Making Renewable Heating Accessible and Affordable

Overcoming Market Barriers in the Rental Sector

February 2024







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Summary

Thirty percent of Europeans live in a home they do not own¹, a figure that can be significantly higher in major European cities (e.g. 63% in Brussels², 76% in Berlin³). These tenants have little control, if any, over the heating systems in the house or apartment they inhabit. Such decisions are made by the owners. But owners do not reap the benefits of renewable heating systems, which often results in suboptimal decisions, both from an economic and environmental point of view. This split-incentive situation is known as the landlord-tenant dilemma.

Most policy measures that incentivise renewable heating are typically addressed to owners at large, but do little to encourage landlords specifically to renovate their buildings: grants, rebates, loans, tax cuts, etc.

In recent years, measures have been introduced in many countries to make renewable heating accessible and affordable to the most vulnerable families with tailored policies: grants that cover the full cost of the system, and do not require to pay upfront; loans that are state-backed and/or zero- or low-interest, etc. With energy poverty affecting one in ten Europeans⁴, and high inflation putting more of the middle class at risk of falling into energy poverty, these are welcome efforts. But again, in most cases, these measures only help energy poor homeowners make the necessary investments, and fail to reach energy poor tenants.

This briefing explores what is needed to make renewable heating accessible and affordable for tenants living in Europe, with a special focus on the energy poor. At its core lies the idea that the heating decarbonisation transition should not leave anyone behind, regardless of their income and their tenancy status.

To frame its recommendations, the report builds on desk research, interviews with experts in housing and energy, including civil society organisations. From this, four main recommendations arise:

- 1. Build on what already exists. Step up efforts to promote renewable heating throughout the building stock, even if they do not specifically address the rental sector. This is because such measures: 1) create a market for renewable heating, thereby reducing costs via economies of scale and changing social perceptions; and 2) improve the economics of investments decisions of all owners, including landlords.
- 2. Address supply-side barriers while prioritising the most vulnerable. With large building stocks and a social raison d'être, social housing providers and social rental agencies are ideally positioned to provide affordable, quality housing with renewable heating solutions for the most vulnerable. The sector also provides a great opportunity to develop innovative solutions, to aggregate the demand that can create mass markets for deep renovations, and to address supply-side barriers to renewable heating. All while prioritising those who need it most.

¹ Eurostat, House or flat – owning or renting

² L'Institut wallon de l'évaluation, de la prospective et de la statistique. La structure de la propriété des logements en Wallonie et en Belgique. 2023.

³ Statista. Share of rental and owner-occupied apartments in selected cities in Germany in 2019.

⁴ European Commission. Commission Recommendation (EU) 2023/2407 of 20 October 2023 on energy poverty. 20 October 2023.

- 3. Fill the gaps. Building on the tools and experience above, policy-makers can tweak existing renewable heating policy tools to make them fit for the rental sector, and develop new measures from scratch, while ensuring that the necessary social safeguards are in place to protect tenants.
- 4. Information is power. Facilitate access to, and proactively provide, independent information on all existing tools available to facilitate the switch to renewable heating. Ensure that landlords and tenants understand the added value of renewable heating in their properties. And provide support to reduce administrative burden.



Introduction

The rental sector plays a crucial role in the housing market, particularly in providing housing options for individuals and families. However, there are several market barriers that hinder the adoption of renewable heating technologies in this sector. These barriers can include high upfront costs, limited access to financing options, and a lack of awareness and understanding among landlords and tenants.

Thirty percent of Europeans live in a home they do not own, a figure that can be significantly higher in countries such as Germany and Denmark, or in major European cities (in Germany, for example, the share of tenants in major cities varies between 55% and 76%). These tenants have little control, if any, over the investment decisions that concern the house or apartment they inhabit. These decisions are made by the owners. Yet, owners do not reap the benefits of the investments, resulting often in suboptimal decisions. This split-incentive situation is known as the landlord-tenant dilemma.

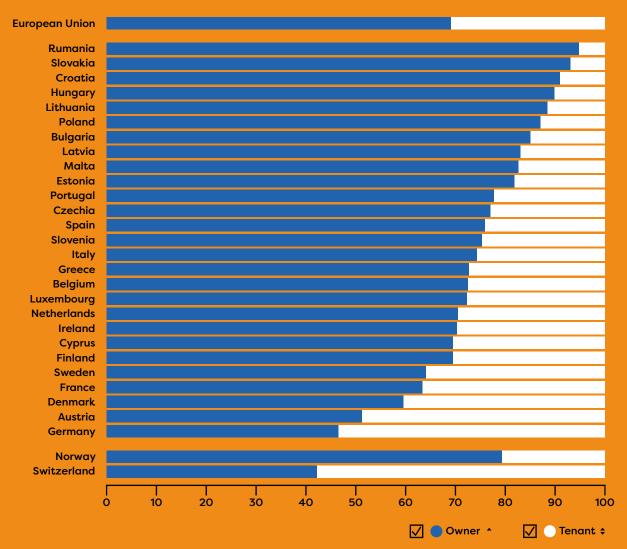


Figure 1: share of people living in households owning vs renting their home, 2022. Source: Eurostat

⁵ Richard Waldron. Experiencing housing precarity in the private rental sector during the covid-19 pandemic: the case of Ireland. 1 February 2022.

