How to maximise the social benefits of climate action

Scoping exercise
This study has been endorsed by the European Social Platform and the European Anti-Poverty Network. This report is based on an analysis performed by the Cambridge Institute for Sustainability Leadership (CISL). A large number of CAN Europe members and staff contributed to this report.

Authors: The analysis was commissioned by CAN Europe to Sanna Markkanen and Krisztina Borbála Zálnoky, from the Cambridge Institute for Sustainability Leadership (CISL), University of Cambridge. A large number of CAN Europe members and staff contributed to this report.

Editors: Elif Gündüzyeli and Isabelle Brachet

Design: Olena Marchishina

Climate Action Network (CAN) Europe
Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 170 member organisations from 38 European countries, representing over 1,500 NGOs and more than 47 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

The University of Cambridge Institute for Sustainability Leadership
The University of Cambridge Institute for Sustainability Leadership (CISL) partners with business and governments to develop leadership and solutions for a sustainable economy. We aim to achieve de-capitalise net zero, protect and restore nature, and build inclusive and resilient societies. For over three decades we have built the leadership capacity and capabilities of individuals and organisations, and created industry-leading collaborations, to catalyse change and accelerate the path to a sustainable economy. Our interdisciplinary research engagement builds the evidence base for practical action.

The European Anti-Poverty Network (EAPN) is the largest European network of national, regional and local networks, involving anti-poverty NGOs and grassroot groups as well as European organisations, active in the fight against poverty and social exclusion. It was established in 1990.

Social Platform is the largest network of European rights- and value-based civil society organisations working in the social sector. Social Platform's mission is to advocate for policies that bring social progress to everyone living in the European Union, applying a human-rights approach to fight for a socially just and cohesive Europe that promotes equality, diversity, solidarity, democracy and human dignity.
Contents

- Factsheet | 04
- Introduction | 07
- Approach
  - Scope
  - Caveats
  - Financing to deliver just outcomes | 10
- Decarbonising the building sector | 14
- Cleaner transport | 28
- Renewable energy | 35
- Conclusion and recommendations | 40
Factsheet

KEY QUESTIONS

Can well-designed and implemented climate policies avoid potential adverse social impacts? How can climate action help reduce inequality and have a redistributive role? How can social policies better interact with climate action?

WHAT

Climate action and the green transition are often portrayed as entailing a huge social cost, in particular job losses. It does not have to be so if there is political will to address equity while increasing climate action. This report presents concrete proposals in order to maximize the positive social outcomes of climate policies on decarbonising the buildings sector, cleaner transport, and renewable energy.

WHY NOW

The question of the articulation between social justice and climate action is making more and more the headlines. This was the case when the European Commission tabled its legislative proposals (Fit for 55 Package) in July 2021. The gas price hikes from the Fall 2021, followed by continuous rising costs of living driven by increased fossil fuel prices due to Russia’s invasion of Ukraine make this question even more pressing.

KEY MESSAGES

Climate policies cannot be a substitute for transformative social policies, and social and climate policies need to be much better coordinated in order to deliver a just and green transformation of our economies and societies.

Many of the policy instruments included in the Fit for 55 Package have the potential to generate both positive and negative social impacts, but the extent and direction of these outcomes depend on how the policies are designed and implemented.
Climate change mitigation policy can help improve the living circumstances and health of the most vulnerable, thus actively reducing existing inequality. The potential is there, but the question is whether there is political will.

**OUR RECOMMENDATIONS**

1) **The European Commission must include provisions in all climate legislation to ensure Member States identify who may be adversely affected, how this adverse impact could potentially be mitigated, what are the social benefits and how they could interplay.** Terms such as low-income households, vulnerable/marginalised groups, energy and transport poverty should be treated in a coherent way across all files, but as circumstances largely differ among Member States, they should have flexibility to translate such guidance at national level in the most appropriate way in order to avoid too narrow approaches and maximise inclusivity. Member States should agree on a methodology to identify who will fall under these definitions, in the framework of implementing the Council Recommendation on ensuring a fair transition towards climate neutrality.

2) **Member States should implement policies in a logical timeline and orderly manner** so that households can get ready to minimise potential negative impacts and maximise the benefits stemming from energy savings and renewables. This means ensuring that support measures are in place before the new policy comes into effect, and incentivising transition to technologies which would run on sustainable renewable sources as well as energy savings. For example, financial incentives could be made available for buildings’ deep renovations before carbon pricing or energy taxation, prioritising those occupied by low-income, vulnerable and energy poor households in order to shield them from any increase in energy bills. Member States must also phase out fossil fuels’ use in buildings in a timely and adequate manner. For example, in order for households not to feel the impacts of increased price or a ban on fossil fuels, they first need to be supported to modernise their individual heating systems to shift towards highly efficient, clean and renewable-based solutions.

3) **In the short run, Member States must provide lowest-income households with either exemptions from the implementation of carbon pricing/taxation or direct income support.** These measures would help shield households from unbearable price increases (through means-testing or other similar measures), in order to guarantee the respect of their fundamental rights (i.e. to energy, food, health, education). Such support measures must be implemented with certain conditions in order to avoid leading to perverse incentives to continue fossil fuel use. They must be temporary, designed with the intention to facilitate the gradual participation of the lowest-income-households in the just energy transition, and accompanied by measures which oblige and support energy efficiency improvements and uptake of renewables. It is fundamental though that short term fixes do not obfuscate the need for structural reforms to address prevailing inequalities and energy poverty. A part of such income support may come from carbon pricing and energy taxation revenues of the Member States. In that case, Member States must recycle revenues together with progressive climate and social policies. The European Commission must set a clear EU-level governance mechanism to incentivise progressive carbon pricing and taxation across Member States, and ensure equity.

4) **Member States must ensure sufficient and equitable access to upskilling and reskilling.** The European Commission underlined this prerequisite in general terms in its Proposal for a Council Recommendation on ensuring a fair transition towards climate neutrality. Member States should make sure enough training schemes are made available, and public support is in place to make

---

European Commission proposal of a policy guidance for a fair and inclusive transition towards climate neutrality to complement the Fit For 55 Package:

this impactful (i.e. costs of quality training, adequate infrastructures for adult education, etc.). This may require employees in contracting sectors (such as coal, oil and certain automotive industry value chain manufacturing) to be made eligible for paid training leave, and for upskilling and reskilling programmes to be made available free of charge to all who cannot afford to pay for it (i.e. means tested, whether or not they are unionised), or through salaried in-work training. Ideally, free childcare should be available for parents to ensure they can attend, and in some instances, subsidised transport may also be needed to ensure truly equitable access to all.

5) Where digital services are deployed (such as using only online forms to apply for subsidies, assessments, etc.), the European Commission must include additional provisions to address the digital divide. Member States must provide alternative access options to residents who have limited access, or ability to use, digital services (access, language barriers, literacy barriers, disability, etc.).

6) Member States should ensure that the funds for mitigating potentially adverse distributional effects of climate policy are not redirected from existing social support programmes that are directly addressing the needs of the most vulnerable households, such as free school meals, discounted public transport or state-funded care services. Where new funding streams are developed, Member States must consider the possibility of using existing administrative structures and distribution mechanisms to reduce administrative costs (such as exemptions through tax credits) and effectively reach those most in need.

AN EXAMPLE

Subsidies to help with bills for low-income and low-middle income people to continue relying on fossil fuels risk locking people into a technology that makes them vulnerable to price volatility. Improving energy performance of buildings would:

- Reduce energy demand and improve living comfort,
- Permanently reduce energy bills and vulnerability to price hikes
- Create new jobs

Before carbon pricing measures are applied to domestic fuel consumption, low-income households should access to funds to undertake deep energy efficiency renovation and to electrify their heating and water heating appliances. That would facilitate transition to renewable heating.

Such improvements should not be financed through utility bills in a way that increases energy costs to all customers, including those who experience fuel poverty. Certain climate policy measures can generate substantial amounts of revenue that can be used to support these households, thereby contributing to a redistributive agenda.
Introduction

In 2021, the European Commission tabled a series of legislative proposals — the so-called Fit For 55 legislative package. The aim is to revise the current 2030 climate and energy policy framework in order to deliver the new EU climate target, i.e. a 55% greenhouse gas emission reduction by 2030.

