RENOVATION WAVE

cepPolicyBrief No. 2021-4



KEY ISSUES

Context: The EU wants to reduce emissions of greenhouse gas (GHG) to net zero by 2050 ("climate neutrality"), and by 2030 get them down by 55% compared to 1990 levels. The building sector will also contribute to this.

Objective of the Communication: The number of energy renovations on residential and non-residential buildings is set to at least double by 2030 and the financial support for this is to be expanded.

Affected parties: Building owners; tenants; building industry; trades; manufacturers of heating and cooling systems, heat insulation and building materials; renewable energy producers.



Pro: EU climate targets can be most effectively and efficiently achieved by means of an emissions trading system (ETS). In principle, this also applies to the building sector.

Contra: (1) Mandatory minimum requirements for the energy performance of existing buildings will not increase the number and scope of renovations in a cost-efficient manner.

- (2) A binding requirement to use minimum levels of renewables for heating and cooling, and rules on the sustainability performance of construction products, also give rise to increased costs and reduce the rate of renovations.
- (3) "Energy poverty" should be alleviated not by way of energy efficiency requirements but by the social systems of the Member States.

Proposal: (1) A temporarily separate ETS would mean that industries covered by EU emissions trading, that are at risk of relocating, would be protected against the burden of further increases in allowance prices.

(2) As regards rented properties, an ETS would have to be accompanied by a rule allowing landlords to keep savings in heating costs, at least in part, in order to give them the necessary incentive to invest in renovations.

The most important passages in the text are indicated by a line in the margin.

CONTENT

Title

Communication COM(2020) 662 of 14 October 2020: A Renovation Wave for Europe

Brief Summary

Context and objectives

- By 2050, the EU wants emissions of greenhouse gases (GHG) such as CO₂ to fall to net zero ["Climate Neutrality"; Commission Proposal COM(2020) 80, see cepPolicyBrief 2020-03]. The requirement for GHG reduction will be increased in 2030 from 40% to 55% compared to 1990 levels (EU-2030 climate target)
- Buildings produce 36% of energy-based GHG emissions in the EU. Over 40% of buildings were built prior to 1960; almost 75% of those are not energy efficient by today's building standards. [P. 1]
- District heating and electric heating, making up about 30% of carbon emissions caused by the heating of buildings, are subject to the EU Emissions Trading System [see ceplnput 03/2018].
- The reduction of CO₂ emissions in the building stock is regulated EU-wide primarily by the Energy Efficiency Directive [2012/27/EU; see cepAnalyse 2017-01], the Building Energy Efficiency Directive [2010/31/EU; see cepAnalyse 2017-06], the Renewable Energy Directive [(EU) 2018/2001; see cepInput 01/2019], the Energy Labelling Directive [92/75/EEC] and the Ecodesign Directive [2009/125/EC] [see cepInput 05/2018].
- The annual energy renovation rate of building stock ("renovation rate") is currently about 1%; deep renovations reducing energy consumption by at least 60% are only carried out in 0.2% of building stock [p. 2].
- In the interest of climate neutrality and economic recovery "to overcome the COVID-19 crisis", the Commission wants to at least double the annual renovation rate by 2030 ("renovation wave") [p. 1, 2, 14].

Financial support

In order ensure "adequate and well-targeted" funding of energy renovations, the Commission wants [p. 5, p. 9 et seq.]

- to use "InvestEU" as a single EU-level investment support programme which will be
 - greatly increased by the Corona recovery programme "Next Generation EU" [see cepAdhoc 07/2020] and
 - mobilised by financing from private investors backed by an EU budget guarantee;
- to establish simpler and clearer State Aid rules for national investment support programmes.



▶ Increasing the energy performance of existing buildings

In order to reduce the demand for energy for heating, cooling, hot water etc. "associated with the typical use" of buildings, and thereby increase their "energy performance" [Energy Performance of Buildings Directive, Art. 2 No. 4], the Commission wants [p. 5, 7 et seq.]

- to introduce mandatory minimum energy performance standards for existing buildings which, as in France and Belgium, must be met "by a specified compliance deadline or at certain moments in the lifetime of a building", e.g. on re-letting or sale, with penalties for any failure to comply, e.g. a ban on renting;
- tighten the requirements for certificates on the energy performance of buildings ["energy performance certificates" (EPC); Energy Performance of Buildings Directive, Art. 11], which enable potential buyers and tenants to make a comparison, and to introduce a uniform EU-wide digital format for the certificate.

▶ Decarbonisation of heating and cooling

In order to reduce the consumption of fossil fuels and thereby carbon emissions caused by the heating and cooling of buildings ("decarbonisation"), the Commission wants [p. 6, 26, 29 ff.]

