Social justice priorities in the Fit for 55 package

Recommendations for MEPs and Member States to address social impacts in ETS II, SCF, EPBD, EED and CO2/cars

This policy briefing summarises evidence of the most significant social impacts related to key files under the Fit for 55 package and provides recommendations for addressing these social impacts for MEPs and Member States ahead of the plenary votes and Council meetings from June 2022. The briefing covers:

1. The extension of the Emissions Trading Scheme to buildings and road transport (ETS II) and the Social Climate Fund (SCF).
2. The CO2 from Cars and Light Vehicles Regulation (CO2 from cars).
3. The Energy Efficiency Directive (EED) and Energy Performance of Buildings Directive (EPBD).
4. The Renewable Energy Directive (RED III).

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Introduction

Mitigating negative social impacts and maximising positive social impacts of climate and energy policies are central to building the political and social acceptability of the energy transition. If well-designed, the Fit for 55 package can lay the foundation for a just transition in Europe. Each of the files assessed in this briefing has the potential to deliver significant social benefits while accelerating the decarbonisation of the EU economy.

**EAPN does not necessarily endorse the other sections*

1. ETS II and the SCF

The proposals in a nutshell

Emissions reductions in the transport and buildings sectors are critical to achieving the 2030 EU emissions target. The EC has proposed a policy mix of carbon pricing and regulatory measures across the Fit for 55 package to do so. This includes the proposal to extend the Emissions Trading Scheme to road transport and buildings (**ETSII**) from 2026. This is proposed to be a separate or parallel scheme to the existing ETS (which covers the power sector, heavy industry and intra-EU aviation) subject to 100% auctioning of emissions allowances to upstream fuel suppliers.

Given that fuel suppliers are expected to pass-through (a share of) the costs to customers, the EC proposed that a **Social Climate Fund (SCF)** should be established to help address any adverse social impacts. The SCF is proposed to be established under the EU budget with an amount equivalent to 25% of the expected auctioning revenues (proposed to be €72.2bn for the period 2025-32), to cover temporary income support for vulnerable citizens and structural investments to reduce emissions in the buildings and road transport sectors. The EC has proposed a distribution key to allocate the funds among Member States (MSs), on the basis of Social Climate Plans and the provision of matching funds by MSs from their remaining national ETSII revenues.

SOCIAL IMPACTS SUMMARY

- Since energy costs typically represent a higher share of expenditure of lower-income households, who are less able to change their behaviour in response to higher prices, the principal social impacts of concern in the reviewed literature concerning ETS2 and the SCF are **access to energy** for low-income households and **income equality.**

- Most of the reviewed literature suggests that – **in the absence of revenue recycling** – there will likely be **limited to moderate adverse welfare impacts** for the lowest-income households EU-wide and in low-income MSs, in the order of a loss of disposable income of approximately 1 to 2% (Held, Leisinger, & Runkel, 2022) (Fragkos, et al., 2021) (Feindt, Kornek, Labeaga, Sterner, & Ward, 2021) (Temursho, Weitzel, & Vandyck, 2020) (Cambridge Econometrics, 2022) (Gore, 2022).

- These welfare losses for low-income households are shaped by a range of factors, including the **carbon price**, the extent to which there are **behavioural changes** in response to price (although generally these are assumed to be very limited) and – in particular – the extent to which the carbon price is introduced alongside **complementary policies** which reduce energy demand among these households.

- However, when **revenue recycling is included**, the evidence suggests welfare impacts are very likely to be **net positive for low-income households** EU-wide and in low-income MSs, and could be substantially positive depending on the share of revenues and how they are recycled, both between and within Member States.

- For example, Gore (2022) and Fragkos et al. (2021) show that when revenue recycling is included, carbon pricing in these sectors can produce **significantly progressive outcomes**, entailing a clear redistribution of resources from higher-income to lower-income EU households and a consequent reduction in income inequality. These findings are broadly supported by the wider literature on carbon pricing in other contexts (see for example (Paoli & van der Ploeg, 2021) or (Zhao, Wang, & Cai, 2022)).

- Gore (2022) shows that while adverse impacts can be reversed for the 10% lowest-income households EU-wide with recycling of just 25% of total ETSII revenues via the SCF, MSs should recycle **100% of ETSII revenues** in order to address adverse impacts among middle income groups EU-wide and in higher-income MSs.

- Regarding **spatial inequalities** between the MSs, without revenue recycling **Central and Eastern European (CEE) MSs** are expected to be most impacted on average, in view of their relatively low current energy price levels, and relatively high expenditure shares on carbon intensive heating and transport fuels. However several studies (Gore, 2022) (Held, Leisinger, & Runkel, 2022) and the EC Impact Assessment, find that the SCF results in a significant redistribution between MSs that effectively addresses this concern.

- While there is less evidence concerning horizontal distributional impacts, Gore (2020) identified that **urban households** and household types in which **women** are highly represented tend to be among the least adversely impacted by carbon pricing in these sectors and among the biggest beneficiaries of revenue recycling.

Social impact evidence gaps

- Evidence with regard to jobs is not extensive and is mixed.

- In general, non-pecuniary benefits of the measures are not extensively studied. Two studies in the grey literature were identified that address positive health benefits from reduced air pollution in inner cities, that in many cases may be associated with particular benefits for racialized groups and/or women, (Equinox, 2021) (Friedrich-Ebert-Stiftung, 2022), but these have not been clearly related to the ETS2 and SCF to date.