To complement the Fit For 55 Package, the Commission also proposed a Council recommendation on ensuring a fair transition towards climate neutrality. It is a tool to help Member States devise and implement policy packages that ensure a fair transition towards climate neutrality, by addressing the relevant social aspects linked to the transition in a comprehensive manner. If adopted, Member States will be expected to implement the social, economic and fiscal measures outlined in the Recommendation.

Since the launch of the first part of legislative proposals under the Fit For 55 Package in July 2021, concerns about the potential distributional impacts of climate measures proposed by the European Commission have been voiced by various actors. The EU climate and energy files do not systematically include a deep and consistent analysis of the positive and negative distributional and social impacts of proposed measures. While some flanking measures are being proposed — for example, to mitigate the adverse distributional impacts of the proposed climate policy measures on cost of essentials such as heating and transport fuels through the European Social Climate Fund —, more could be done to ensure a systematic integration of the labour and broader social dimension at the design stage. Meanwhile, social policies barely refer to the impacts of the climate crisis — for example, the recently adopted European Pillar of Social Rights Action Plan does not mention climate. This situation illustrates the existing gap between social and climate policies, and the need to build better synergies between them, and even think about them in a comprehensive manner, as complementary

1 Endorsing the equity principle, countries with a higher historical responsibility and with greater capacity to act should do more and hence Europe should act much faster than most other countries in the world. CAN Europe position on various legislative proposals for the introduction and revision of climate and energy files can be found on our website: https://caneurope.org/press-release-fit-for-55-climate-energy-eu-commission-package/
elements of a just and green transition. Although the European Green Deal\(^3\) clearly calls for bringing up opportunities for everyone, there is a significant need for social and climate policy proposals to complement each other, provide clear guidance to tackle the root causes of inequalities, and maximise justice and equity while effectively contributing to emissions reduction.

With the Covid-19 pandemic, many of the existing inequalities in Europe have surfaced the water, demonstrating the crucial role of social protection in times of crises. This resulted in widespread calls to ‘build back better’, i.e. to build a sustainable, just and democratic economic model that will keep global warming at 1.5 °C. With the adoption of the EU’s new climate targets, the importance of ensuring that the transition to climate neutrality is delivered in a socially just manner has gathered growing momentum, creating a space where the objectives of social justice groups, and environmental and climate movements intersect.

This lack of integrated approach opens the door for certain Member States and vested interests to instrumentalise social justice concerns to lower climate ambition. The ongoing gas price hikes in Europe hitting vulnerable groups particularly hard illustrate this trend, with climate policies unjustly blamed in certain countries. Russia’s invasion of Ukraine, and the EU’s economic measures against Russia, further exacerbated the energy price increase, exposing people in Europe to inflation, poverty and risk of further erosion of their social rights.

CAN Europe considers that ambitious climate action is crucial for both climate justice and social justice — as well as for peace and security. Even with the new climate pledges on the table, including the EU’s more ambitious climate target, the world is still heading towards a global temperature rise of at least 2.5 °C by the end of this century. The lack of adequate climate action will have deep adverse social impacts, affecting our lives, livelihoods, fundamental rights and the economy. Climate inaction will have detrimental impacts especially on the most vulnerable people and households, both in Europe\(^4\) and abroad. The latest science\(^5\) shows that warming in Europe will continue to rise faster than the global average, with some countries and regions more exposed than others. It is necessary to protect society as a whole against climate change and to take the imperative of intergenerational equity into account. Inaction is therefore not an option. At the same time climate measures must not erode the social rights of people during the transition, and should aim at maximising the benefits for all — starting with the most vulnerable groups.

Climate policies must reduce and not exacerbate existing inequalities, nor create new ones. As highlighted in the recent reports by the International Panel of Experts on Climate Change (IPCC)\(^6\), “Structural vulnerabilities to climate change can be reduced through carefully designed and implemented legal, policy, and process interventions from the local to global that address inequities based on gender, ethnicity, disability, age, location and income.” Climate scientists are now more confident than ever that, “Climate change mitigation action designed and conducted in the context of sustainable development, equity, and poverty eradication, and rooted in the development aspirations of the societies within which they take place, will be more acceptable, durable and effective?"\(^7\)

---


\(^4\) Joint Research Center, Szewczyk, W., Mongelli, I. and Ciscar Martinez, J.C., Heat stress, labour productivity and adaptation in Europe—a regional and occupational analysis, ENVIRONMENTAL RESEARCH LETTERS, ISSN 1748–9326, 16 (10), 2021, p. 105002, JRC122773.


\(^6\) IPCC WG2AR6 report, 28 February 2022: [https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_SummaryForPolicymakers.pdf](https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_SummaryForPolicymakers.pdf)

\(^7\) IPCCWG3AR6 report, 4 April 2022: [https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf)
Bottom-up participatory processes, tailored for engagement of all people in policy design and implementation are fundamental for a genuine just transformation to take place. It is also important to ensure that the costs and losses associated with the low-carbon transition accrue to those who have knowingly gained financial benefits from polluting practices and have the resources to withstand financial losses.

The below analysis was commissioned by CAN Europe to Sanna Markkanen and Krisztina Borbála Zálnoky, from the Cambridge Institute for Sustainability Leadership (CISL), University of Cambridge. It provides a snapshot of some climate measures proposed by the European Commission, through a lens of potential social benefits and adverse impacts. The analysis suggests potential mitigation mechanisms that could be adopted at EU or national level, and use of EU public financial instruments, in order to increase the positive social impacts of the policies analysed.

---

HOW TO MAXIMISE THE SOCIAL BENEFITS OF CLIMATE ACTION

Approach

SCOPE

It is important to acknowledge the root causes of existing poverty and inequalities in Europe, which lie in the dominant economic system and the power relations underpinning it. The same economic system is also contributing to global warming. It is against a background of existing intersectional inequalities that the transition towards a climate neutral economy must take place. It is therefore crucial to make sure climate action does not exacerbate existing inequalities and does not create new inequalities.

There are two distinct, but potentially complementary, approaches to how social justice considerations can be addressed in climate policies:

1) Embedding flanking social measures in order to do no harm;
2) Adopting a socially transformational climate policy agenda.

In this briefing, we follow mostly the first approach. We indeed scope measures to embed in climate-related policy files that are currently being negotiated — meaning adopting flanking and redistributive measures from the design stage of these policies (financial transfers, tax incentives, re-/up-skilling, adult education and quality trainings, etc.). We are pointing at the means for compensation of potential adverse impacts of some climate measures, ensuring lower income groups are not worse off than before the measure, and aiming at the maximisation of social benefits. The second approach would start with a more fundamental question on whether and how climate action can pursue a more determined agenda to redistribute wealth and power, and to be socially transformative. We acknowledge the importance of this approach, but it goes beyond the scope of this study.

Our approach is informed by an academic analysis that was published in the Climate Policy journal in 2019. In this paper, the authors drew on a huge body of existing literature to identify a set of positive


9
and negative social impacts that various types of climate change mitigation policies can have and how these could affect inequality outcomes.

The chapters in this report look at specific policy proposals that have mainly been put forward under the Fit for 55 Package, focusing primarily on measures that existing literature suggests may have direct positive or negative social impacts within the EU (excluding policies such as Carbon Border Adjustment Mechanism and hydrogen strategy, which may have indirect social impacts both within the EU and abroad). Considering that social impacts, including and beyond employment, are more explicitly associated with policies that have impact on goods or services that most households consume on a regular basis, the assessment focuses on buildings, transport, and energy. For each element of specific policy proposal included in the Fit for 55 Package, we identify the possible positive and negative social impacts, actions that could be undertaken to minimise or mitigate the potentially adverse social impacts, and how actions may be financed.

The underlying logic connecting social impacts to inequality outcomes is simple: social benefits that accrue to the lowest income households, and those who are most vulnerable to climate change or cost of living increases, will likely reduce inequalities, while adverse social impacts affecting the same groups will most likely increase them. Those who are currently not among the vulnerable or low-income (i.e. households whose income is above the national median income), but who may face greater precariousness as a result of the ‘green transition’, are included to acknowledge the need for mitigating actions to avoid ‘leaving people behind’ or creating new inequalities. This is particularly relevant for workers in contracting sectors, such as fossil fuel industry and internal combustion engine automotive manufacturing.

