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Delivering climate targets: How can EU policy support a just transition?



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Introduction

To reach its climate target of reducing net greenhouse gas emissions by at least 55% by 2030, the EU is currently discussing an ambitious revamp of its climate and energy legislation: the Fit for 55 Package (FF55). The overall benefit for EU societies of tackling climate change is clear. Mitigation policies do however have distributive consequences and they risk, if ill conceived, to disproportionately weigh on vulnerable citizens or leave workers in carbon intensive industries behind. This risk should not prevent policymakers from taking ambitious actions to fight climate change. Phasing out fossil fuels strongly favours the well-being of all in the long run due to the positive impact on health from improved air quality. At the same time, fighting climate change aims to preserve the well-being of future generations.

In this context, public authorities have a crucial role to play in shaping public policies and redefining the boundaries of the welfare state. These policies should prioritise the protection of vulnerable citizens against living standards reduction and the promotion of climate transition policies that improve their well-being. This is important both as a goal in its own, and in terms of preserving broad political support for climate action, which is crucial for achieving long term climate goals. There are many opportunities to do so. Revamping the fiscal system towards a stronger application of the polluter pays principle by ending fossil fuel subsidies, and the introduction, or increase, of a carbon price can be implemented in a progressive manner, if revenues are redistributed to the benefit of households. Energy prices in Europe are today at unprecedented levels in decades because of the war in Ukraine. Responding to this means that energy policies targeted at improving the livelihood of vulnerable households both in the short term (by compensating the impact of energy price increases on household's budget) and in the long term (by making energy renovation and clean mobility accessible to everyone) are more important than ever. At the same time, an active reconversion policy in regions dependant on carbon intensive industries today is needed to prepare a future without fossil fuels and focused on new activities compatibles with a net-zero economy. A first step was taken in this direction in 2020 with the creation of the Just

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Transition Fund on the recognition of social challenges of the energy transition in Europe and the need to support the transformation of coal dependant regions.

In this context, the Fit for 55 Package presented in July 2021 by the European Commission should be the occasion to deepen policy actions integrating climate and social objectives. While the REPowerEU plan aims to further accelerate the European energy transition as a response to the Russian security challenge, finding the right balance between regulation changes, pricing instruments and other support policies encouraging changes in households and industry energy use. The FF55 includes many important levers to do so with important regulatory changes to accelerate the transition, but also new financial resources with the mobilisation of additional carbon revenues and the creation of a new dedicated Social Climate Fund. The proposed reforms will affect the final energy price paid by European citizens with the extension of carbon pricing to the building and transport from 2026 and a reform of the energy taxation that also aims to eliminate energy taxation loopholes. With all these measures open for decision, the EU has an unprecedented opportunity to show it can implement the energy transition at home in a just manner.

Progress to date: A need to better integrate social and climate policy for a low carbon transition in EU policy

In 2021, Think2030 issued several policy recommendations to deliver a sustainable, durable, and inclusive recovery for Europe¹. The main recommendations were:

- to use the economic recovery stimulus to accelerate the transition and improve the state of the environment,
- to develop economic and industrial strategies compatible with net zero objective, and
- to introduce a comprehensive package of policy measures that will grow long-term private sector investment in – and market demand for – environmental and low carbon solutions.

Since then, Member States developed and executed their recovery plans and at the same time, the Fit for 55 Package, aimed at aligning EU legislation with the new 2030 climate objective, has been presented by the EU Commission and is currently discussed by the EU institutions. A first look at the national plans presented by Member States to access the 672.5 billion euros of the Recovery and Resilience facility (RRF) showed that 43% of the funds were dedicated to the green transition above the 37% target.² If these funds represent a significant spending on the environmental transition in

¹ Molho, N. (2021) Delivering a sustainable, durable and inclusive recovery for Europe. Think2030 policy paper by the Aldersgate Group.