RECOMMENDATIONS

Recommendations	Social impact area
Ensure 100% of ETS II revenues are used for social climate action Modelling by IEEP and BC3 (Gore, 2022) shows that redistributing just 25% of ETS II revenues via the Social Climate Fund can ensure a net welfare gain for the lowest income 10% of the EU-wide population. However, recycling 100% of ETS II revenues is necessary to ensure net welfare gains for other lower- and middle-income households also.	• **Income equality** • **Spatial equality** • **Access to energy**
Ensure the size of the Social Climate Fund mirrors the ETS II revenues The EC proposal for the SCF is based on an estimate of the expected revenues from ETS II with an assumed carbon price trajectory. However, if prices rise beyond the levels indicated in the EC's assessment, this could mean the SCF has insufficient resources to address social impacts. It is therefore essential that the size of the SCF reflects accurately the evolution of the carbon price and consequent ETS II revenues, rather than being fixed in advance.	• **Income equality** • **Spatial equality** • **Access to energy**
Limit fuel suppliers' pass-through of the carbon price With fuel suppliers making substantial profits in a period of high prices, the co-legislators should set limits to the extent to which they may pass-through carbon prices to end consumers. This approach can retain the integrity of the carbon price signal, help to limit windfall profits in the sector and generate significant revenues for social climate action, while protecting end-consumers from the full impact of rising prices. Setting a carbon price cap or ceiling could also help protect end-consumers from rising prices, but at the cost of foregone revenues and weakening the environmental effectiveness of the scheme.	• **Income equality** • **Spatial equality** • **Access to energy**
Avoid delaying full implementation of ETS II to private households, without securing adequate alternative revenues for the Social Climate Fund The compromise adopted in the ENVI committee of the European Parliament would bring forward implementation of ETS II to the commercial buildings and road transport sectors to 2025 (compared to 2026 in the EC proposal), but would delay EU-wide implementation for private households until 2029 (subject to a review in 2026), while allowing Member States to opt-in to applying ETS II to private households sooner if they wish. While the final ETS II revenues would be determined by whether and when Member States choose to opt-in, this approach will very likely significantly reduce the expected revenues available for social climate action – to perhaps as low as 25% of the potential available. Such an approach should only be supported if	• **Income equality** • **Spatial equality**

adequate alternative revenues are identified – such as from the ETS I or nationally-levied windfall taxes, and clarity would be needed about the implications for the proposed distribution key for the SCF if revenues are not generated in all Member States at the same time.	
Empower Member States and in particular local communities to determine the best use of Social Climate Fund revenues Given the significant heterogeneity among households even in the same income groups – both within and across Member States – co-legislators should be wary of being overly prescriptive about how Member States should spend their allocation from the SCF. One size will not fit all, in determining which households are impacted and how best they can be supported. Rather Member States, and in particular local communities, should be empowered to determine the use of funds for social climate action. Co-legislators should ensure that Member States are required to consult meaningfully with citizens about their social climate plans and be accountable for them, while a share of SCF resources should be ring-fenced for spending on priorities identified by local communities. This will also help to build the social acceptability of the energy transition.	• **Procedural justice**
Supporting measures	
Reduce electricity excise taxes – in line with the proposed reform of the Energy Taxation Directive – and remove renewable energy levies from electricity bills Gore (2020) shows that lower-income households spend a higher share of income on electricity compared to higher-income households, and so any measures to reduce electricity prices will have a significantly progressive distributional impact. This can help to offset the regressive impact (in the absence of revenue-recycling) of the introduction of carbon pricing in the buildings and road transport sectors, and should be a priority in governmental responses to the current energy price crisis (compared, for example, to reducing transport fuel excise duty, which primarily benefits middle income households).	• **Income equality** • **Access to energy**

2. CO2 from cars

The proposal in a nutshell

Regulation (EU) 2019/631 currently sets EU fleet-wide carbon dioxide (CO2) emission performance standards for new passenger cars and new light commercial vehicles (vans). The EC proposes the following, strengthened EU fleet-wide CO2 emission reduction targets as compared to the 2021 target:

- From 1 January 2030: 55 % for cars, and 50 % for vans,
- From 1 January 2035: 100 % for cars, and 100 % for vans.

The 100% target for 2035 implies the phase-out of internal combustion engines (ICE), likely in favour of electric vehicles (EVs). Specific emission targets are set annually for each manufacturer. These are based on the EU fleet-wide targets and take into account the average mass of the manufacturer's new vehicles registered in a given year, using a limit value curve. The EC also proposes to remove the extra crediting incentive for zero- and low-emission (ZEV/LEV) vehicles from 2030 onwards, as well as the exemption for small-volume manufacturers.

SOCIAL IMPACTS SUMMARY

Positive impacts

- Fundamentally, the EC IA, and some other studies, show the **total lifetime cost of ownership** (TCO) for both new and used vehicles is lowered due to reduced fuel expenditures in electric vehicles (EVs). While higher up-front costs for new zero emission vehicles (ZEVs) lead to some affordability constraints for certain – especially larger – vehicle categories for lower-income groups, these groups are projected to see higher TCO savings relative to their annual income than other income groups, which would entail a relative improvement in **income inequality** (Element Energy for BEUC, 2021). Nonetheless, the upfront capital investment represents a significant potential barrier for some people, which needs to be addressed.