---

50 Categories in which migrants, minority ethnic populations, a sizeable proportion of pensioners, disabled people, one-parent households and women are overrepresented.
CAVEATS

It is key to acknowledge that this analysis is conducted while many of the key elements and targets of the different climate and energy policy proposals included in the Fit for 55 Package are subject to change as negotiations continue. Thus, we have not captured policy interactions which could result in different outcome scenarios in terms of positive and negative social impacts, as well as the potential effects of going beyond the EU’s current emissions reductions target (i.e. increased ambition).

However, policy instruments are not implemented in isolation and the cumulative effect of several policy instruments may be substantial in terms of cost of living increases. As a result, existing social protection and regulation may not be sufficient to mitigate the joint impact of different policies, even if each policy measure independently seems to have a manageable impact.

On the other hand, deep energy efficiency retrofits leading to energy savings can effectively reduce the adverse social impact of several different price-based policies to negligible levels, if regulations are implemented adequately and in a timely manner. Strong positive synergies between the various policy instruments under the Fit for 55 Package could even make it possible for the package as a whole to achieve emissions reductions more than the 55% target. There is a need for a systematic analysis across files to identify a range of cumulative benefits and impacts, and to implement measures to maximise positive impacts.

The term “low-carbon” (and not renewables) in the chapter on renewable energy is used to refer to electrification. Although some electricity is still produced from coal and other fossil fuel sources, electricity has the potential to be produced fully from renewables. However, as grid-connected households do not always get to choose where their electricity comes from, we are unable to ensure that electric technologies are necessarily powered by ‘renewable’ electricity as the current energy mix is far from being 100% renewable-based. By saying “low-carbon” or “lower-carbon sources”, we do not intend to promote nuclear energy, nor referring to techno-fixes that are currently economically and technologically unviable at scale, such as fossil gas with carbon capture and storage (CCS).

This briefing aims to be a preliminary scoping exercise, as all files are currently going through negotiations and subject to rapidly changing political dynamics. Member State positions are developing both around the negotiations, national policies and regional geopolitics. Thus, it has a limited scope.

The analysis is also limited to assessing the inequality impacts within EU member States, and does not systematically look at inequality between Member States. The intersectionality lens has been applied to a certain extent but would require deeper research.

---

Electrification has the potential to become carbon free and can deliver energy for home heating and cooling with much lower efficiency losses than alternatives, such as renewables-based hydrogen.
FINANCING TO DELIVER JUST OUTCOMES

We provide in this report some examples of possible funding sources to mitigate the adverse impacts that certain policies may otherwise have. The examples focus primarily on EU-level funding sources that have a specific objective to ensure that European climate change mitigation policies deliver just outcomes. The most substantial resources are funds available under the Just Transition Mechanism (JTM), the European Regional Development Fund (ERDF), the Cohesion Fund, the proposed Social Climate Fund, the Recovery and Resilience Facility, the ETS (revenues and the Modernisation Fund) and the EU-LIFE programme. Certain additional resources that are not explicitly climate-focussed can also support just transition, for example the Erasmus+ programme or the European Social Fund Plus (ESF+).

It is important to note that this is not a systematic review of all funds available, and further research would be needed to create a comprehensive overview of opportunities to finance just outcomes for the selected policies.

In addition to funding sources mentioned above, numerous smaller and more specific funding sources are also available. However, these are not currently covered in this scoping. There are also funds that can implicitly support just climate policy outcomes, for instance through research in this area.

Although we have been able to identify a range of funding sources for many of the actions that are needed to ensure a just transition, the current budgets are likely to be insufficient to cover all needs, or to enable the resources to be directed to where they are most needed (as shown below, funds will need to be distributed across various stakeholders including citizens, companies, regions and governments, in various formats e.g. subsidies, direct payments, investments).

The availability of resources also varies between different Member States. While the wealthier Member States have more extensive national financial resources, certain EU budgets are only accessible for specific Member States. For example, the Cohesion Fund is available only to Member States that have a Gross National Income (GNI) per capita lower than the 90% EU-27 average and the Modernisation Fund is available to 10 lower-income Member States. Moreover, some of the EU budget resources, such as the proposed Social Climate Fund, will need to be complemented by match-funding from Member State resources — a requirement that can make funding from these sources less accessible to poorer Member States.

---

12 An example could be Horizon Europe’s 2021–2022 work programme that has a specific call topic focusing on “Fostering a just transition in Europe.”

Decarbonising the buildings sector\textsuperscript{14}

**POLICY MEASURES**

Proposed revisions of the Energy Efficiency Directive (EED) and Energy Performance of Buildings Directive (EPBD), implemented as part of a so-called renovation wave (i.e. a plan to implement a broad range of household energy efficiency improvement programmes).

Specific policy instruments that are part of the renovation wave are discussed in more detail further down.

**POTENTIAL SOCIAL BENEFITS**

Improved indoor temperature translating in improved health and wellbeing.

Reduction in illness and excess deaths; reduced absences from school and work translating in improved educational achievement and work performance due to better housing circumstances.

\textsuperscript{14} Policies to decarbonise embodied and operational emissions from the buildings sector.
Lower energy bills, thereby a reduction in fuel poverty and improved disposable incomes; reduced stress; improved mental health; improved opportunities for social integration and interaction.\(^\text{15}\)

At large scale, the renovation wave would create geographically distributed employment (new jobs) and related economic benefits (including lower energy bills allowing households to spend more on other essential goods and services, and creating more jobs).

Under the energy savings obligation (Article 8 of the EED recast proposal), Member States are required to target a share of their efforts towards energy poor households. In combination with the increased ambition level of the annual energy savings rate, this can bring social inclusion and benefits of energy efficiency to those that need it the most.

**POTENTIAL ADVERSE EFFECTS**

If costs are passed on to consumers e.g. via increased rents, or if costs of energy efficiency obligations that are imposed on utility companies are passed on indiscriminately to all consumers through additional charges or increased rents (whether or not these consumers benefit from these energy efficiency measures), there will be regressive distributional impacts. Indeed, lowest income households and renters are most likely to experience an increase in the living costs, even if the energy efficiency of their accommodation is improved. The worse outcome will be felt by households whose utility bills go up to pay for renovation programmes for which they do not qualify / cannot benefit from).

If access barriers (such as partial grants and subsidies that have high co-financing requirements) prevent participation, there will be regressive distributional impacts as households with low disposable incomes are not able to benefit from the grants. Instead of instead, the properties occupied by higher income households are more likely to be improved than those occupied by lower income households.

Lack of high-quality training programmes would increase the risk of energy efficiency retrofits being carried out by unqualified workers, potentially leading to lower indoor air quality, dampness and mould, or thermal discomfort, thereby generating negative health impacts.

**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

Regulation could be implemented to prevent energy efficiency retrofit costs from being passed on to renters. This may need to be via housing policy and rental sector regulation. As we cannot realistically expect the owners of rental properties that have fairly low rents to invest hugely from their own pocket to improve those properties without increasing rents, such measures may have to

\(^{15}\) See Markkanen and Anger-Kraavi, 2019, for more detailed analysis.
be accompanied by extensive subsidies to (social and private sector) landlords that own properties that house low-income tenants, to pay for energy efficiency retrofits that will improve the quality of those specific properties.

Tax rules could also be amended (by Member States) to enable landlords to implement energy efficiency improvements in their rental properties at minimal / negative cost. Such subsidies and favourable tax treatment should be conditional on the landlords’ willingness to retain the sitting tenants and commitment to limit rent increases for a certain period of time. These measures could also improve security of tenure to most vulnerable private sector tenants.

Diverse and accessible financing options, including extensive subsidies (akin to, but less bureaucratic and more comprehensive to Italy’s building renovation superbonus scheme16) targeting especially fuel-poor and low-income households across all tenures. However, subsidy programmes should be sufficiently long-term to avoid capacity crunch and to create conditions for the sectors (building energy efficiency and low-carbon17 heating and cooling solutions) to expand sustainably.

EU-wide certification schemes for workers carrying out energy efficiency improvements (as proposed under the revised EPBD), supported by a registry of accredited service providers with verified ratings. EED and EPBD should be accompanied by large-scale educational initiatives to ensure that there is a sufficient supply of adequately qualified and certified workers to deliver high quality work.