² Bruegel (2022) European Union countries' recovery and resilience plan

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certain areas, such as renewable deployment or energy renovation, it remains unclear how additional these spendings are and whether they will be continued after the end date of 2026 or the exhaustion of these funds. Only 11 national plans contain spending classified as contributing to the green transition and social, economic development for amounts that represent 9 billion euros overall³, less than 5% of the total amount earmarked for green spending, making it even more important to better integrate climate and social priorities within the open FF55 regulatory files.

Against this background, this policy brief builds on different analysis made by members of the Think Sustainable Europe network on different files of the FF55. It summarises the most significant social impacts related to them and presents policy recommendations to address them.

Energy taxation and carbon pricing

One of the main objectives included in the Fit for 55 package is revising the Energy Taxation Directive (ETD) to facilitate the achievement of the EU's climate and energy commitments. To this end, the European Commission proposed⁴ to update energy tax rates reflecting the energy content and environmental performance of fuels and electricity, to include more products and to remove exemptions and reductions. In parallel, the EC also proposed to cover GHG emissions from fuels used in road transport and building in a separate emissions trading system (ETS2).

A recent IEEP report⁵, based on new evidence from a microsimulation model developed by the Basque Centre for Climate Change (BC3)⁶, finds that, although the reform of energy taxation and the extension of the ETS may have regressive distributional effects, they can become progressive if Member States recycle revenues from the ETD and SCF to compensate lower-income households. Figure 1 summarises the main findings of the report: lower income deciles bear proportionally more the burden of the increased carbon pricing. As this was already expected, the EC also proposed to complement these measures with a new Social Climate Fund (SCF) with a financial envelope of 72.2 billion euros. Figure 1 shows the effect of the combined impact of the ETD reforms and ETS2, together with recycling of 25% of ETS2 revenues via the SCF, targeted to the poorest 50% of households within each Member States. This scenario achieves net positive effects on the poorest 10% households and decreases welfare losses of middle-income households. The last scenario turns over the distributional effects towards progressivity by recycling all ETS2 revenues within Member States.

³ Ibid

⁴ European Commission (2021). Proposal for a COUNCIL DIRECTIVE. Restructuring the Union framework for the taxation of energy products and electricity (recast). COM (2021) 563 final.

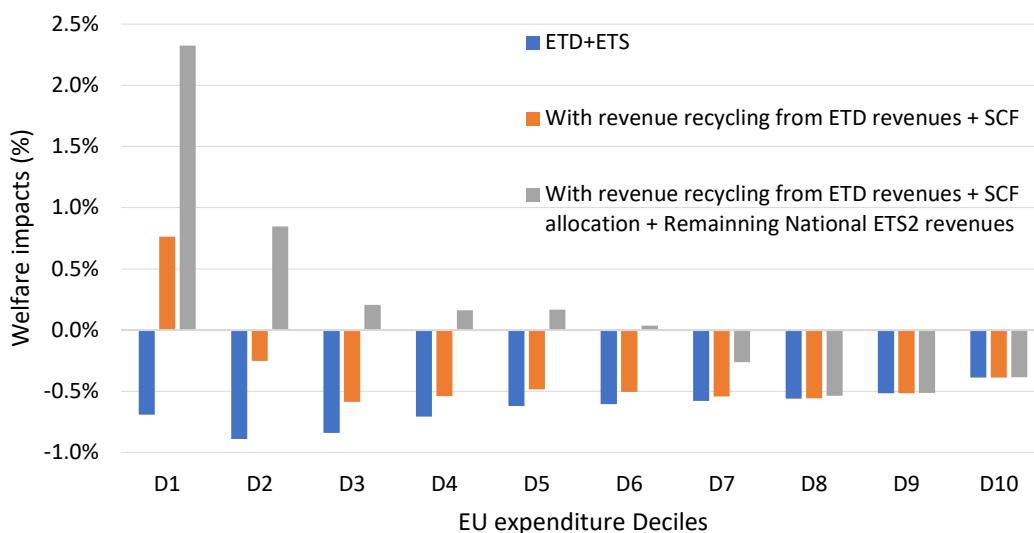
⁵ See the IEEP report: <https://ieep.eu/publications/can-polluter-pays-policies-be-progressive>

⁶ See the modelling work developed by BC3:

<https://api.otea.info/storage/2022/03/08/d87a258a425adcad49f3cb35a268fe6ad52935ba.pdf>

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Figure 1. Welfare impact (% total expenditure) EU-wide from ETD reform + ETS2, without and with revenue recycling (2019).