- There is an important difference between **rural and urban** or peri-urban residents. Due to the disproportionately negative impact of internal combustion engine vehicles (ICEs) on urban inhabitants, as well as the relative ease of deploying updated infrastructure for EVs in cities, the transition will potentially be easier, and more beneficial (in terms of reduced negative externalities, such as local air and noise pollution) for urban areas, although ultimately EVs should benefit high mileage, rural users more in terms of TCO (Sovacool, Hook, Martiskainen, & Baker, 2019).

- 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 strength of emissions standards.

Negative impacts

- With regard to **jobs**, studies vary considerably (Günther et al, (2015)) (European Association of Automotive Suppliers, 2021) in their estimate of the long-term effects of a transition to electric mobility, but overall there is a plurality indicating a small overall impact, but significant effects in the sectoral structure and location of jobs. The EC projects an increase in overall economic output as a result of stricter targets, due to increased consumer spending, infrastructure investment, and reduced petroleum imports. However, Central and Eastern Europe are at a relative disadvantage, while jobs may shift out of the automotive industry as a whole and into related industries such as electronics and utilities (Popp, 2021) (Kuhlmann, et al., 2021).

Missing or incomplete evidence

- One issue that makes comparisons to past regulations more difficult is the "step change" that a wide scale transition from ICEs to EVs represents. Recent regulations have produced more incremental changes within the existing technological paradigm, while this one is aiming to transition toward vehicles with zero emissions at tailpipe.

- In the past, CO2 regulations have had **unintended consequences** for health by encouraging diesel fuels without fully considering their worse air pollution, and thus health, implications (Čavoški, 2017). While diesel is unlikely to be further encouraged under this regulation, it is possible that other unintended consequences will emerge. One such risk is related to heavier EVs or ICEs (which can pollute more under the current regulation's mass adjustment provisions), leading to worse **safety** outcomes, **rebound effects**, or as a consequence of increased, or **displaced pollution and material use** at other stages of the vehicle's life cycle (Sovacool et al, (2019). This may also "displace" emissions and pollution from the point of use to other places related to the material extraction, manufacturing, and disposal of the vehicles and the fuels used to power them (through the electrical grid or other alternative fuels). This raises important environmental justice questions, with potential **racial and class** considerations (Henderson, 2020).

- The **gender** implications of CO2 standards are not addressed in the EC IA or the broader literature, despite other evidence of the pronounced gender inequality of transportation (Gore, Stainforth, & Lucic, 2021).

- A switch to EVs has a number of potentially far-reaching social consequences, including the **systemic perpetuation of car centered mobility** (Henderson, 2020) which implies a continuation and spread of the many social and political problems this entails (Sperling & Gordon, 2009) (Mattioli, Roberts, Steinberger, & Brown, 2020). EVs' lower running costs may ultimately encourage users to drive more. Additionally, EVs' higher baseline weight may have implications for safety, pollution, well-being and land use.

- A high degree of **car dependence** is assumed by the EC IA, as well as much of the academic literature, and a modal shift to public transport or non-motorised transport is not seriously considered in most analysis of this legislation – a major gap.

RECOMMENDATIONS

Recommendations	Social impact area
1. Ensure that ambitious CO2 targets are maintained, with 2035 as the latest possible phase out of ICE engines* It is vital that the proposed phase out of ICEs is maintained in 2035 at the latest. In addition to the environmental benefits, the faster Zero Emission Vehicles (ZEVs) are introduced, the faster consumers can begin benefitting from their reduced TCO, used car markets can start to sell cars at lower prices, and these vehicles can begin to filter into lower income markets – all of which benefiting lower income groups. This is ample time for the industry to prepare and adjust structurally to the changes, as seen by voluntary industry agreements in this area. Delay in fact risks losing competitiveness to other regions which move more quickly into ZEV production. **Article 1(1): Amendment to Article 1*	• **Income equality** • **Spatial equality** • **Health**
2. Interim 2027 CO2 reduction targets* The pre-2030 ambition of the EC proposal is low. Without interim targets, manufacturers will typically delay introduction of efficiency technologies in order to meet the deadlines. More frequent deadlines forces them to introduce these technologies more quickly. Any delay in introduction delays the social benefits of EV introduction (see above) and lower emissions. **Annex I – paragraph 1 – point 1*	• **Income equality** • **Spatial equality** • **Health**
3. Ban highly-polluting ICEs from 2027 (emissions above 120g/km)* According to the European Environment Agency, growth in the sport utility vehicle (SUV) segment and an increased average mass are key reasons for the increase of average CO2 emissions from all new cars in recent years. This trend threatens to overwhelm the improvements in emissions brought on by the introduction of LEVs and ZEVs in the short to medium term. SUVs are also disproportionately purchased by the wealthiest consumers and are a big contributor to the increasing inequality in transport emissions. The increased EU fleet-wide CO2 targets should therefore be accompanied by a ban on the sale of ICE SUVs across Europe. This would bring co-benefits for climate, local air pollution and road safety,	• **Income equality** • **Spatial equality** • **Health**