One-stop-shop and professional assistance programmes to remove non-cost barriers to energy efficiency renovation and the uptake of low-carbon heating and cooling solutions should be made available to landlords and owner-occupiers (some suggestions are included in the proposed revisions to the EPBD).

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

Examples of funds available to deliver just outcomes:

- [Recovery and Resilience Facility](#).
- [Cohesion Fund and the European Regional Development Fund](#) as these need to take into account the integrated national energy and climate plans that address “energy poverty and greenhouse gas emissions” (p.64).
- [Just Transition Mechanism](#) including the Just Transition Fund, [InvestEU’s Just Transition Scheme](#) and the [public sector loan facility](#) under the Just Transition Mechanism.

---

16 CAN Europe has a critical perspective on this scheme, as fossil gas boilers are eligible for funding, the conditions associated with this scheme do not guarantee the achievement of adequate levels of energy efficiency, and the scheme is not designed to prioritise energy poverty. 

17 We use here the term “low-carbon” to refer to electrification and not “renewables” because electric options are low-carbon (electricity has lower carbon intensity than fossil gas in most Member States that have started to restrict the use of coal in power sector). However, as grid-connected households generally do not get to choose where their electricity comes from, they are often unable to ensure that it is ‘renewable’. 

LIFE — Clean Energy Transition
Technical Support Instrument that supports the implementation of reforms for instance under the Just Transition Fund.

Potential complementary sources:
- ESF+ resources could complement the JTF on the voluntary basis
- REACT-EU
- Private Finance 4 Energy Efficiency
- European Energy Efficiency Fund
- Technical Assistance — Cohesion Policy
- European Globalisation Adjustment Fund for Displaced Workers (EGF)

See further information on financing the Renovation Wave here.

POLICY MEASURE
Minimum Mandatory Energy Performance Standards (MEPS) rating (grade F) for homes, to be enforced by 2030 at point of sale / new tenancy (proposed revision of EPBD).

POTENTIAL SOCIAL BENEFITS
Could reduce energy bills and therefore energy poverty — this could have multiple benefits similar to those described above regarding the renovation wave (immediate and long-term) from improved health to better educational outcomes (see above).

POTENTIAL ADVERSE EFFECTS
These types of Minimum Mandatory Energy Performance Standards could lead to increasing rents and higher housing costs, even if energy costs decline as a result of improved efficiency. This will be the case especially if landlords seek to recover the cost of energy efficiency improvements (and potential income losses during the renovation period) through higher rents.

It may also result in housing market distortions and inefficient use of the housing stock if the requirement for an EPC certificate is implemented without
ensuring the landlords are capable of paying for retrofits, which may slow down the turnover rate; (2) if homeowners who want to sell cannot afford to improve the energy efficiency enough to get an EPC that makes the property sellable, they will not sell. This will mean that houses do not enter the market, and there will be fewer properties for aspiring buyers to choose from, which will push up prices (while some people continue to occupy homes that are too big for them).

EPC requirements may also tighten rental markets, if lots of landlords choose to sell rather than improve energy efficiency when a tenant leaves a property.

Could incentivise the development/expansion of ‘black’ (unregulated) rental market, especially for immigrants and other vulnerable groups.

Households will not benefit hugely from incremental energy efficiency improvements in the lowest performing houses, i.e. from grade G to grade F. More ambition (such as an upgrade to EPC rating B) would be needed to effectively reduce fuel poverty and health problems caused by poor housing conditions (damp, rot, inefficient ventilation and heating and cooling systems).

**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

A combination of subsidies and other fiscal instruments (such as tax deductions and negative gearing18) to ensure that the cost of energy efficiency improvements for landlords is minimised. These interventions should be targeted at landlords whose properties are occupied by lower-income households (i.e. not extend full subsidies to large-scale landlords of top-end rental market properties).

Utilise regulatory instruments (housing policy) to limit acceptable post-renovation rent increases for properties that have been upgraded with subsidies. Subsidies could also be made conditional on the landlord agreeing to certain tenure security requirements, especially in otherwise loosely regulated rental markets.

Full subsidies / free EPC assessments for low-income owner-occupiers and subsidies / interest-free loans to cover energy efficiency improvements if needed.

Deductions in property purchase taxes (where such measures are in place) could be applied if the buyer undertakes certain energy efficiency improvements.

For owners who are wishing to sell their properties, any loans to improve the EPC rating must come with a facility that enables them to be passed on to the buyer. Ideally, the energy efficiency improvement also improves the selling price of their property potentially covering the cost of the loan. However, some people (especially older people) who have very low incomes and big houses may be

---

18 Negative gearing allows an investor who is using borrowed funds (such as a mortgage) to finance an investment (such as rental property) to set off any net losses (i.e. costs of maintaining the property exceeding the rental income) against any other taxable income (such as their income from paid employment or capital gains). This process allows them to invest amount of money that exceeds the rental income in the maintenance of the property without accruing financial losses.
discouraged from taking a large loan at high interest rate on an assumption that it will definitely increase the retail value of their property. A loan that can be passed on to the buyer would enable them to find a buyer and agree the sale, then update the property energy efficiency, minimising the risks while staying within the regulatory requirements.

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

Fund that could support the measures to mitigate potentially adverse social impacts:

- Recovery and Resilience Facility
- Cohesion Fund and the European Regional Development Fund
- Just Transition Mechanism
- LIFE — Clean Energy Transition
- Social Climate Fund

**POLICY MEASURES**

Removal of subsidies for the use of fossil fuels in heating (proposed under revisions to the use of ETS revenue; also recommended in the EPBD revisions from 2027 onwards); eligibility in energy savings accounting in EED; subtargets for renewable based heating and cooling in EED and RED.

**POTENTIAL SOCIAL BENEFITS**

Air quality and health improvements if consumption of fossil fuels is reduced as a result.

Could help accelerate the uptake of renewable heating and cooling solutions, including heat pumps, water heating and waste heat recovery, thus enabling economies of scale to develop, leading to declining prices (and eventually cost parity of low-carbon technologies with incumbent, more carbon-intensive, technologies).
POTENTIAL ADVERSE EFFECTS

If vulnerable consumers are not compensated for potential losses due to the end of the subsidy, there will be regressive distributional impacts.

Without mitigating action to protect low-income households, removal of fossil fuel subsidies could reduce public support for the Fit for 55 Package / ambitious climate targets / fossil fuel subsidy phase-out pledges.

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Removal of subsidies for the use of fossil fuels in heating, eligibility in energy savings accounting, and subtargets for renewable based heating and cooling must be combined with large-scale energy efficiency retrofit programme (see above).

Large-scale, long-term subsidy programmes including grants and interest-free loans (for households with low-ability to pay) and part-subsidies and interest-free or low-interest loans (for able-to-pay households) to support the switch to low-carbon heating and cooling solutions.

Direct cash payments to lowest-income households, households who live in fuel poverty or are at risk of fuel poverty, and low-income households living in energy inefficient rental properties to compensate for the removal of fossil fuel subsidies.

Regulation requiring public and private sector landlords to switch to low-carbon heating and cooling options available in their area (e.g. announce a date to implement a ban on letting properties with fossil-based heating and cooling systems) — this should ideally be in place prior to the removal of fossil fuel subsidies for heating and cooling.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

EU funds that could support the measures to mitigate potentially adverse social impacts:

- Recovery and Resilient Facility
- Cohesion Fund and the European Regional Development Fund
- Just Transition Mechanism
- LIFE — Clean Energy Transition
- Social Climate Fund
- Modernisation Fund as priority investments include “support to a just transition in carbon-dependent regions in the beneficiary Member States.”

Financing programmes similar to Private Finance 4 Energy Efficiency could support households with low-ability to pay for low-carbon heating and cooling solutions in this transition.
POLICY MEASURE

Carbon pricing (as per the proposed revisions to the ETS for buildings and to the ETD)

POTENTIAL SOCIAL BENEFITS

Air quality and health improvements if fossil fuel consumption is reduced as a result.

Ability to generate revenue, which could be used for decarbonisation measures (redistribution).

Application of the polluter pays principle in order to incentivise using less fossil energy sources (decrease demand).

Carbon pricing could help to accelerate the uptake of renewable heating and cooling as well as energy efficiency improvements in buildings.