- by June 2021, as part of the revision of the Renewable Energy Directive, to examine whether a mandatory minimum level of renewables should be introduced [p. 24];
- by June 2021, as part of the revision of the Energy Efficiency Directive,
 - to expand the use of energy performance contracts; in this case energy service companies (ESC) such as municipal utilities, operators of heating networks first make the buildings energy efficient and then guarantee the customer a certain room temperature at a fixed price [p. 21];
 - to strengthen the ability of authorities to develop comprehensive heating and cooling plans for renovations which promote the use of renewable energy and waste heat [p. 24];
- to "further develop" standards for energy-efficient products under the Ecodesign Directive and Energy Labelling Directive [p. 31].

► Energy renovation of public buildings

In order to make the advantages of energy renovations "visible", "public buildings" which belong to public authorities or are publicly accessible - such as schools, hospitals, offices - will be used to a greater extent as "role models". Thus, the Commission wants [p. 8, 23]

- by June 2021, as part of the revision of the Energy Efficiency Directive, to examine whether the current mandatory rate of 3% p.a. for the energy renovation of building stocks owned by the central governments of the Member States [Energy Efficiency Directive, Art. 5] should be [p. 8]
 - increased and
 - extended to all levels of public administration;
- to issue "indicative milestones" for 2030 and 2040, for the energy renovation of public and private service buildings [S. 29].

► Fighting "energy poverty"

In order to help the approx. 34 million EU citizens, who cannot afford to heat their homes "adequately" ("energy poverty"), to carry out energy renovations, the Commission wants [p. 6, 11, 20 et seq.]

- to accelerate energy renovations by way of minimum energy performance standards;
- to examine how revenues from the EU ETS and EU budget resources can be used to a greater extent for building renovation schemes aimed particularly at low-income populations [p. 6, 11];
- to launch an affordable housing initiative with 100 "pilot lighthouse districts", aimed at renovating entire neighbourhoods, which sets "liveability and latest innovations at the forefront" [p. 22].

Sustainability requirements for the construction sector

In order to make the construction sector "fit" to deliver "sustainable" renovation with as little consumption of energy and materials as possible, the Commission wants [p. 6, 15 et seq.]

- to introduce, in the context of its revision of the Construction Product Regulation [(EU) No. 305/2011], binding rules on the "sustainability performance" of construction products;
- to promote "environmentally sustainable" building materials such as wood or secondary raw materials made from recycled waste;
- to review, by the end of 2024, the EU material recovery targets for construction and demolition waste [Waste Framework Directive 2008/98/EC, Art. 11 (2)];
- to develop a 2050 roadmap for reducing whole life-cycle carbon emissions in buildings from construction to demolition.

Inclusion of buildings in EU Emissions Trading

The Commission is considering the inclusion of carbon emissions from buildings in emissions trading [p. 25].



Policy Context

In the Paris UN Climate Agreement, the EU committed to comply with the 2-degree climate target (see cepPolicyBrief
2016-13). This gave rise to the target of EU climate neutrality by 2050 which is to be achieved by way of numerous EU measures outlined in the "European Green Deal".

Options for Influencing the Political Process

Directorates General: DG Energy (leading)

Committees of the European Parliament: Industry, Research and Energy (leading)

Federal Ministries: Economic Affairs and Energy

Committees of the German Bundestag: Economic Affairs and Energy (leading)

ASSESSMENT

Economic Impact Assessment

The climate targets envisaged by the EU - emissions reduction of 55% by 2030 and "climate neutrality" by 2050 represent a major economic and social challenge. They can be most effectively and efficiently achieved by means of an emissions trading system (ETS) for all sectors [see cepPolicyBrief 2020-03; cepStudy Effective Carbon Pricing (2019)]: By limiting and reducing the number of emissions allowances, the envisaged carbon reduction will be reliably achieved and, as a result of emissions trading, the market will find the most cost-effective reduction measures available. In principle, this also applies to the building sector. An ETS will make the use of fossil fuels for the heating and cooling of buildings more expensive. This creates a widespread incentive to reduce the consumption of such fuels in order to save costs, thereby reducing the associated carbon emissions. This may take place in numerous ways, such as through the energy renovation of buildings, the increased use of renewables or deliberate energy saving by the building user. Thus, out of the whole range of possible reduction measures, the cheapest will prevail. By contrast, governmental intervention regarding the choice of measures, by means of regulatory requirements and subsidies - e.g. to promote energy renovation -, prevents full use of all potential reduction options thereby giving rise to unnecessary additional expenditure. In addition, renovation measures do not always result one to one in lower energy consumption and carbon reductions, e.g. where residents spend savings in heating costs on increasing room temperature thereby using more fossil fuel; the ETS counteracts such "rebound effects". Expensive subsidies and piecemeal, individual regulatory measures should be dispensed with in favour of using an ETS as the main instrument – being considered only vaguely by the Commission as a mere supplementary measure.