and ensure a more equitable contribution to emissions reductions in the road transport sector. **Article 1 – paragraph 1 – point 9 Regulation (EU) 2019/631 Article 14 a – paragraph 2 a (new)*	
4. Remove "mass adjustment" parameter (reduces standards for heavier, more polluting vehicles)* Previous CO2 regulations have had the perverse incentive of promoting larger and heavier vehicles, particularly SUVs, as manufacturers receive a discount for larger vehicles. This has led to an increase in the average vehicle size across European car fleets – with the largest vehicles disproportionately serving higher income citizens – with negative consequences for air quality, safety, material consumption and quality of life in cities. The adjustment mechanism should be removed to again promote smaller, more efficient cars. **Recital 17*	• **Income equality** • **Spatial equality** • **Health**
5. Remove exemption for small-volume (mostly luxury) manufacturers* This exemption specifically creates lower standards for the most expensive, luxury cars on the road. While not having a huge quantitative impact it is a clear example of the richest having their disproportionate, luxury emissions treated more leniently than the emissions of the rest of the population. The EC proposal to remove this exemption needs to be preserved and should even brought forward from the proposed dgate of 2030. **Article 1(6)*	• **Income equality**
6. Introduce a minimum number of low and zero-emission vehicles to be purchased by fleet-owning companies* One important aspect of access to Z/LEVs is to promote their sale of used vehicles. An important aspect of this market is the sale of used corporate and fleet vehicles after a relatively short period of use. This will be important for the distribution of these vehicles to lower income individuals and in Central and Eastern Europe, in addition to placing the onus of being first movers on those who have the resources to purchase relatively more expensive vehicles. **Amendment 414 was defeated in ENVI.*	• **Income equality** • **Spatial equality** • **Health**
7. Revised CO2 calculation methodology The current assessment methodology is widely considered insufficient to account for the lifetime emissions of vehicles, especially as new technologies and new fuels emerge. The introduction of a more robust methodology to account for all of the emissions and pollution at	• **Income equality** • **Spatial equality**

different stages of vehicle life cycles is necessary, and should be proposed as soon as possible.	
Supporting measures	
Employment support Particular attention should be paid to impact on SMEs and financial support allocated through the European Social Fund Plus, the Just Transition Fund, the Innovation Fund, the European Region-al Development Fund, the Cohesion Fund, the Recovery and Resilience Facility and other instruments of the Multi-annual Financial Framework and the Next Generation EU. A specific fund to support the transition could be contemplated. It is clear that there will be potentially significant job losses, concentrated in particular parts of the auto industry. This will have a disproportionate effect in certain communities and Member States and there must be sufficiently robust support mechanisms for workers to retrain as possible, and to be supported where not possible. Particularly certain SMEs will be vulnerable, and these should be supported through targeted funding under relevant EU funding mechanisms, and potentially through a specifically designed programme.	• **Jobs**
Strong support to public transport, non-motorised transport and inter-city and regional rail It is vital to support positive alternatives to private automobile transport to provide efficient, comfortable, affordable and accessible means of transport with lower environmental and social footprints. This is particularly important in the context of pressure on material supply chains and their growing social and environmental impacts. These alternatives are often not available today to many EU citizens. Active funding, planning and capacity support from EU level tools should be prioritised and made mandatory across relevant funding and planning tools for cities, regions and Member States.	• **Income equality** • **Spatial equality**
Alternative Fuels Infrastructure Regulation The AFIR needs to ensure an ambitious, equitable and sufficient role out of the supporting infrastructure required by EVs across regions. Implementation will be key to ensure no regions are left behind.	• **Spatial equality**

3. EED and EPBD

The proposals in a nutshell

The proposed **Energy Efficiency Directive (EED)** revision strengthens the EU-level target for energy efficiency (from 32.5% to 36% for final, and 39% for primary energy consumption). Key provisions include the establishment of a legal basis for the Energy Efficiency First principle; increased annual energy savings obligations - including a share of the total end-use energy savings among vulnerable customers and people affected by energy poverty; implementation of energy efficiency obligation schemes (EEOS), or measures financed under an Energy Efficiency National Fund, as a priority among people affected by energy poverty and vulnerable customers.

The **Energy Performance of Buildings Directive (EPBD)** recast complements the objectives of the EED and the wider Fit for 55 package, and delivers on the Renovation Wave Strategy focus areas: tackling energy poverty and worst-performing buildings; public buildings and social infrastructure showing the way; and decarbonising heating and cooling. Major elements of the EPBD recast include: the proposal for mandatory minimum energy performance standards (MEPS); fossil fuel phase out - fossil-fuel powered boilers not being eligible for public financial support as of 2027; the monitoring framework of National Building Renovation Plans – as part of National Energy and Climate Plans – to assess reduction of people living in energy poverty and inadequate housing as well as the role of energy communities; accessible one-stop-shops; and the introduction of a deep renovation standard towards zero-emission buildings.

SOCIAL IMPACTS SUMMARY

There is strong evidence in the literature of **positive social impacts** related to both EPBD and EED, particularly regarding **health** and **access to energy**, and evidence of **more nuanced or adverse social impacts** in relation to **jobs** and **income equality**. Although the extent of these social impacts will depend on the level of ambition of the final text of both directives and implementation at national level.

Health

- **Energy-inefficient homes** exacerbate **mental and physical illnesses**, induce **higher morbidity and mortality** rates linked to premature deaths, and increase the risk of **respiratory problems**, particularly for energy-poor households (Guidehouse, 2021). Therefore, better thermal comfort and insulation have positive impacts on health.