Compensation mechanisms are necessary not only for the sake of equity but also to ensure buy-in, as recently recognised by the International Monetary Fund (IMF)⁷. According to this institution, they are necessary to achieve the social support, probably weakened due to the short-term inflationary effects of carbon pricing and fossil fuel subsidy reforms. IMF supports the introduction of temporal compensation mechanisms, targeted at the most vulnerable households and businesses, and warns that "permanent carbon and fuel subsidies (or tax relief) motivated by short-term price spikes must be avoided". Similarly, other institutions⁸ recommend compensations to be articulated through the income tax, conditioned to the income level and to a change in consumption patterns and also granting "green checks" to be spent in low carbon technologies, as a means to avoid reducing incentives to decrease damaging emissions.

Apart from direct compensation or lower income taxation, subsidies for clean energy and enabling infrastructure will be necessary. Indeed, subsidies on their own without the necessary underlying infrastructure can only be seen as palliative help and not strong incentives for changing habits in the long-term. Investments in infrastructure building should empower citizens to shift from fossil fuel, resource, and energy intensive alternatives and eventually radically reduce compensation demand, which now seems unavoidable to not implement for all EU Member States. Lack of access to infrastructure, for e.g. low climate impact transport, smart energy demand for

⁷ See the World Economic Outlook report by the International Monetary Fund:
<https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022>

⁸ See the Annual report 2021 by the Banco de España :
https://www.bde.es/f/webbde/SES/Secciones/Publicaciones/PublicacionesAnuales/InformesAnuales/21/Fich/nfAnual_2021_Cap4.pdf

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buildings or flexible energy supply to electric grids, cannot be measured at the national level, as we can quite often observe disparities even beyond the municipality level. These disparities can be attributed to many factors including, but not limited to, structural inequalities and income variations, but also the neighbourhood effects⁹ or better access to information.

The Social Climate Fund

The Social Climate Fund proposed by the European Commission could potentially help address the distributional impacts of the measures mentioned above, but it is necessary to address the drivers of carbon-intensive consumption that led to lock-ins and jeopardise a just transition including the most vulnerable groups of our societies.

The SCF can partially be used for direct income support, but this alone is not sufficient to fully support a just transition, as the previous discussion shows. The contribution of the SCF to a just transition faces certain limitations connected to its extent, focus, and scope of support, as well as public fairness perceptions¹⁰. Nevertheless, fairness perceptions are among the most important determinants of climate policy acceptance¹¹.

The SCF exists because the level at which EU households are able to reduce their carbon footprints varies. In many cases, willingness to change habits cannot translate to actually change, since income, population density, age, education, access to infrastructure affect our choices. Complementary measures to address obstacles created by these factors need to first be in place in order to create the conditions for the most vulnerable to explore alternatives to potentially high carbon impact lifestyle choices.