The advantages of an ETS only achieve their full potential, however, in the case of owner-occupied housing. Here, by investing in energy renovation, owners can reduce their own future heating costs so that the investment is amortised over time. The likely increase in allowance prices will reduce the amortisation period. This does not apply in the same way to rental property ("landlord/tenant dilemma"): Here, the investment costs and the savings in heating costs part company. Thus, the landlord initially has no financial incentive to renovate the dwelling because the tenant bears the costs of heating; the tenant, on the other hand, has no influence on the landlord's investment decision and cannot force him to undertake energy renovations. As regards rental properties, therefore, an ETS in the building sector would have to be accompanied by a rule allowing landlords to keep the overall savings in heating costs, at least in part, in order to give them the necessary incentive to invest in renovations.

In addition to the aforementioned disadvantages of expensive subsidies, a "renovation wave" initiated primarily by "InvestEU" runs the risk of quickly ebbing away because, on current plans, this will only be topped up by the Corona recovery programme in the short term.

The minimum energy performance standards for existing buildings, being propagated by the Commission, will not increase the number and scope of renovations in a cost-efficient manner for the aforementioned reasons. They may even have the opposite effect if the landlord completely fails to undertake comprehensive renovations because compliance with the minimum standards is not profitable for him. Minimum standards applicable on re-letting or sale, and a ban on renting buildings with low energy performance, such as apply in some Member States, would compel the private sector to act but also further restrict affordable housing. EU-wide minimum standards, in particular, should be rejected because the situation in terms of climate, economy and architecture as well as the ownership structure of buildings varies greatly between the individual Member States.

Energy performance certificates for potential buyers and tenants enable the comparison of likely energy costs and can thus help to solve information problems. A uniform digital standard may increase comparability. Cost efficiency must, however, be considered whenever the requirements for energy performance certificates are tightened.

Other regulatory requirements - such as mandatory minimum levels of renewables in heating and cooling, and rules on the sustainability performance of construction products - also give rise to increased costs, and reduce the rate of renovations.



Increasing the current 3% mandatory renovation rate applicable to central government buildings, and extending it to other public buildings, will place a heavy burden on the public purse. The Corona recovery programme will only provide short-term help - insofar as the money is used for this at all. In addition, the increase in demand may encounter bottlenecks in the construction sector and cause price increases.

Energy performance contracts, on the other hand, may lead to comprehensive renovations and energy savings, and provide an efficient solution for the public building stock, because the efficient provision of heating and cooling reduces costs and is therefore in the EDU's own interest.

"Energy poverty" should be alleviated not by way of energy efficiency requirements but by the social systems of the Member States. These are most likely to address the varying national levels of poverty. It is also uncertain whether the resulting savings in energy costs will be greater than the rent rises resulting from renovations.

Legal Assessment

Legislative Competency

Unproblematic. The EU can take energy policy measures to promote energy efficiency and energy savings (Art. 194 TFEU).

Subsidiarity

As climatic conditions, building methods and the ownership structure of buildings vary greatly within the EU, the factors relevant to energy efficiency are local in nature. Consequently, Member States are better placed than the EU to determine requirements for the energy efficiency of buildings. Future proposals by the Commission for any envisaged EU-wide minimum energy performance standards for buildings must therefore be examined in detail as to whether they are compatible with the principle of subsidiarity [Art. 5 (3) TEU].

Alternative Approach

A temporarily separate ETS - only for buildings or for buildings and transport - would mean that price rigidity in the demand for allowances in these sectors would have no influence on the allowance price in the existing EU ETS. Industries, covered by EU emissions trading, that are at risk of relocating their production to third countries with lower standards for GHG reduction ("carbon leakage"), would be protected against the burden of further increases in allowance prices. At the same time, Member States could - and should - redistribute a considerable part of ETS revenues among the population in order to avoid social upheaval.

Conclusion

EU climate targets can be most effectively and efficiently achieved by means of an emissions trading system (ETS). In principle, this also applies to the building sector. Expensive subsidies and piecemeal, individual regulatory measures should be dispensed with in favour of using an ETS as the main instrument. As regards rented properties, however, an ETS would have to be accompanied by a rule allowing landlords to keep savings in heating costs, at least in part, in order to give them the necessary incentive to invest in renovations. Minimum requirements for the energy performance of existing buildings cannot increase the number and scope of renovations in a cost-efficient manner. A binding requirement to use minimum levels of renewables for heating and cooling, and rules on the sustainability performance of construction products, also give rise to increased costs and reduce the rate of renovations. "Energy poverty" should be alleviated not by way of energy efficiency requirements but by the social systems of the Member States. A temporarily separate ETS would mean that industries covered by EU emissions trading, that are at risk of relocating, would be protected against the burden of further increases in allowance prices.