- However, indoor air quality also matters (Buildings Performance Institute Europe, 2020), thus adequate ventilation remains a priority in the context of the EPBD despite the potential

differentiation between new and existing buildings. In this respect, new zero-emission buildings could have stricter requirements than existing ones regarding the equipment with control devices for the monitoring and regulation of indoor air quality as well as heating systems with zero direct greenhouse gas emissions.

- Energy efficiency in buildings of public interest, such as schools and offices, could **reduce average patient hospital stays by 11%** leading to a potential saving of 45 EUR billion per year on healthcare in the EU (Buildings Performance Institute Europe, 2020).

Access to energy

- Decreasing the energy needs of buildings can lead to a reduction in households' expenditure on energy, for all income deciles but more importantly for the poorest deciles, entailing a reduction in energy poverty rates (Guidehouse, 2021).

- However, this does not consider potentially regressive effects of carbon pricing on heating fuels (see ETSII/SCF above) or unequal access to funding opportunities to pay upfront costs of renovations and renewable technologies.

- Insufficient incentives to overcome non-regulatory barriers and a low standard for deep renovation risk locking energy poor and lower-income households in the second worst-performing grade for buildings after 2030. There is a risk that the decarbonisation goal will be achieved in new buildings first or mainly, and that insufficient technical and financial assistance for energy poor and low-income households will lock lower-income households into fossil fuel dependence.

Jobs

- The European Commission estimates that the impact of the EPBD on jobs will be positive - 1% increase in employment (ranging from 1,2% in low and medium skilled jobs and 0,6% in high skilled jobs), mostly in construction, trade and services, and industry. Energy efficiency measures also tend to create more jobs: 9-20 new jobs per 1 million EUR invested in retrofits or new buildings (Guidehouse, 2021).

- However, the assumption that the sector will be able to absorb the consequent demand for labour relies on a market-centred approach to flexible labour markets entailing cross-sectoral shifts, cross-border migration of workers and re-skilling / up-skilling programmes. Accessibility to trainings for all remains uncertain, likewise the quality of those new jobs. Therefore, the creation of new jobs per se cannot be considered a positive social impact if other important elements are not prioritized: social protection, collective bargaining, fair working conditions, adequate wages and adequate resources to undertake reskilling and upskilling programmes for cross-sectoral shifts.

- Whilst energy efficiency gains in the public sector foster employment growth, efficiency gains in energy intensive industries may reduce the employment growth rate in that sector (Costantini, Crespi, & Paglialunga, 2018). In addition to this, when significant opportunities

arise for retrofitting and renovation, including through public procurement, these tend to be taken up by bigger corporations meaning that smaller local businesses miss out (FEANTSA, 2020).

Income equality

- The distributional impacts of the proposed measures relate to the financial support available to homeowners and for renters, to the extent to which investment costs are passed to tenants (landlords may use energy efficiency improvements as a reason to increase tenants' rent) (Guidehouse, 2021). In this case, the risk of split incentives and rent increases - without adequate measures (e.g. caps on rent and ban on renovictions) - cancels out energy cost reductions from energy savings.

- Particularly vulnerable in this regard are low-income people living in social housing, whose management is often centralised and cannot benefit from district-level initiatives and additional funding schemes (RAP, 2020).

- Higher standards for new buildings may have impacts on the supply of social housing in the longer term, which could result in the exclusion of potential beneficiaries from social housing.

Social impact evidence gaps

- There is a lack of strong evidence in the literature regarding social impacts of the EPBD and the EED in the areas of **gender, racial and spatial equality, community cohesion** and **procedural justice**.

- However, EAPN insights suggest that **women** are at a greater risk of energy poverty (due to income inequality and sensitiveness to extreme temperatures); are also more often renters and less represented as workers in the construction sector. Disaggregated data are needed to assess the impact of energy efficiency and renovations on women.

- EAPN insights also suggest that **racialised** groups are generally more vulnerable and exposed to greater risks, so their access to jobs, energy and renovations should be further assessed.

- Current **territorial inequalities** across the EU show potentially negative results in spatial equality, especially with regard to access to benefits and the scale up in rate and depth of measures across regions and between Eastern and Western EU countries.

- Potential rent increases after renovations could significantly reduce housing affordability for low-income households and lead to renovictions and displacements. In addition to this, different standards in energy efficiency and energy performance could stigmatize those areas that do not receive the same level of improvements and produce gentrification effects. Subsequently, further research is recommended to evaluate the long-term implications for **social cohesion**.

- The horizontal aspect of **citizens' empowerment and engagement in decisions** that may change their life, specifically energy poor, low-income and vulnerable consumers, is fundamental to realise a socially inclusive Renovation Wave. The availability of awareness-raising and participation opportunities for local community actors (consumers, municipalities, social services' providers) will determine funding and programmes' accessibility as well as social acceptance of resources' distribution and common targets. The level of consultation and representation of local actors in the design and implementation of policies – and access to information on available local resources - and its effects on **procedural justice** should be further analysed.

