and green investment targeted at the most vulnerable citizens and microenterprises. To access funding, Member States would have to submit Social Climate Plans for approval by the European Commission, and commit to co-finance at least 50% of the proposed measures and investments.

Financial resources attributed to the Social Climate Fund by the EU would amount to 25% of the revenues from the ETS2 allowances, under the condition that Member States would adopt an amended Own Resource Decision (see details infra). The Fund would start in 2025, one year before the start of the proposed ETS2, and is expected to operate with 10 billion € a year, based on a carbon price of 48€ per ton, which is very hypothetical (see section 1).

Fund, the Commission has taken an unprecedented step towards addressing investment gaps for the housing and mobility transitions for vulnerable families. Starting social compensation ahead of the implementation of the ETS2 is an important measure to foster greater social acceptability.

However, with the time frame currently projected for the Social Climate Fund, the green investments aimed at shielding vulnerable families from price increases would nonetheless occur at the eleventhhour. It is true that green investments are key in the just transition, as they can contribute to mitigate EU families' exposure to high carbon prices on building and road transportation fuels. Yet, since projects will take several years to have an effect, e.g. when it comes to investments in energy renovation or improved public mobility infrastructure, starting green investments for vulnerable households only one year before the introduction of the ETS2 would be too late.

Besides, the Fund is too small to properly finance both green investment and social compensation for households (and microenterprises), and could easily fail to provide adequate support to those who need it the most. Member States could forsake social compensation since the Social Climate Fund may finance social compensation measures but *shall* include green investments¹⁹. However, the aspect of social compensation will be critical in the case of the ETS2 implementation in order to avoid the worst effects of rising energy bills, e.g. forcing families to restrict their fuel consumption below their basic needs²⁰ Suffering from cold or heat at home can lead to diseases and in some extreme cases to death²¹. Another problem is the fact that the definition of vulnerable consumers might fail to target those who need it most. In the absence of clearly targeted. well-communicated, and easily accessible support measures for the most vulnerable (i.e. households within the lowest income bracket, living in the worst-performing houses and/or with little alternatives to individual car use for their daily mobility needs), Europeans with low vulnerabilities would likely be the main beneficiaries due to better access to information on support schemes, and greater investment planning Social Climate Fund would remain an empty capacity²².

The proposal to fund the Social Climate without distribution across the EU to those Fund through the means of a new EU Own who need it the most.

3 How could the Social Climate Fund best contribute to a socially fair transition

and road transportation fuels is a highrisk, low-return policy which should be abandoned. Giving up on the ETS2 would solve the social compensation puzzle. Distributional effects for individuals would be too complicated to tackle at the EU level, and some Member States could neglect the social challenges associated with the new EU instrument. Since the drafting process is ETS2 is already strongly contested within conducted at the national level, varying quality and ambition can be expected²⁹, including



Resource furthermore threatens the availability of financial resources. Moreover, the social acceptability of the initiative is at risk if a part of the ETS2 revenue would go to the general EU budget²³. Existing EU funds that are financed by ETS1 allowances²⁴ were created under the ordinary legislative procedure²⁵ through the ETS Directive. This time, the Commission proposes to first create a new EU Own Resource based on a share of the ETS2 revenues, and then to allocate 25% of the ETS2 allowances to the Social Climate Fund. However, the adoption of a new EU Own Resource requires unanimity in the Council and ratification by all national parliaments²⁶. Therefore, the proposal to fund the Social Climate Fund with an Own Resource seems to indicate the European Commission's willingness to keep part of the ETS2 revenues for the general EU budget, potentially to pay back part of EU covid debt²⁷. This goes against research findings that highlights that social acceptability of carbon pricing requires clear and visible earmarking of all the revenues for a green and just transition²⁸. Furthermore, the need to adopt the Own Resource instrument undermines the chances of getting EU funding for the Social Climate Fund. In the absence of unanimity in the Council, the shell, and Member States would simply get all the ETS2 revenues for national use,

An EU wide carbon price on building varying degrees participation of civil society, social partners and local governments³⁰ Institutionally, the European Commission will have limited room for negotiation if national Social Climate Plans lack ambition. This is a major political risk for the EU, since governments could blame "Brussels" in case of local social unrest, even if they bear the real responsibility³¹. Besides, the proposed the Council and the Parliament³², who might decide not to support the proposal.