For example, people living in low population density areas have a higher transport footprint since they rely more on fossil-fuel driven car transport for their mobility needs. Longer travel distances and lack of transport alternatives leaves little room for changing habits. If there is an additional risk of poverty and social exclusion, these people will have lower capacity to cope with the financial implications of the transition as expressed with various decarbonisation policies¹⁰. Unless low-carbon and cost-effective mobility alternatives are put in place, such sociodemographic groups will be in need of mechanisms such as the SCF to navigate the transition. However, the SCF is neither sufficient as a support to remove all associated transitions risks in the short

⁹ Kosugi, T., Shimoda, Y. & Tashiro, T. Neighborhood influences on the diffusion of residential photovoltaic systems in Kyoto City, Japan. *Environ Econ Policy Stud* 21, 477–505 (2019)

¹⁰ Strambo, C., Xylia, M., Dawkins, E., & Suljada, T. (2022). The Impact of the EU Emissions Trading System on Households: How Can the Social Climate Fund Support a Just Transition? [SEI Report]. Stockholm Environment Institute. <https://doi.org/10.51414/sei2022.019>

¹¹ Bergquist, M., Nilsson, A., Harring, N. et al. Meta-analyses of fifteen determinants of public opinion about climate change taxes and laws. *Nat. Clim. Chang.* 12, 235–240 (2022). <https://doi.org/10.1038/s41558-022-01297-6>

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term, nor it motivates deeper changes of infrastructure, technology, and habits in the long term.

Renewable Energy Directive (RED III)

On top of being a precondition for success and force multiplier for many of the other technologies being deployed as part of the Green Deal, research has shown that renewable energy can also be an important tool to fight inequality. While renewable energy can be an important supporter of local jobs, especially if a manufacturing value chain can be sustained, the real socio-economic power lies in local ownership¹². Studies show that this is the most important element in unlocking co-benefits for local communities. At the same time, an ownership stake is critical to building public support for renewable energy projects. The EU should place more support into building energy communities across all Member States and regions as a key element of a strategy to build economic and energy resilience. Recent recommendations to reduce administrative barriers and mandate the incorporation of solar power in new houses as part of the REPowerEU plan are also powerful policy levers to put the power of renewable energy into the hands of normal people.

CO2 emission performance standards for new Cars and Light Vehicles Regulation

Overall, the CO2 cars and vans regulation can have some important social co-benefits¹³. The total cost of ownership (TCO) of an electric car is already lower overall than for an internal combustion engine¹⁴. This is particularly true for high mileage users and owners of used vehicles and is relatively more important for lower income households. This lower cost of mobility could have important benefits for lower income individuals. However, the higher up-front cost of vehicles can present a barrier to lower income individuals, so it is important to activate secondary markets through mandates for corporate and fleet owners, as well as stronger targets for the industry as a whole. It should be noted that the transport electrification pace is more sensitive to variations of fossil fuel prices than electricity prices. In other words, the price of diesel or gasoline is the strongest factor driving electrification, since “fuel” costs represent only a small share of EVs’ TCO. The higher fossil fuel prices motivate switching to EVs.¹⁵

The health benefits of a switch to EVs and, at least in terms of air pollution are quite clear. The EC IA projects €40-60 billion in reduced health care costs due to avoided air pollution compared to the baseline in the period 2030 to 2040, depending on the

¹² Stainforth, T., Gore, T., & Urios Culiañez, J. ‘The socio-economic impacts of renewable energy in EU regions’ (2021) Institute for European Environmental Policy

¹³ Gore T., Stainforth T., Urios J. and Iannazzzone S. (2022) Social justice priorities in the Fit for 55 package, IEEP policy brief, June 2022

¹⁴ Element Energy for BEUC. (2021). Electric Cars: Calculating the Total Cost of Ownership for Consumers.

¹⁵ Xylia, M. et al. (2017) ‘Locating charging infrastructure for electric buses in Stockholm’, Transportation Research Part C: Emerging Technologies, 78, pp. 183–200. doi:10.1016/j.trc.2017.03.005.

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strength of emissions standards. However, caution is still needed in terms of assessing broader health implications in terms of the likely increase in total vehicle distance travelled, and the dislocation of pollution from the point of use to the point of assembly and disposal, as well as in the fuel value chain. These shifts have potentially significant environmental justice implications, particularly if these effects are simply exported from the EU. Past CO₂ cars regulations have had significant unintended health consequences, when larger, diesel cars were incentivised leading to worse air pollution in cities.