RECOMMENDATIONS

Recommendations	Social impact area
1. Target energy efficiency measures at vulnerable, low income and energy poor households* The energy efficiency first principle established in the EED should prioritize low-income households, people at risk of energy poverty and those who live in social housing and reflect such focus in the renovation obligation. Setting and monitoring an adequate minimum share of energy savings amongst vulnerable, low income and energy poor households is essential to address distributional inequities through the energy efficiency obligation schemes (EEOS) and targeted measures at local level including renewable energy communities or local/regional decarbonisation plans. Considering the rising prices of energy and the lack of financial avenues for those in need, the use of social aims in the EEOS is a vital tool of social justice.[1] **EED Articles 8 and 22*	• **Access to energy** • **Income equality** • **Health**
2. Ensure socially-just Minimum Energy Performance Standards (MEPS), an adequate deep renovation standard and programmes for decarbonisation of heating and cooling in the residential sector, including social housing The EPBD revision is a unique opportunity to deliver on an adequate standard for decent housing, particularly in the residential sector. To maximise its potential positive social impacts, the EPBD must include the following elements:[2] • **Ambitious MEPS with social safeguards**: The EC proposal entails the worst-performing 15% of the building stock of each Member	• **Procedural justice** • **Access to energy** • **Income equality** • **Health**

[1] A similar approach to social safeguards was proposed by Friends of the Earth, the Right to Energy Coalition, ENSMOV and Social Watt, and the ITRE Committee (Draft Report, Rapporteur: Niels Fuglsang, February 2022).

[2] Proposals to mitigate identified social impacts in the EPBD revision have been explored by a number of other social and climate justice actors, including - but not limited to – FEANTSA, ETUC, Climate Action Network, Friends of the Earth, the Right to Energy Coalition and the Regulatory Assistance Project.

State being upgraded from the Energy Performance Certificate's Grade G to at least Grade F only, by 2030, for residential buildings. This is still far too low to maximise the social benefits of renovations for lower-income groups. • **An ambitious deep renovation standard**: The proposed 30% of energy savings is insufficient to alleviate energy poverty. The ambition should go hand in hand with funding: fully subsidised deep renovation programmes should be available for those who are already living in poverty and energy poverty. • **Public measures to remove the split incentives barriers for landlords and tenants**: It is vital to include long-term protection measures, such as bans on renovictions and caps on rent increases beyond energy savings (especially in the case that the landlord receive public grants to finance renovation works in his/her properties). Vulnerable users and owners should have access to technical and financial assistance to stimulate a deeper renovation without significant regressive effects. • **Adequate financial schemes to cover upfront costs**: Subsidies and grants must be available for low-income households. Private funding should be relied upon only when clear indicators to assess distributional impact have been assessed to ensure that households do not pay more than they save. • **A ban on fossil fuel infrastructure in new and existing buildings**: This should be required and implemented in the National Building Renovation Plans, by 2025, to mitigate the regressive impacts of rising fossil energy prices and any potentially regressive impacts (in the absence of revenue recycling) from the proposed ETSII (see above).	
3. One-stop shops with tailored outreach and specific schemes for low-income and energy poor households, and those who live in marginalized communities and are excluded from mainstream services The EPBD revision should strengthen the role and requirements for one-stop shops, which are often the only instrument to make renovation programmes and funding accessible at local level. One-stop shops at neighbourhood level play a fundamental role in joining-up critical information and services on energy efficiency and renovation solutions and ensure the social and cultural acceptability of policies adopted at national and/or EU level. They can help to empower the final user to make choices, design schemes addressing unmet needs, and monitor quality of processes and outcomes. They also help to bridge the gaps between renters and owners and disparities between old and new buildings in terms of affordability, zero-emissions targets, indoor air quality and energy savings.	• **Procedural justice** • **Spatial equality** • **Income equality** • **Access to energy**

To this end, one-stop shops should be conceived in an integrated framework including:[3] • Access to free energy audits • Access to affordable energy offers • Accessibility and availability of renewable energy communities and alternatives to fossil gas boilers • Provide tailor-made financial assistance • Set specific conditions entitling people to access to deep renovations (e.g. respiratory problems linked to roof leaks) • Raise awareness and provide incentives for regulating indoor air quality and installing the necessary devices anytime a building undergoes a major renovation • Adequate investments (e.g. ad hoc trainings) to support social services in the provision of technical assistance and the collection of good practices at local level • Engage relevant local stakeholders (e.g. municipalities) and citizens (both owners and renters) in the evaluation of the impact of minimum energy performance standards on housing affordability and quality • Legal assistance and reinforced protection to overcome landlord-tenant split-incentives in privately rented homes	
Supporting measures	
Strengthen participation in developing energy poverty mitigation strategies in National Energy and Climate Plans Adequate policies and funding are necessary to ensure that phasing out fossil fuels combustion in heating and cooling systems prioritize those at risk of being locked into fossil gas infrastructure for decades to come. Incentives to support vulnerable consumers should imply better access to information and further involvement of those in need, as well as civil society organisations, in developing in energy poverty mitigation strategies in National Energy and Climate Plans (NECPs).	• **Procedural justice**
Deliver good quality jobs for all, in a decarbonised economy A sustainable transition towards climate neutrality should rely on quality jobs for those who work or need to adapt to low-carbon economy sectors/activities – workers in the renovation sector, for example, or service providers in the one-stop shops. Creating more	• **Jobs**

[3] Friends of the Earth, the Right to Energy Coalition, Jacques Delors Institute, E3G, Regulatory Assistance Project also highlighted the benefits of one-stop shops at neighbourhood level.

