

Why including buildings in the EU ETS is not the right tool to deliver energy-efficient homes

The European Commission is assessing whether to extend the EU Emissions Trading System (EU ETS) to cover the emissions associated with the heating and cooling of buildings. This paper points out several reasons why this would not be the best approach to deliver a highly energy-efficient and decarbonised building stock by 2050.

Buildings are the EU's biggest CO₂ emitter

Decreasing and decarbonising the energy used to heat and cool buildings is crucial for the transition to a climate-neutral Europe by 2050. Since most of the buildings that we will occupy in 2050 are already built, the main challenge is to renovate these 210 million existing buildings to make them less energy-hungry. At the current rate of renovation, it would take another century to achieve a decarbonised building stock, instead of the targeted 30 years. Further inaction risks the EU missing its climate objectives by up to 400 million tonnes of CO₂¹.

Around 50 million people still live in energy poverty. Deep renovation of their homes would lower their energy bills and make their houses more comfortable and healthy. Without accompanying measures to drive deep renovation, decarbonisation of heating fuels alone risks exacerbating energy poverty.

Well-insulated buildings are also key for increasing the share of renewables and enabling demand side flexibility for the grid. Buildings that are less vulnerable to temperature variation enable their occupants to consume energy in a flexible way without experiencing any loss of comfort, and allow for greater penetration of renewables without disproportionate increases in energy bills.

Integrating buildings in the EU ETS is complex and time-consuming

Urgent action on buildings is vital to overcome the climate and social crises facing Europe today. Integrating the building sector in the EU ETS is complex and likely to take at least several years. The only major, comparable existing scheme – implemented in Germany as of 2021 – is in its infancy, but already shows that such a mechanism is highly unlikely to yield any impact on the renovation market in its first few years of operation, given the low fixed price of allowances introduced during the first phase of operation (2021-2025)². That is time we do not have, and which diverts attention from more effective short-term measures.

Structural barriers, such as long-term contracts with supplies and customers, prevent German district heating operators from quickly adapting to the market mechanism. Lacking

¹ Climate (2018), The key role of energy renovation in the net-zero GHG emission challenge ([see here](#))

² MCC Berlin (2019), Bewertung des Klimapakets und nächste Schritte ([see here](#))

the accompanying regulatory framework to drive renovation, the scheme has intensified the issue of split incentives between German landlords and tenants.

The EU should instead prioritize implementing the Renovation Wave and revising the Energy Performance of Buildings Directive (EPBD) to unlock the vast investments that are needed to raise the rate of deep renovations.

What is the EU ETS?

The EU ETS sets a cap on the total amount of greenhouse gases that can be emitted by installations from the power, industry and aviation sectors. The cap is reduced over time so that emissions go down. Within the cap, companies receive or buy emission allowances which they can trade with each other, thereby creating a carbon price.

The building sector is already covered by a cap on how much greenhouse gases can be emitted as part of the Effort Sharing Regulation; the EU's other climate legislation targeting sectors not included in the EU ETS.

Carbon pricing does not deliver more affordable, energy-efficient homes

According to the International Energy Agency³, most of the energy efficiency potential is available at a negative cost. This means that these efficiency measures already pay for themselves, even in the absence of a carbon price.

The reasons why measures like energy renovation are not taken are usually not economic in nature, but rather the result of market-barriers and -imperfections. In the case of the building sector, these barriers include split incentives between those making investments (i.e. home-owners) and those paying energy bills (i.e. tenants), the inability to come up with high upfront costs and a lack of information on renovation opportunities and financing options.

Including the building sector in the EU ETS would do nothing to overcome these barriers to make buildings more energy-efficient. Even worse, **the introduction of a carbon price for the heating and cooling of buildings could lead to higher energy bills** for tenants or homeowners who are not able to, or cannot afford to, renovate their homes.

For example, in France, the introduction of an EU ETS for heating fuels would almost double the cost of gas by 2030.⁴ This would disproportionately affect poorer households because; (1) they are more likely to reside in badly insulated dwellings, (2) they spend a greater proportion of their incomes on heating, (3) reductions in demand by these households are more likely to lead to under-heating and the associated negative impacts on health and wellbeing.

To avoid these detrimental social-economic impacts and ensure that EU policy remains in line with the Energy Efficiency First Principle, the Commission should prioritise

³ IEA (2011), Summing Up the Parts – Combining Policy Instruments for Least-Cost Climate Mitigation Strategies ([see here](#))

⁴ Cambridge Econometrics (2021), Exploring the trade-offs in different paths to reduce transport and heating emissions in Europe ([see here](#))

establishing a legal framework for minimum energy performance standards (MEPS) for existing buildings and a clear timeline for phasing out fossil fuels.

Governments should remain responsible for the built environment

The 'Fit-for-55' package will signal how the varying objectives of the European Green Deal can be translated into concrete measures at both EU and national levels. Whilst the ETS is undoubtedly an important tool for attaining some Green Deal objectives, the 'Fit-for-55' package should make clear that the Renovation Wave can only be delivered through coherent, ambitious national policies implemented as part of the Effort Sharing Regulation.

By simultaneously launching an extension of the EU ETS to include heating fuels for buildings, the Commission risks sending national policymakers the wrong signal – that an EU-wide market mechanism would deliver the bulk of additional savings required to meet the new 2030 ambition, this way disincentivising the needed efforts to increase renovation rates and depth.

It is up to governments to put in place programmes to accelerate renovation, to introduce minimum energy performance standards for buildings and to prioritize measures to alleviate energy poverty. **These actions will not happen through the EU ETS, but by policymakers taking ownership of the transition to a climate-neutral, comfortable, safe and healthy built environment.**

The Renovation Wave should be the key priority for Europe

Without urgent and accelerated action to renovate up to 97% of the European building stock by 2050, it will be impossible to meet the EU's climate objectives. Fortunately, operational emissions of buildings can be cut by 100%, largely by using commercially available solutions such as insulation.

Including the building sector in the EU ETS represents a serious risk of distracting from taking effective measures to overcome the main barriers hampering the renovation of the EU building stock and the alleviation of energy poverty. Instead, an enabling framework should be established to ensure that the worst energy performing buildings are phased out over time, to guarantee quality homes for all people and clear a pathway to climate-neutrality.

The Renovation Wave can help unlock 130 billion euro per year to fill the investment gap for energy-efficient buildings⁵. Over 2 million jobs in Europe could be created through such investments in energy efficiency – in particular via deep renovation of buildings⁶.

In the event that the Commission decides to pursue an ETS for buildings, a prerequisite to alleviate concerns explained above, would be the possibility, for national governments, to reinvest the revenue collected from the building ETS into buildings to finance energy efficiency measures. Such an arrangement would enable the ETS extension to buildings to contribute to the roll-out of Long Term Renovation Strategies and the realisation of their

⁵ EU high-level expert group on sustainable finance (2018), Financing a sustainable European economy ([see here](#))

⁶ JRC (2018), Competitive landscape of the EU's insulation materials industry for energy-efficient buildings ([see here](#))

2050 ambition. It would prevent the leakage of revenue from buildings ETS towards other ETS sectors and provide a key source of funding to alleviate energy poverty. This would be best achieved with a separate ETS for buildings.

Contact :
Roland Gladushenko | roland.gladushenko@eurima.org
May 2021