POTENTIAL ADVERSE EFFECTS

Carbon pricing could result in higher heating and cooling costs, especially if the current cost difference between fossil gas and electricity remains (this is subject to revisions under the proposed amendments to the ETD but there will likely be a 10-year grace period that Member States can apply if they wish).

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Exempt lowest-income households from carbon pricing for buildings for a defined period of time, or provide them with direct income support for a limited period until energy efficiency measures can be implemented to shield them from unbearable price increases (through means-testing or other similar measure). However, it is worth noting that this measure could lead to perverse incentives to continue fossil fuel use, and therefore must be accompanied by measures which oblige and support energy efficiency improvements and uptake of renewables (see above).

Apply to low-income households only AFTER energy efficiency improvements and realistic opportunities for fuel-switching have been offered (this might be difficult to deliver in practice, especially in the private rented sector, without offering extensive grants to landlords).
Ensure that ETD revisions (ensuring that cleaner fuels are cheaper per unit of heat than carbon-intensive fuels) are in place before applying carbon pricing to low-income households.

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

At the moment, the main mechanism intended to support lower-income households with higher energy bills is the proposed Social Climate Fund. However, the adequacy (and the proposed allocation mechanism) of the level of resources available through this fund has been called into question, as has the ability of the Member States to ensure that the funds are directed at those who are most vulnerable (cf. the need to use mechanisms that are already in place to identify vulnerable households instead of devoting a large proportion of the funding to cover administrative costs).

The existing ETS revenue has more than doubled in value since 2019. This increased revenue could be used to support the domestic buildings decarbonisation without needing to reduce funds available for existing uses, as it is new additional revenue.

In addition, an earlier end to free ETS allocation would provide more revenue for financing industrial decarbonisation and could thus free up even more revenue from the existing ETS for support buildings sector decarbonisation.

**POLICY MEASURE**

Ban on the use of fossil fuels in buildings (enabled at Member States level by proposed revisions to EPBD).

**POTENTIAL SOCIAL BENEFITS**

Could help markets for low-carbon heating and cooling (and water heating) options (such as renewables and electric heat pumps) to develop, bringing down costs and making them more widely accessible.

Could result in lower energy bills for users over the longer-term, especially if supported by reduction of environmental taxes and taxes and levies applied to electricity (as proposed under the ETD revision).
A ban would give investment certainty and could help vulnerable parts of the society not to be locked into unsustainable heating and cooling technologies, which may incur higher operation costs during the transition period.

**POTENTIAL ADVERSE EFFECTS**

Could result in rent increases (if landlords need to cover the up-front cost of the upgrades) and higher heating and cooling costs, especially if enforced before the current imbalance between the cost of electricity and fossil gas is addressed.

Higher rents could make it more difficult for low-income households to enter the rental market (or to move house) because their ability to pay the rent is determined by their income.

In extreme circumstances, and if not adequately managed, could result in deteriorating housing circumstances if low-income households have their fossil gas supply cut off before they have been able to switch to low-carbon alternatives (households are left without having access to heating and cooling / water heating / cooking fuels).

**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

Knowledge distribution (via different channels and in multiple languages) to explain the ban, when it comes into effect, and what options are available for households and small businesses (including sources for financial support to manage the switch to low-carbon alternatives). May require home visits and individual support for vulnerable households (information should not be in digital format only as this could create an access barrier).

Extensive subsidies, tax incentives and low-cost loans (for landlords as well as owner-occupiers) to be made available for a substantial period of time prior to the enforcement of the ban.

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

EU funds that could potentially support these mitigating mechanisms:

- Erasmus+
- ESF+ (esp. skills)
- Social Climate Fund

Programmes similar to for instance ELENA, European Local Energy Assistance, could help with capacity building and information dissemination on the fossil fuel ban and to raise awareness of available low-carbon heating and cooling (and water heating) solutions.
Summary of social impacts of selected climate change mitigation policies: Decarbonising the buildings sector

**POLICY MEASURE**

Regulation requiring all new buildings to be zero-emission (by 2027 for public sector and 2030 for all buildings, under proposed revisions to EPBD).

**POTENTIAL SOCIAL BENEFITS**

Will ensure that no new buildings that are energy inefficient or use fossil-fuel based heating and cooling and water-heating systems (i.e. properties that would need to be retrofitted by 2050) are added to the buildings stock after the deadline dates.

This regulation will expand the demand for low-carbon building materials and heating and cooling (and water heating) solutions, helping to create economies of scale and bringing down costs. Many of the energy efficient building materials used for new-built are also used for energy efficiency retrofits in existing buildings.

Will lower the operating costs of buildings.

**POTENTIAL ADVERSE EFFECTS**

Could increase the up-front cost of new housing and new rental housing (in the short term, until low-carbon building technologies and materials achieve cost parity).

For example, if the cost of new housing goes up (say from EUR 300,000 to EUR 400,000), but the loan to value ratio does not (i.e. the buyer is still required to have a similar share of the property’s value to offer as a deposit), it will take longer for new homebuyers to save the required deposit because they will need more savings to cover the deposit.

**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

Financing instruments, such as green mortgages (mortgages with lower interest rates or higher loan-to-value ratio), to compensate for the higher up-front cost of zero-emissions buildings.
These should be made available immediately to accelerate the demand for zero-emissions buildings even before the law comes into effect\textsuperscript{19}.

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

Action would likely need to be taken by financial services providers, such as mortgage lenders (although investment is also needed by Member States for public sector buildings).

Regulation requiring financial institutions to record and disclose the environmental impact of their assets (such as the mortgage portfolio standard proposed as part of the revisions to the EPBD) could boost the development of new ‘green’ financial instruments for property developers and purchasers.

These instruments could also incentivise greater uptake of energy efficiency renovations by buyers of existing properties (not just new-built). Making the information available on the various options/materials/recycling possibilities for landowners who want to renovate/build houses is also needed.

\textsuperscript{19} The mortgage portfolio standards (proposed as part of the EPBD) seek to incentivise lenders to improve the energy performance of their portfolio of buildings, and encourage potential clients to make their properties more energy efficient. This would mean lower cost loans for people purchasing a more efficient property, or additional lending (at mortgage interest rate, which is well below other loans), to help households with a mortgage to improve the energy efficiency of their homes. It offers an additional source of low-cost loans to people who own with a mortgage or who buy with a mortgage. Considering that 25% of EU homes are owned with a mortgage, this instrument could be influential if financial institutions come on board \textit{en masse}. Although, it would be difficult to make the mortgage portfolio standard obligatory for financial institutions at 100%, it could make it easier for middle-income households to source the funds to improve energy efficiency. The potential benefits of such an instrument are big in terms of emissions savings, with non-existent or negligible adverse impacts.
POLICY MEASURE

Income tax cuts to compensate for the financial impacts on households of buildings ETS and revisions to ETD (proposed under the revisions to EPBD).

POTENTIAL SOCIAL BENEFITS

Could benefit low-income working households, especially if they are also eligible for subsidies to improve the energy efficiency of their homes and to switch to low-carbon heating and cooling solutions.

POTENTIAL ADVERSE EFFECTS

Do not provide any relief for households on fixed income (benefits or pensions) when these are not subjected to income tax, or households on extremely low incomes that fall below the income tax threshold (where this is applicable).

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Need to be complemented with other measures, such as cash transfers, for those who do not benefit (or benefit very little) from cuts to income tax.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

The decision to cut income taxes, and mitigating action needed to ensure that people on fixed income are not adversely affected, would need to be done by each Member State.

The tax revenue lost through cuts to income tax would most likely require other taxes to be increased to cover the shortfall. It is imperative that these tax increases would be progressive (i.e. affect primarily wealthier consumers) and gender-just. Female-headed households and minority ethnic groups are overrepresented in the lowest income categories, and would therefore particularly benefit from such tax cut.
POLICY MEASURE

Extended Renovation Obligation (proposed revision of the EED).

POTENTIAL SOCIAL BENEFITS

Applies to public sector buildings only but, by accelerating demand and therefore enabling economies of scale to develop, would help bring down the cost of energy efficiency retrofit solutions faster than would otherwise be the case (making these more accessible to middle-income households). This process would also contribute to a stronger demand for the installation, materials and products to deliver deep energy efficiency retrofits, creating jobs.