BOX 2 - ETS2 is not an essential tool to repay the EU public debt contracted to finance the COVID-19 economic recovery

The debate on which new Own Resources should be mobilized for EU recovery debt repayment is far from settled. The European Commission first envisaged a revised ETS1 extended to the maritime and aviation sectors that could provide 10 € billion per year to the EU budget³³. But the proposed revision of the ETS has lower ambition than expected³⁴.

Without providing an exhaustive list of Own Resource candidates, it is worth mentioning that an international agreement on corporate taxation, as the one sponsored by the OECD, could provide significant revenues to the EU budget. If the agreement reached in June³⁵ is confirmed, a 15% global minimum taxation rate would apply, translating to an additional revenue of 50 \in billion for EU Member States, which could decide to allocate part of it to the EU budget³⁶. The EU needs to find 15 € billion per year for EU recovery debt service, starting from 2028.

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Climate Fund would remain an opportunity to send a strong signal in favor of a just transition. The Fund could focus solely on targeted investments to fight energy and transport poverty and finance the energy transition of vulnerable citizens. High levels of public subsidies are required to support green investments for low to middleincome vulnerable households. Families that are already struggling to pay their utility bills cannot afford to undertake deep renovations (including switching away from fossil-based heating appliances) or buy/ rent an electric car³⁷. Besides, sustainable mobility also depends on access to high quality low-carbon infrastructure, such as charging points, appropriate multi-modal public transportation and safe bike lanes, decarbonized district heating and cooling networks, whose development depends on public investment. Taking this into account, the rest of this section will describe an improved design for a Social Climate Fund.

15% of revenues from ETS1 could be directed to the Social Climate Fund under the upcoming revision of the ETS Directive, and the Fund thus could start functioning already in 2023. The price of carbon in the ETS1 recently reached 60€ per ton and is not expected to drop³⁸, meaning that new funding will be readily available. The Social Climate Fund could be financed in a similar way as the Modernisation and the Innovation Funds, Furthermore, effective implementation

Should the ETS2 be abandoned, the Social through direct allocation of allowances in the ETS Directive. Using this legal instrument would avoid unanimity rule since the ETS Directive is adopted through the ordinary legislative procedure. Earmarking 15% of ETS1 revenues³⁹ to the Social Climate Fund would translate in annual resources of about 6€ billion euros at current prices⁴⁰. The amount is lower than the proposed Social Climate Fund under the Commission's assumptions (10 € billion per year) but of similar order of magnitude when considering the reduced scope to green investments only.

> In accordance with the Commission's current proposal, access to funding could continue to be based on national Social Climate Plans submitted alongside National Energy and Climate Plans. However, the regulation should have strengthened provisions on public participation of civil society organizations, social partners, local authorities, and other relevant stakeholders in the elaboration of the plans⁴¹, along with shared respected criteria. There is robust evidence that high political trust is associated with stronger climate policies and lower greenhouse gas emissions⁴² Increased trust, democratic legitimacy and citizens' support could be achieved through an extensive involvement of all stakeholders in the process of drafting and implementing the national Social Climate Plans.

would be facilitated by the partnership principle by providing adequate time and resources (capacity building and technical assistance) for stakeholder consultation and communication of the new measures⁴³

Conclusion

Social justice needs to be at the core of the clean energy transition. The complete overhaul of our production and consumption models will require large investments that will bring about multiple benefits beyond climate change mitigation, for example increasing quality of life, public health, comfort, lower cost of living, and new jobs.