jobs without the necessary quality would not address root causes of energy poverty, comprising in-work poverty, precarious employment conditions and gender pay gap, amongst others, which lead to further income inequality. Fair working conditions; adequate living wage and minimum income; participation of workers in social dialogue (e.g. collective bargaining); adequate investments in the upskilling and reskilling of workers; and incentives to increase women's representation and quality working conditions, especially in the sectors where they are currently under-represented, such as the construction sector.	
Gender-disaggregated data collection Promoting the systematic collection of gender-disaggregated data on energy poverty and women's access to renovation, renewable and energy efficiency jobs and schemes is a vital first step towards addressing the evidence gap in relation to gendered impacts of buildings renovations.	• **Gender equity**

4. RED III

The proposal in a nutshell

The **Renewable Energy Directive (RED)** establishes common rules and targets for the development of renewable energy across all sectors of the economy, and was last revised in 2018 (RED II). This new proposal (RED III) increases the current EU-level target of 'at least 32%' of renewable energy sources in the overall energy mix by 2030, to at least 40% by 2030 – **doubling the current renewables share** of 19.7% in a decade.

It also seeks to build on the existing building blocks of the previous reforms, as well as to turn into EU law some of the concepts outlined in the energy system integration and hydrogen strategies published in 2020. It also includes strengthened measures for transport and for heating and cooling.

In the context of the Russian invasion of Ukraine, the EC has now proposed a 45% target in the REPowerEU Plan. The plan has also proposed a number of complimentary measures, including a specific solar target and EU Solar Strategy, accelerating hydrogen and biomethane deployment, and measures to accelerate permitting for renewables, among others.

SOCIAL IMPACTS SUMMARY

Positive impacts

- On health, the EC impact assessment (IA) finds that achieving the 40% binding EU-level renewable energy target would achieve a significant reduction in **outdoor air pollution**. It finds that air pollution would be reduced by 10% compared to the (no new RED policy) baseline in 2030, and reduced health damages and air pollution control costs are estimated at €25-43 billion per year compared to the baseline.

- Concerning **employment**, the IA finds that the increased climate target creates only limited but positive impacts on jobs. The projections indicate a small positive effect on employment projected to be 0.36% higher in 2030 than the baseline. There is an overall agreement in the literature that an expansion of the renewable energy sector leads to moderately higher employment, especially in rural areas (Streimikiene, et al., 2021) and in the bioenergy sector (Dammer, et al., 2017) (Chiaramonti & Goumas, 2019).

- On **community cohesion**, the REDII defines and encourages 'renewable energy communities'. However, the IA does not analyse the impact or the prospect of the communities. Currently, energy communities remain a niche initiative in most countries, benefitting a relatively small number of citizens and not available for everyone. However,

there is a significant literature dealing with the potential positive social impacts of renewable energy communities ranging from strengthening the relationship of local governments with their electorate or citizen's empowerment to energy efficiency and savings for consumers (Lizarralde, et al., 2021).

Negative impacts

- In terms of **economic inequalities** (as noted in previous IEEP work) the literature related to impacts on jobs of renewable energy deployment in EU regions often stresses that employment is mostly concentrated in the manufacturing and construction phases, with longer-term job creation dependent on investment in upstream R&D (Stainforth, Gore, & Urios Culiañez, 2021), and local ownership of RE resources.

- In addition, this job creation reinforces **spatial inequalities**. For instance, wind energy deployment created more than 2.5 million jobs in the EU (58% of those jobs are related to the manufacturing phase) during the period 2008-2016. Three quarters of this job creation however is concentrated in just three MS (Germany, Denmark and Spain) (Ortega-Izquierdo & del Río, 2020).

- Similar to the findings explored in relation to the other Fit for 55 files, the IA finds that the share of energy-related expenditures (comprising both equipment and fuel purchases related to both transport and buildings) as a percentage of average household consumption has only very marginal increases of less than 1% compared to the baseline. For the low-income group, however, the share of energy-related expenditure in household consumption is higher than the average, indicating a potentially negative impact on **income inequalities** and the need for targeted policies addressing needs of vulnerable households.

- Problems arising from the current **biomass provisions** of RED are mentioned in the EC IA. For instance, the IA recognizes the need to reinforce the sustainability criteria for bioenergy in order to align it with the climate and biodiversity objectives of the European Green Deal. It also recognizes the need to ensure that bioenergy is not produced at the expense of primary or old forests. However, with the exception of some mentions to health and job impacts of bioenergy, most social issues are not taken into consideration.

- This contrasts with existing literature that has analyzed extensively the potential **adverse social impacts of bioenergy**. A literature review of bioeconomy activities in the key supplying countries indicates that the EU bioeconomy is an important underlying driver of increasing incidences of land tenure problems, harsh working conditions and more volatile food commodity markets, mostly in developing countries (Friends of the Earth, 2016). More concretely, bioenergy related activities are often responsible for reduced soil fertility, soil erosion and increased water use as well as air pollution if biomass combustion increases (Food and Agriculture Organisation of the UN, 2008).

- Problems related to **food security** have become more relevant in the current context of the Russian invasion of Ukraine. For instance, corn is an energy-intensive crop that requires the use of fossil fuels. An increase of oil prices increases costs related to corn production. This increase in oil prices also allows farmers to increase profits from the production of corn ethanol. Hence, rising oil prices can result in an increase of corn ethanol production in detriment of crop feedstocks, increasing the price of corn for animal and human consumption (McGill, 2022)

Missing evidence

- **Gender inequality** is not addressed in the EC IA and literature on its relationship with renewable energy targets is nonexistent. However, there is an incipient interest on the relationship between energy poverty and gender issues and its implications.