Overall, the effect on jobs should be positive across the economy, but there will be important negative consequences for certain suppliers in the ICE value chain, particularly SMEs, and particularly in Central and Eastern Europe.¹⁶ These communities will need significant support for retraining, re-skilling, and investment into new productive capacity.

Longer term, the switch to EVs presents a number of social challenges, not least that it is likely to encourage a higher level of driving, due to lower running costs. This will have important environmental and social implications, and potentially lock in car dependence with all the negative social consequences that this has been shown to have. There is also a strong risk that public funds will be used to subsidise this transition to further car dependence rather than being invested in greener alternatives.

Energy Performance of Buildings Directive (EPBD) and Energy Efficiency Directive (EED)

There is strong evidence in the literature of potential positive social impacts related to both EPBD and EED¹⁷ particularly regarding health and access to energy, and evidence of more nuanced or adverse social impacts in relation to jobs and income equality.

Energy-inefficient and poorly ventilated homes exacerbate mental and physical illnesses, particularly for energy-poor households. Since poorer households spend a disproportionate amount of their income on home energy costs, there are thus strong synergies in promoting more energy efficient homes, as long as the tools and measures to finance renovation are not regressive. However, the picture is not so straight forward as potential rent increases after renovations could significantly reduce housing affordability for low-income households, and lead to renovictions and displacements.

The European Commission projects a net increase in jobs due to increased energy performance standards under the EPBD. However, ensuring that people who need these jobs can get, and fully benefit from, them will rely on access to training, as well as adequate enforcement of labour standards across the EU. Often it is also larger

¹⁶ Kuhlmann, K., Kupper,, D., Schmidt, M., Wree, K., Strack, R., & Kolo, P. (2021). Is E-mobility a Green Boost for European Automotive Jobs? Boston Consulting Group.

¹⁷ Gore T., Stainforth T., Urios J. and Iannazzone S. (2022) Social justice priorities in the Fit for 55 package, IEEP Policy brief, June 2022

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corporations which are best able to take advantage of retrofits, renovations, and new efficient technologies. Access of SMEs and smaller actors should also be safeguarded.

The EPBD is an opportunity to deliver enhanced housing standards. However, if it is not ambitious enough in terms of binding targets, it risks leaving behind the most vulnerable. Setting and monitoring an adequate minimum share of energy savings amongst vulnerable, low income and energy poor households, is essential to address distributional in-equities through the energy efficiency obligation schemes and targeted measures at local level including renewable energy communities or local/regional decarbonisation plans.

Policy recommendations for the Trio Presidency and decision makers between now and 2024

The Fit for 55 policy package was designed with the target of achieving the EU's 55% GHG emissions reduction target on time and considering the need for a just transition for European citizens. The reform of the ETD and the expansion of the ETS to include the transport and buildings sector are among the instruments under the policy package that are expected to bring most emissions reduction, but at the same time could have significant impact on household economies, unless policies are designed to be the most effective, inclusive, and fair possible. Member States can use carbon and energy tax revenues and additional financial resources that can be supported by the EU budget to implement transition policies. Implementing a just transition implies reorienting a whole set of policy actions towards proposing a renewed welfare pact taking different public actions that works for all socio-economic categories, in particular vulnerable and middle-class citizens whom need public support to change and which political support is crucial to maintain climate action. We structure our recommendations below starting from the fundamental infrastructure level as the first step (*infrastructure aspect*), to tailoring measures so that the most vulnerable benefit (*citizen aspect*), and in the end, discussing how current challenges in the global landscape can be used to increase EU policy ambition and bring a longer-term solution to those problems (*policy aspect*).

1. Focus on new infrastructure to achieve Fit for 55 targets

Lack of infrastructure that would facilitate switching to more sustainable habits in the long-term is among the identified bottlenecks. Addressing changing infrastructure needs as part of the transition is a national responsibility with a very high sociodemographic resolution and one of the biggest challenges for the EU in the short term.