The inclusion of social rented housing in the definition for ‘public sector buildings’ (as proposed in the revised EED), means that this extended obligation would likely result in substantial improvements in the social housing stock (thus benefiting social housing occupants).

POTENTIAL ADVERSE EFFECTS

Could increase the housing quality gap between low-income social housing occupants and private rented sector tenants, if regulation of the private sector does not incentivise landlords to deliver similar energy efficiency improvements.

If the enabling conditions are not in place (i.e. lack of certified contractors and installers, less bargaining space for workers and trade unions, lack of materials leading to long delays, poor integration of the retrofit projects leading to poor resulting energy performance), there is a risk of destroying the trust in the renovation industry, leading to a decrease in the renovation rate.

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Private sector housing regulation to be tightened in EPBD and by using housing policy measures, to better align with the housing quality requirements for social housing.

---

20 On the adverse effects of poorly designed energy efficiency policy — that does not sufficiently consider the enabling conditions:

https://www.researchgate.net/publication/356431858_Unintended_Effects_of_Energy_Efficiency_Policy_Lessons_Learned_in_the_Residential_Sector
SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

Energy efficiency improvements in public sector buildings could potentially be supported by resources from the Just Transition Fund (one of the Common Output indicators of the Just Transition Fund is “public buildings with improved energy performance” — Annex III, p.18).

Cleaner transport

POLICY MEASURE

Carbon pricing — proposed EU Emissions Trading System (ETS) for transport and Energy Taxation Directive (ETD) revisions.

POTENTIAL SOCIAL BENEFITS

Air quality and health improvements if consumption declines as a result. The resulting benefits are accrued disproportionately by lower income households, who are more exposed to air pollution (because they are more likely to live in areas /neighbourhoods that are close to big roads and areas of intense road traffic flows).

Carbon pricing would generate revenues, which could be used to finance decarbonisation measures (redistribution).

Application of the polluter pays principle — incentivise reduced consumption of fossil fuels (decrease demand).

Could help the uptake of low-emission transport modes, electrification of the transport sector (including cars and busses), and improvements to public transport provision.

POTENTIAL ADVERSE EFFECTS

Increased cost of energy and consumer goods (especially food and bulky goods with high transport costs) would have regressive distributional impacts.

Reduced demand for fossil fuels would generate job losses; localised economic decline, population decline, risk of social unrest (impact concentrated primarily in oil-producing countries outside the EU).
PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Regressive distributional impacts could be mitigated through pro-poor revenue recycling—although the effectiveness of this approach depends on the availability of adequate resources.

It might also be necessary to apply some of these charges selectively, exempting certain population groups (such as rural residents, low-income households, certain shift-workers).

Large-scale subsidy schemes for Electric Vehicle (EV) purchase could help accelerate demand and bring forward cost parity between Internal Combustion Engines (ICEs) and EVs, making them more accessible to middle-income households. Subsidies that accelerate the take-up of EVs could also bring forward the development of second-hand markets for EVs, making them more accessible to a larger share of car users. However, such subsidies benefit primarily middle- and higher-income households.

In cities, local authorities will need to ensure that all low-income areas / areas ranking high in terms of deprivation are well serviced by safe, clean, and affordable public transport that meets the residents’ needs (e.g. providing not necessarily just connection to the city centre but also nearby areas where people work / go to school / access essential services). Local governments will also need to make sure that safe infrastructure is in place to encourage active modes (cycling, walking) and inter-modality. This infrastructure will need to be designed in a manner that is accessible to the broadest possible spectrum of people, including women on their own.

Multi-stakeholder engagement can help identify local travel needs, which can inform transport planning and behaviour, with a gender lens.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

The proposed Social Climate Fund should be directed to support these mitigation mechanisms as one of its key objectives is to reduce the costs for vulnerable households while supporting investments in measures to reduce emissions from road transport.

Many EU countries have put in place EV subsidies to accelerate economic recovery and to support the automotive manufacturing industry during the Covid-19 pandemic. Examples can be found here, here, and here.

Some Member States, such as Spain and Italy, have allocated EU Recovery Funds to EV subsidies.

Investments into public transport.

Investments into charging infrastructure.

Encouraging modal shift as well as reducing transport needs (e.g. partial or full teleworking and urban planning notably via universal design, i.e. designed so that it can be used by as many people as possible, regardless of disability or other factors).
**POLICY MEASURE**

Regulation — phasing out of Internal Combustion Engines (ICEs) by 2035 (proposed changes to the Regulation on CO₂ emission performance standards for cars and vans).

**POTENTIAL SOCIAL BENEFITS**

Air quality improvement and associated health benefits (due to reduction in tailpipe emissions / particle matter pollution, as well as CO₂ emissions).

New jobs in the EV industry and potentially in car-sharing, if the phasing out of ICEs incentivises lots of people to give up their private cars.

If there are simultaneous improvements in the public sector and active transport infrastructure and use, more jobs could also be created in the cycling industry and related services, and public transport.

Residential bidirectional charging for e-mobility (proposed revision to EPBD) can contribute to increase grid flexibility and provide a complementary source of revenues for households producing renewable energy, with the right retribution system.

**POTENTIAL ADVERSE EFFECTS**

(Localised) economic decline caused by job losses across the ICE manufacturing value chain.

**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

(Localised) employment impacts can be mitigated through strategic, multi-stakeholder planning, and economic diversification approaches to incentivise investment in new industries and new jobs in growing sectors to replace the jobs in ICE value chains.

Opportunities for upskilling and reskilling must be accessible to all, at no cost, preferably either through (salaried) in-work training or paid training leave, with dedicated efforts to provide equal opportunities for women and men as well as people with disabilities and other intersecting grounds of discrimination.
One of Erasmus+’s key priorities in the field of education is “creating upskilling pathways, improving accessibility and increasing take-up of adult education” (p. 204). Under this programme, projects could address the job losses across the ICE manufacturing value chain.

ESF+ could support upskilling and reskilling measures. One of the ESF+’s stated objectives is to contribute to the policy objective of “a greener, low carbon Europe through the improvement of education and training systems necessary for the adaptation of skills and qualifications, the upskilling of all, […]” (p.38).

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

Member States can make substantial investments without breaching the State Aid rules (for e.g., see here for an example in Poland).

POLICY MEASURE

Alternative Fuels Infrastructure Regulation / Directive (AFIR / AFID).

POTENTIAL SOCIAL BENEFITS

Will help to deliver more renewable charging infrastructure in rural areas, which could help address non-cost barriers to EV take-up in rural / less well-connected areas.

Could also create geographically distributed jobs (the new jobs would be primarily in the installation of the charging infrastructure, because jobs in its operation and associated services would likely replace existing jobs in the operation of petrol and diesel refilling stations).

POTENTIAL ADVERSE EFFECTS

No identifiable risks of adverse social impacts, as long as the funds for the delivery of AFID are not redirected from social support programmes that are directly addressing the needs of the most vulnerable EU households.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES
POTENTIAL SOCIAL BENEFITS

Air quality improvements especially in inner cities and near busy roads lead to health benefits.

Innovative green transport technology increasing affordable access to services in remote rural areas contributes to improved access to health and education.

Increasing demand for EVs will enable economies of scale to develop, and thus will bring down the pre unit costs over time (eventually making these products more accessible to larger segments of the population).

Increasing demand for EVs will encourage car manufacturers to bring more EV models into the market, accelerating the development of second hand markets for EVs, which will improve access to EVs among lower-income households.

POTENTIAL ADVERSE EFFECTS

The use of public sector funds to subsidise the purchase of EVs (which, even with subsidy, still require a substantial upfront investment) can be potentially regressive because lower income households are unlikely to be able to afford EVs in the near future, even if subsidies are available. In the meanwhile, the households that are able to take-up the subsidies will also benefit from the lower running costs of EVs, making these subsidies inequitable.

Can lead to polluting ICEs being exported to other continents, which could be bad for climate, pollution levels and people’s health outside Europe.

Increased need for critical raw materials which can have considerable lifecycle emissions and may not always be mined in an environmentally or socially sustainable manner (such as using child labour, lack of health and safety regulations and equipment, etc.). The adverse impacts associated with mining are likely to occur largely outside of Europe and therefore are difficult for the European manufacturers to control.