However, without carefully designed redistribution and compensation schemes, the costs and benefits of the transition will have an uneven distributional impact across the population. Deep energy renovation of buildings, decarbonisation of heating and cooling, and low-carbon mobility needs to be accessible to a wider public. To increase the chances of the European Union succeeding to perform a socially fair energy transition, this paper recommends that:

- · The European Parliament and Council abandon the idea to create the ETS2 in the 2020 decade. The political risks of that policy are too high compared to the limited expected climate benefits, especially because of the importance of high investments barriers not linked to price in the residential buildings and passenger road transport sectors.
- If the ETS2 is abandoned, the European parliament and Council should find new



National governments should start already now consultations with stakeholders to develop sustainable investment project pipelines targeted at vulnerable people.

sources of revenues for the Social Climate Fund, which would be solely dedicated to green investments that would shield the most vulnerable Europeans from fossil fuels price increase. In the current context of higher electricity prices for consumers, allocating 15% of the ETS1 revenues to the Social Climate Fund would be a tangible way for the EU to contribute to a socially fair energy transition.

· If the European parliament and Council however decide to go through with the ETS2 they should ensure that 100% of the ETS2 revenues are directed towards the Social Climate Fund, so that it adequately can mitigate the most negative social impacts expected from the ETS2, and avoid overburdening vulnerable and energy poor families, both through social compensation and green investment support.

The current energy prices crisis across Europe is already bringing existing energyrelated social challenges to the surface. The Commission's proposal to create a Social Climate Fund is an historical opportunity to address current and future inequalities. It can send a powerful signal of the EU's commitment towards a just green transition.



TABLE 1

EU SOCIAL CLIMATE FUND	EC PROPOSAL	ALTERNATIVE PROPOSAL (FIRST BEST)	ALTERNATIVE PROPOSAL (SECOND BEST)
EST2 implement- ation	YES	NO	YES
To fund what	Social compensation and green investment targeted at the most vulnerable citizens and microenterprises (defined in national Social Climate Plans)	Green investment for the most vulnerable citizens (defined in national Social Climate Plans)	Social compensation and green investment targeted at the most vulnerable citizens and microenterprises (defined in national Social Climate Plans)
Which governance	Based on National Social Climate Plans	Based on National Social Climate Plans with stronger provisions on public and local stakeholders participation	Based on National Social Climate Plans with stronger provisions on public and local stakeholders participation
Which funding	25% of ETS2 revenues About 10 € billion per year ⁴⁴ for social compensation and green investment	15% of ETS1 revenues About 6 € billion per year ⁴⁵ (but reduced scope to green investments only)	100% of ETS2 revenues About 40 € billion per year ⁴⁶ for social compensation and green investment
Starting when	2025	2023	2025
Legal basis	Ordinary legislative procedure (Social Climate Fund) and unanimity rule (Own resource Decision) Social Climate Fund Regulation: Art 91.1.d, 192.1, 194.1.c TFEU (ordinary legislative procedure), Own Resource Decision: Art 311 TFEU (unanimity rule)	Ordinary legislative procedure (Social Climate Fund and ETS Directive) Social Climate Fund Regulation: Art 91.1.d, 192.1, 194.1.c TFEU (ordinary legislative procedure), ETS Directive: Art 192 TFEU (ordinary legislative procedure)	Ordinary legislative procedure (Social Climate Fund and ETS Directive) Social Climate Fund Regulation: Art 91.1.d, 192.1, 194.1.c TFEU (ordinary legislative procedure), ETS Directive: Art 192 TFEU (ordinary legislative procedure)

Annex 1 - Under the proposed market design of ETS2, prices could reach very high levels

The proposed ETS2 design include the 250€/tCO2.Contrary to ETS1, no exemptions following features:

- allowances auctioned in 2026
- in 2030
- Price control mechanism injecting new allowances from a "Market Stability pressure in case of a doubling of tripling price over three-month period