- Similarly, **racial issues** are not addressed by the EC IA or the wider literature, indicating a significant gap.

RECOMMENDATIONS

Recommendations	Social impact area
1. Increase renewable energy target to at least 45%* A faster deployment of renewable energy – at least to the 45% target proposed by the EC in the RePowerEU proposal – alongside measures to address capital costs for lower-income households, ensures faster access to social benefits particularly for health and jobs. In a period of high fossil energy prices, driven *inter alia* by a surge in demand following the end of COVID-19-related restrictions, and supply-side constraints exacerbated by the Russian invasion of Ukraine, an acceleration of renewable deployment is also critical to lowering long-run energy prices by reducing demand for fossil gas. If well invested, the avoided payments for fossil fuel imports from autocratic regimes can also help to support wider social benefits. **Article 1(2) amends Article 3(1)*	• **Health** • **Jobs** • **Access to energy**
2. Encourage public participation in streamlined permitting procedures Administrative barriers, in particular in the granting of permits, have long been identified as a bottleneck for the deployment of renewable energy projects which discourage potential investors. The package of measures to alleviate permitting delays proposed by the EC in the REPowerEU package are an important step forward. National governments in coordination with other levels of government should ensure bureaucracy does not impede their deployment and follow the EC recommendation on speeding up permit-granting and	• **Procedural justice**

PPAs, and amend the RED to recognise renewable energy as an overriding public interest. It is still key to actively involve local/regional authorities and take a holistic approach going beyond administrative aspects, including spatial planning and local stakeholders.	
3. Enhance support for energy communities deployment Energy communities have a strong potential to reduce income and spatial inequalities and to address energy poverty. Research has shown that local ownership is the most important factor in ensuring local socio-economic benefits, and thus local political support, as well as being a useful tool for economic development across the EU, including marginal regions. Hence, renewable energy communities should be supported by national governments by easing energy market regulations so that these energy actors can align their energy transition mission with a social purpose engaging with vulnerable households. As a minimum, the REDII needs to be transposed in MS which is not yet the case to allow those important provisions on energy communities to be implemented. In addition, mandatory targets for energy communities and local ownership at the national or regional level should be considered, as suggested by the European Community Power Coalition. The spread of energy communities is very uneven across the European Union and more active assistance is needed to help them to take hold in jurisdictions without a strong history of success in this area, also as a tool to build capacity for the future.	• **Income equality** • **Spatial equality** • **Access to energy**
4. Revise problematic bioenergy provisions* The general sustainability criteria in the RED encourage the diversion of food crops toward energy purposes which is detrimental to food security. Particularly in a context of critically high food prices and global food security concerns, the EU should not divert land used to produce food toward energy purposes which can better be covered by other fuels, but rather use it to improve the availability and affordability of food supplies across the globe for the most vulnerable populations. In the recent vote of the ENVI Committee of the EP, amendments in favour of limiting food crop biofuels to no more than half the share of the overall biofuel use in transport, alongside a phase out of palm and soy oil are a step in the right direction. The co-legislators should ensure that this provision is adopted, and aim to strengthen limits of food crop biofuels in transport fuels. **Article 1(2) modifies Article 3(3)* *Article 1(18) amends Article 29(1), (3), (4), (5), (6) and (10)*	• **Income equality** • **Access to food**

Supporting measures	
Revise energy poverty policy from a gender perspective in the EU Developing a gender action plan for DG Energy's approach to addressing energy poverty could be a first step. In addition, although Eurostat collects sex disaggregated data across the EU on the gender dimension of energy poverty, the data should be presented in an intersectional way to represent a typology of energy users at the household level.	• **Gender equality**
High quality jobs in the EU renewable sector* Higher renewable energy deployment levels have not necessarily been translated into significant increases in employment in the sector. This can be attributed to the effect of the 2007 financial crisis, moving some renewables manufacturing capacities outside of Europe, as well as the change in the subsidisation of renewables within the EU. We recommend the EU to develop and implement strategies, beyond R&D, tackling the different angles of employment in renewable energy in the context of the energy transition to encourage domestic manufacturing. This should cover, among others, reskilling/upskilling, improving educational profiles to meet market demand, raising awareness and industrial strategies. Even when RES is manufactured outside of the EU it can still be an important source of jobs for installation and maintenance, and when the revenues are recycled into local communities. **Article 1(7) amends Article 18(4)*	• **Jobs** • **Spatial equality**
Use of windfall profits derived from energy crises for renewable energy deployment We recommend that windfall profits of energy firms should be taxed, and revenue redirected to renewable, energy efficiency and community energy projects and to support citizens, especially the most vulnerable.	• **Income equality** • **Community cohesion**
Ensure integration of renewable energy with building standards and support for low-income households* One of the easiest ways for citizens to benefit from renewable energy and to reduce their energy bills is to ensure that their own homes have renewable energy built in, usually in the form of solar panels, heat pumps or district heating. The EC's proposals in REPowerEU for requirements in regard to new builds with solar panels by 2029, heat pumps and district heating need to be pursued and implemented aggressively by MS. **Article 1(13) amends Article 24(1), (4), (5), (6), (8), (9) and (10)* *Article 1(6) inserts a new Article 15a* *Article 1(9) amends Article 20(3)*	• **Access to energy** • **Income equality**

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