POLICY MEASURE

Measures to support electrification of transport – an aspect of the transition not explicitly covered in the Fit for 55 Package but a measure that has gained a lot of traction in various EU countries to facilitate economic recovery in the aftermath of Covid-19.
**PROPOSAL OF POTENTIAL MITIGATION MECHANISMS**

Subsidies to support EV purchase could be made available also to consumer who are purchasing a second-hand EV.

Subsidies for EVs should be made conditional on the scrapping of the purchaser’s ICE (when switching from an ICE to EV) to ensure that old ICEs do not end up in less developed countries.

**SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES**

The Recovery and Resilience Facility includes intervention fields that concern “newly or upgraded built” and “restructured or modernised” railways with a focus on being “electric/zero emission” (p. 57).

**POLICY MEASURE**

Improved public transport networks — an aspect of the transition not explicitly covered in the Fit for 55 Package.

**POTENTIAL SOCIAL BENEFITS**

Increased activity levels and improved air quality generate health benefits.

Inclusive development through improved access to opportunities for urban / peri-urban low-income households reduces poverty.

These represent employment and economic benefits and more secure/formal jobs.

**POTENTIAL ADVERSE EFFECTS**

If results in higher cost of public transport or improvements directed at wealthier areas only, the distributional impacts will be regressive (increasing inequalities).
PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Potentially adverse effects can be prevented by focusing on poor areas and the transport needs of low-income groups, including consultation on needs and barriers to the use of existing provision (if available). A gender-sensitive approach is also needed.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

The ERDF specifically focuses on “promoting pollution-free and sustainable multimodal mobility with a focus on public transport, shared mobility” (p.62) while the Cohesion Fund aim is to invest in the area of environment and trans-European networks in the field of the transport infrastructure in EU countries in Member States with a GNI per capita lower than 90% of the EU-27 average. Therefore, these funds could be utilised to ensure that public transport expansion is carried out in a way that improves provision for areas that are currently underserved.

The Cleaner Transport Facility could be an additional resource.

POLICY MEASURE

Improved modal choice — an aspect of the transition not explicitly covered in the Fit for 55 Package

POTENTIAL SOCIAL BENEFITS

Increased activity levels and improved air quality will translate in health benefits.

Increased participation in society since social isolation is one of the effects of the lack of affordable transport options.

POTENTIAL ADVERSE EFFECTS

If public sector spending is directed to infrastructure improvements that do not benefit the poorest (e.g. large scale spending to improve cycling infrastructure connecting high-income neighbourhoods to the city centre), the distributional impacts will be regressive (increasing inequalities).
PROPOSAL OF POTENTIAL MITIGATION MECHANISMS
The potential adverse distributional effects can be avoided by ensuring adequate consultation at local level in the planning phase.

Renewable energy

POLICY MEASURE
An increased target for the EU to produce 40% of energy from renewable sources by 2030 (proposed revision under RED).

POTENTIAL SOCIAL BENEFITS
Air quality improvements and related health benefits if consumption of fossil fuels declines as a result.

New (geographically distributed) jobs will represent an economic benefits; strategic location potentially able to mitigate job losses in other sectors (such as ICE supply chain or coal mining).

May reduce import dependency and increase Member State’s resilience to peaking prices (such as 2021 and 2022 gas price crisis).

POTENTIAL ADVERSE EFFECTS
Increased share of electricity from variable renewables will require extensive grid upgrades. If the costs of grid upgrades are passed on to consumers or if green levies in electricity prices increase further to cover the cost of Contracts for Difference21, etc., there will then be an increased cost of electricity. This will translate in regressive distributional impacts (increased inequality) as lower income households are most severely affected; they will have a reduced disposable income (after housing costs); and there will be an increase in fuel poverty.

---

21 Contracts for Difference (CFD) is a mechanism used by many governments to support low-carbon electricity generation by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices, thus reducing the financial risk associated with such investments. CFDs are typically allocated to eligible projects through an ‘auctioning’ process.
PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

The adverse impacts on consumers can be mitigated by utilising regulatory instruments at national and EU-level to limit the extent to which the cost of grid upgrades and other costs relating to the changing power mix is passed on to consumer in higher electricity costs.

Alternatively (or alongside the above), tax or benefits systems (cash transfers or tax credits) could be used to compensate low-income households and vulnerable groups that may be negatively affected by increasing electricity price.

Consumers with limited digital skills or limited access to computing equipment should be provided in-person or over the phone assistance to find the best utility deals for their needs.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

Under the Modernisation Fund, 10 lower-income Member States can receive supporting investment in renewable energy, among others.

The Just Transition Fund also supports investment in renewable energy.

POLICY MEASURE

Phasing out of coal (not an official component in the Fit for 55 Package but widely accepted as necessary for the EU to achieve agreed 2030 and 2050 emissions reductions targets).

POTENTIAL SOCIAL BENEFITS

Air quality improvements, especially in areas that have large coal power plants or still use coal fires to heat residential properties.

Water quality and quantity improvements in areas where competing demands have resulted in insecure water supply for local households. If thermal power production and mining that use large amounts of underground water cease, the access to water by local communities may improve as a result.
POTENTIAL ADVERSE EFFECTS

Localised job losses and economic decline in coal mining regions (loss of livelihoods) will translate in increased out-migration and associated decline in community networks; risk of social conflicts and risk of domestic violence (because of the gender bias in the coal industry, it will be largely men who lose their jobs as coal is phased out, and male unemployment has been more strongly linked to increase in domestic violence).

Increasing cost of heating and electricity (which may increase the cost of operating air-conditioning), especially if households incur higher energy costs as a result of changed energy mix, or if they need to invest in new technology to facilitate the fuel switch (such as replace a coal fire or gas boiler with a heat pump), will generate a risk of regressive distributional impacts (wealthier households will find it easier to cope); reduced disposable income (after housing costs) affecting especially lower income households; and increase in fuel poverty.

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Localised job losses must be mitigated through strategic planning and funding. Regional and local economic redevelopment and diversification strategies are essential to avoid adverse economic impacts of the coal phase-out.

Opportunities for upskilling and reskilling must be accessible to all affected workers, at no cost, preferably either through (salaried) in-work training or paid training leave. Severely affected lower income Member States may need support from the EU in the design, development and delivery of upskilling and reskilling programmes.

Tax or benefits systems (cash transfers or tax credits) could be used to compensate low-income households and vulnerable groups that may be negatively affected by increasing electricity cost.

Subsidies and interest-free loans will be needed to enable lower-income households to purchase new heating and cooling and water heating systems (such as heat pumps) to facilitate the fuel switch.

Financial and political support should be offered to facilitate the unionisation of workers engaged in new green jobs.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

Under the LIFE programme, projects funded by the “community-driven clean energy transition in coal, peat and oil-shale regions” call could, among others, focus on aligning “local/regional strategies with the clean energy transition and strengthening the implementation by deploying support from the Just Transition Mechanism” (p.43).

The Modernisation Fund can be used for upskilling and reskilling.
### Summary of social impacts of selected climate change mitigation policies: Renewable energy

**Policy Measure**

Measures to ease the permitting processes for new renewable energy installations and to further promote direct contracts between producers and consumers (proposed changes under the Renewable Energy Directive — RED).

**Potential Social Benefits**

Could improve households’ access to renewable energy, which may reduce import dependency and increase households’ resilience to energy price crisis (such as 2021 and 2022 gas price crisis).

**Potential Adverse Effects**

No obvious risk of adverse impacts, as long as reasonable planning regulations remain in place (for e.g. to ensure that renewable energy generation does not cause additional noise pollution in residential areas and to preserve and incentivise civic participation and environmental protection).

**Proposal of Potential Mitigation Mechanisms**

Retain sensible planning regulations to ensure public safety.

**Some Possible Sources of Financing to Deliver Just Outcomes**

This is a matter of implementing some degree of regulation, but in many cases repealing red tape, so no real need for additional budget (commercial renewable energy generation will generate tax income to Member States).
POLICY MEASURES

Requirements for Member States to ensure that modern district heating and cooling (DHC) systems are developed to harness more local renewable energy and waste heat (proposed amendments to RED, EED and EPBD).

POTENTIAL SOCIAL BENEFITS

Could reduce heating and cooling costs for households that become covered by district heating and cooling systems, in case DHC is fully renewable and efficient.

Creates new jobs and business opportunities in district heating and cooling solutions, especially in markets where provision is currently low.