Our recommendations:

Increase the rollout of sustainable transport and energy infrastructure by using the social climate fund and unused RFF funds identified by the EU Repower plan.

Evaluate current data collection methods and analytical tools and propose new ones, if necessary, to ensure targeted infrastructure investments supporting fairness and social acceptance.

New investments in energy infrastructure should be made in renewable and clean energies rather than fossil fuel infrastructure, as they are, with energy savings, the best solution to guarantee the EU's security of supply. Investments made as a response of

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the current energy crisis, should not contribute to lock the EU in a fossil-dependent energy system as it may discourage the energy transition and crowd out other investments in renewable energies.

2. Target support to most vulnerable citizens

Delivering a just transition needs to have a targeted approach to vulnerable and middle-class citizens and make sure all can adapt to the transformation of the economy. The ambitious changes in terms of carbon pricing, budget expenditures and regulations introduced by the FF55 should be shaped in a way that delivers on both climate objectives and social justice.

Our recommendations:

Use revenues generated by new carbon pricing instruments to compensate lower-income households, to energy renovation actions and the development of affordable public transport, trains, non-motorised transport that increases peoples' access to mobility, not decreases it. Compensations must be targeted to low-income households and conditioned to a change in consumption patterns.

Fuel subsidies (or tax relief) motivated by the high energy prices must be avoided. Subsidies have a high fiscal cost, discourage the energy transition and can benefit large consumers who are not necessarily vulnerable. The MSs may use the revenues dedicated to subsidy fossil fuels to compensate vulnerable households that can be hurt for the higher energy prices and promote public transport.

Set the size of the Social Climate Fund according to the identified needs and consider alternative sources of funding, especially if the ETS 2 introduction is delayed.

Set ambitious minimum CO₂ standards on vehicles and to avoid the incentives on big cars and avoid heavy subsidies to perpetuate a car dependent transport system.

Ensure faster penetration of zero emission vehicles to secondary markets through fleet mandate requirements and company car rules to reduce capital costs for average consumers.

Extend minimum building energy regulation to existing buildings to foster the energy renovation market in Europe and target support for renovation to deep energy retrofits and vulnerable households.

Foster energy communities as a solution for empowering citizens and renewable expansion as well as addressing economic inequality.

Start a process to revise the scope and the size of the Just transition fund in order to increase its size and expand its scope to cities and regions dependent on unsustainable

industries such as internal combustion engine car industry or intensive agriculture or tourism.

3. Dare to take advantage of current windows of opportunity

A shift towards including the full cost of carbon in energy prices paid by households is a necessary step if the EU is to meet its climate goals. With energy security, high fuel prices, and various supporting mechanisms at the forefront of discussions, EU policy design must ensure an inclusive and fair transition away from fossil fuels.

Our recommendations:

As part of the REPowerEU plan, use unused recovery and resilience facility funds to foster energy savings actions, such as, the phase down of gas in residential building through targeted energy renovation combined with efficient electrification and isolate the most vulnerable consumers from historically high fossil fuel prices.

Include an increasing price trajectory in the ETS on building and transport, including a price floor and a price cap to make the CO₂ price impact more predictable manner for households and companies.

Use the revised energy taxation directive as an opportunity to phase out fossil fuel subsidies and aligning fiscal systems and support energy efficiency and electrification. The revised ETD proposal is rather cautious and in several MSs it will have no impact, as their tax system is above the new minima. Therefore, there is scope for more ambitious energy taxes and even for introducing new taxes, such as aviation taxes. Although aviation GHG emissions are relatively small, they are growing very fast.

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About Think2030

Launched by IEEP and its partners in 2018, Think2030 is an evidence-based, non-partisan platform of leading policy experts from European think tanks, civil society, the private sector and local authorities.

By focusing on producing relevant, timely and concrete policy recommendations, Think2030's key objective is to identify science-policy solutions for a more sustainable Europe.

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