A market-based mechanism such as the ETS leads to price uncertainty since the carbon price is determined by supply and demand. Although the Impact Assessment of the European Commission considers a unsustainable price levels, the Commission price hypothesis of 48€/tCO2, **nothing in** could use an **"emergency brake"** as a force the proposed design would guarantee that majeure⁴⁸. However, such a direct price prices do not reach socially unsustainable intervention would lower the credibility levels.

given high abatement costs (high cost of decarbonization) in the building and transport sectors, estimated at around 200-



will be provided, adding an upward pressure • No free allowances, but 30% excess on price. The Commission wants to mitigate this risk by providing 30% excess allowances • Annual linear reduction factor (LRF) of in 2026, but this says nothing about where **5,43%** computed to reach -43% emissions the starting price will eventually land.

The proposed price control mechanism still allows for significant price increases. Even Reserve" on the market to ease price if price starts at a hypothetical 40€/tCO2 in 2026, the proposed price control mechanism would allow price to reach 80€/tCO2 in 2027 and 160€/tCO2 the next year. Such a steep upward trend is all the more possible given the high annual linear reduction factor (LRF) of 5,43% proposed by the Commission for the 2026-2028 period⁴⁷. In case of of the mechanism. It would probably be provoked as a reaction to social unrest, Starting auction price might be well hence implying deep resentment from part above current ETS1 prices (60€/tCO2) of the EU population against carbon pricing policy. This situation should absolutely be avoided.



Notes de fin

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26. See Treaty on the Functioning of the European Union, Art 311

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39. Corresponding to 100 million allowances a year

40. Assuming a proposed cap of about 12 GtCO2 over 2021 – 2027 (scenario AMB2c of European Commission 2021. Impact Assessment accompanying ETS Directive. SWD(2021) 601 final), of which about 40% would be given out for free (free allowances). So revenues from 7 GTCO2 over 2021 – 2027. Taking 15% of it: about 1050 M allowances = $63b \in$ at the current ETS1 price of about $60 \in$, or $6, 3b \in$ /year.

41. Including the national networks of experts on energy poverty alleviation to be established by Member States as per the proposed revision of the Energy Efficiency Directive (art22). European Commission. 2021. "Proposal for a Directive on energy efficiency (recast)", COM(2021) 558 final.

42. Tested in a time-series-cross-section analysis of twenty industrialized democracies from 1990 to 2012, of which the following EU Member States: Austria, Belgium, Denmark, EU, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden. Political trust is measured as perception of corruption. GDP contribution from mining, manufacturing and utilities have a negative impact on market-based policies, which explains why Germany, although

characterized by low levels of perceived corruption, has seen amendments weakening the Energiewende in Bundestag, leading to households paying a higher price for electricity while native manufacturing was largely exempted. RAFATY R. 2018. "Perceptions of corruption, political distrust, and the weakening of climate policy", *Global Environmental Politics* 18:3, August.

43. ATANSAH P. *et al.* 2017. "When do subsidy reforms stick? Lessons from Iran, Nigeria, and India", *CGD Policy Paper 111,* Center for Global Development, November.

44. Under the price hypothesis of the European Commission in the Impact Assessment of 48€/tCO2. European Commission. 2021. "Impact Assessment accompanying ETS Directive", SWD(2021) 601 final.

45. Under current ETS1 price of about 60€/tCO2 on September 20th, 2021. Ember, Daily Carbon Prices.

46. Under the price hypothesis of the European Commission in the Impact Assessment of 48€/tCO2. European Commission. 2021. "Impact Assessment accompanying ETS Directive", SWD(2021) 601 final.

47. Which is higher than the LRF proposed for ETS1 (4,2%). Possibility to review ETS2 LRF if emissions reported under ETS2 are more than 2% higher in the 2024 to 2026 period than the value for 2025, another linear reduction factor shall be computed. See §48 recitals s and art30c(2).

48. Although it already applies to ETS1, it has never been used so far.

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