Air quality and health improvement due to shifting from individual boilers burning coal and biomass to renewables in district heating.

POTENTIAL ADVERSE EFFECTS

Risk of gas lock-in in areas where the district heating system is powered by gas. Gas dependency would also expose users to future volatility of gas prices affected by global factor causing an imbalance between supply and demand.

The development of new district heating and cooling systems incurs large capital costs which, if passed on to the consumers, may result in short-term increase in heating and cooling costs. This would affect lowest income households most severely.

PROPOSAL OF POTENTIAL MITIGATION MECHANISMS

Subsidies to support equitable access to new schemes in any given locality.

Require all new DHC systems to use renewable energy sources, and for existing DHC systems to switch to renewable sources by 2040.

SOME POSSIBLE SOURCES OF FINANCING TO DELIVER JUST OUTCOMES

“Rehabilitation and upgrade of district heating” is supported under the Just Transition Fund (p.9).
CAN Europe Just Transformation vision and principles acknowledge that ambitious climate action to limit global temperature increase to 1.5 °C is a moral imperative which requires a deep societal transformation\textsuperscript{22}. This transformation will articulate the inextricable links between social and environmental goals: 

**social goals cannot be achieved at the expense of environmental sustainability while climate policy must take into account its socio-economic impacts.** Climate and social policies together support the just, fair and sustainable transformation of the society. In fact, the recent IPCC report says it clearly: “Climate action and sustainable development are interdependent. Pursued in an inclusive and integrated manner, they enhance human and ecological well-being.”\textsuperscript{23}

Climate policy can reduce systemic inequalities. However, it cannot alone solve the existing social injustices. In fact, prevailing inequalities make climate action and the just transformation of our economies and societies much more challenging — as well as more urgent, and political will is crucial to prioritise addressing them. This is why climate policies should maximise redistributional outcomes while social policies should better factor in climate change impacts.

Our analysis reinforces the findings of the original study\textsuperscript{24} that many of the policy instruments included in the Fit for 55 Package have the potential to generate both positive and negative social impacts, but the extent and direction of these outcomes depends on how the policies are designed and implemented.

---

\textsuperscript{22} CAN Europe Just Transformation vision and principles:  
https://caneurope.org/just-transformation-vision-principles/

\textsuperscript{23} IPCC WG2AR6, 28 February 2022:  

\textsuperscript{24} Sanna Markkanen & Annela Anger-Kraavi (2019) Social impacts of climate change mitigation policies and their implications for inequality, Climate Policy, 19:7, 827-844,  
DOI: 10.1080/14693062.2019.1596873

**Conclusion**
For example, support measures for low-income and low-middle income people to continue relying on fossil fuels risk locking people into a technology that makes them vulnerable to price volatility, while additional subsidies to help with bills may and should only be temporary. More determined efforts to improve energy performance of buildings, on the other hand, would reduce energy demand and improve living comfort, while permanently reducing energy bills and vulnerability to price hikes, as well as creating new jobs. Access to funds to undertake deep energy efficiency renovation and to electrify their heating and water heating appliances before any carbon pricing measures are applied to domestic fuel consumption would enable low-income households to adapt successfully to potential short-term rises in energy prices while simultaneously facilitating transition to renewable heating and water heating.

However, the source of the funds to support deep energy efficiency retrofits and electric heating/cooling and water heating solutions matters. If these improvements are financed through utility bills in a way that increases energy costs to all customers, including those who experience fuel poverty and those who are least likely to switch providers when the cost goes up, they may increase inequalities. It is therefore important for the benefits to be distributed equitably based on needs. Certain climate policy measures, if appropriately applied, can generate substantial amounts of revenue that can be recycled to offset regressive impacts, and even contribute to a redistributive agenda within a middle and long-term vision of energy transition.

Improvements to public transport networks can also improve low-income households’ access to employment opportunities, education and health services, but only if the improvements are delivered in previously underserved areas, address the needs of the residents, and do not result in price increases that would make the improved services unaffordable to the lowest income households. With the right policy mix and active implementation of additional measures to ensure that positive impacts are maximised, and negative impacts minimised, climate change mitigation policy can help improve the living circumstances and health of the most vulnerable, thus actively reducing existing inequality. The potential is there, but the question is whether there is political will to address equity while increasing climate action.

---

25 Laurence Tubiana, Europe must get serious about renovating homes to ease energy crisis, 25 January 2022, https://www.ft.com/content/a0dabf9e-1b76-49fa-90aa-4973c7ba7341
1) The European Commission should include provisions in all climate legislation to require Member States to identify who may be adversely affected and how, how this adverse impact could potentially be mitigated, and what are the social benefits. Terms such as low-income households, vulnerable/marginalised groups, energy and transport poverty should be treated in a coherent way across all climate and social policies. However, each Member State should have the flexibility to translate such guidance to fit their specific national circumstances to avoid too narrow approaches and to maximise inclusivity. Member States should agree on a methodology to identify who will fall under these definitions in the framework of implementing the Council Recommendation on ensuring a fair transition towards climate neutrality.

2) Member States should implement policies in a logical timeline and orderly manner so that households can get ready, and be provided with adequate resources, to minimise potential negative impacts and maximise the benefits stemming from energy savings and renewables. This means ensuring that support measures are in place before the new policy comes into effect, and incentivising transition to technologies which would run on sustainable renewable sources as well as energy savings. For example, financial incentives could be made available for buildings’ deep renovations before carbon pricing or energy taxation comes into effect, prioritising homes occupied by low-income, vulnerable and energy poor households to shield them from any increase in energy bills. Member States must also phase out fossil fuels’ use in buildings in a timely and adequate manner. For example, for households not to feel the impacts of increased price or a ban on fossil fuels, they first need to be supported to modernise their heating systems.

3) In the short run, Member States should provide lowest-income households with either exemptions from the implementation of carbon pricing/taxation or direct income support. These measures would help shield households from price increases that could substantially affect their quality of life.
(through means-testing or other similar measures), in order to guarantee the respect of their fundamental rights (i.e. to energy, food, health, education). Such support measures must be implemented with certain conditions in order to avoid leading to perverse incentives to continue fossil fuel use. Any such subsidies, where essential, must be temporary, designed with the intention to facilitate the gradual participation of the lowest-income-households in the just energy transition, and accompanied by measures which oblige and support energy efficiency improvements and uptake of renewables. It is absolutely crucial that short-term fixes do not obfuscate the need for structural reforms to address prevailing inequalities and energy poverty. A part of such income support may come from carbon pricing and energy taxation revenues of the Member States. In that case, Member States must recycle revenues together with progressive climate and social policies. The European Commission must set a clear EU-level governance mechanism to incentivise progressive carbon pricing and taxation across Member States, and ensure equity.

4) **Member States should ensure sufficient and equitable access to upskilling and reskilling.** The European Commission underlined this prerequisite in general terms in their Proposal for a Council Recommendation on ensuring a fair transition towards climate neutrality, published on 14 December 2021. This proposal asks for Member States to make sure that adequate training schemes are made available, and that public support is in place to make this impactful (i.e. the cost of training is not prohibitive to enable equitable access, and adequate infrastructure is in place to support adult education, etc.). Specific measures may include employees in contracting sectors (such as coal, oil and certain automotive industry value chain manufacturing) to be made eligible for paid training leave, and for upskilling and reskilling programmes to be made available free of charge to all who cannot afford to pay for it (i.e. means tested, whether or not the applicants are members of a trade union), or through salaried in-work training. Ideally, free childcare should be available for parents to ensure they can attend. In some instances, subsidised transport may also be needed to ensure truly equitable access for all.

5) Where digital services are deployed (such as subsidy or training programme applications needing to be completed online), the European Commission should include additional provisions to address the digital divide. Member States should provide alternative access options to residents who have limited access, or ability, to use digital services (access, language barriers, literacy barriers, disability, etc.).

6) **Member States should ensure that the funds for mitigating potentially adverse distributional effects of climate policy are not redirected from existing social support programmes that are directly addressing the needs of the most vulnerable households, such as free school meals, discounted public transport or state-funded care services.** Where new funding streams are developed, Member States must consider the possibility of using existing administrative structures and distribution mechanisms to reduce administrative costs (such as exemptions through tax credits) and effectively reach those most in need.

---