⁶ Eurostat. House or flat – owning or renting.

 $^{^{\}prime}$ Statista. Share of rental and owner-occupied apartments in selected cities in Germany in 2019.

⁸ 'Split incentives' means the lack of fair and reasonable distribution of financial obligations and rewards relating to energy efficiency investments among the actors concerned, for example the owners and tenants or the different owners of building units, or owners and tenants or different owners of multi-purpose buildings.

European Union. Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast) (Text with EEA relevance). 13 September 2023.

Home energy retrofits, including the installation of renewable heating systems (such as renewable energy-based heat pumps, solar thermal, and district heating networks using renewable sources), fall squarely under this dilemma: landlords invest, tenants benefit (reduced bills, increased comfort), and so most often, landlords would rather not invest, unless that investment allows them to raise the rent. Most policy measures that incentivise renewable heating are typically addressed at owners at large, but do little to encourage landlords specifically to renovate their buildings: grants, rebates, loans, tax cuts, and even heat-as-a-service and other innovative business models.

In recent years, there have been measures introduced in many countries to make renewable heating accessible and affordable to the most vulnerable families, with tailored policies: grants that cover the full cost of the system and do not require to pay upfront; loans that are state-backed and/or zero- or low-interest, etc. With one in ten Europeans unable to keep their home adequately warm⁹, these are welcome efforts. High inflation and rising housing costs put more of the middle class at risk of energy poverty: over the past decade (from 2010 until the fourth quarter of 2022) average rents increased by 19% in the EU and house prices by 47%, and house price growth has consistently outpaced growth in incomes¹⁰. In Dublin, the average standardized monthly rent is now 2,102 euros, double what it was a decade ago, according to official figures¹¹.

Yet again, in most cases these measures only help energy poor homeowners make the necessary investments, and fail to reach energy poor tenants. For example, evidence from ECODES's programme "No home without energy" in Spain shows that 75% of energy poor are tenants. Also in Spain, statistics show that those renting have two to three times more chances of not being able to keep their homes warm and of being in energy poverty. In Flanders, 33% of tenants, and 41.5% of social tenants, live in energy poverty, compared to just 14.8% of owner-occupants.

In other words, there is a general consensus that, to be fair, the energy/heating transition should prioritise vulnerable households. However, there are few instruments that address tenants, and vulnerable tenants in particular.

This briefing explores what would be needed to make renewable heating accessible and affordable for tenants living in Europe, with a special focus on the energy poor. At its core lies the idea that the heating decarbonisation transition should not leave anyone behind, regardless of their income and their tenancy status.

Interestingly, the analysis shows that the rental sector, via innovation in the social housing segment, provides opportunities to create mass markets for deep energy retrofits that include renewable heating solutions. Industrialising deep energy retrofits will help address some of the supply-side barriers identified by CAN Europe's briefing "Embracing a renewable heating revolution in our buildings! Overcoming barriers and going beyond fossil-fuel heating" such as lack of skilled workers and supply-chain issues, while prioritising the most vulnerable.

⁹ European Commission. Commission Recommendation (EU) 2023/2407 of 20 October 2023 on energy poverty. 20 October 2023.

¹⁰ Housing Europe, State of Housing 2023, 2023.

The New York Times, 'The Social Contract Has Been Completely Ruptured': Ireland's Housing Crisis, 15 January 2024.

¹² Ecodes. No Home without Eneray

¹³ Spanish Ministry of Environment. Actualización de Indicadores de la Estrategia Nacional Contra la Pobreza Energética. December 2022.

¹⁴ King Baudouin Foundation. Baromètre de la Précarité Énergétique. 23 April 2023.

¹⁵ CAN-Europe, Embracing a renewable heating revolution in our buildings! Overcoming barriers and going beyond fossil-fuel heating. February 2023.

Recommendations

1. Build on what already exists: enhance existing efforts to promote renewable heating

There is a plethora of existing policy, economic and financial tools on renewable heating that indirectly benefit the private rental sector, even if not specifically designed to address its particularities. As a first point in a renewable heating strategy for the rental sector, policy-makers should continue promoting such measures, as they: 1) improve the framework conditions for renewable heating; 2) provide financial support to those who need it, be them landlords or not; 3) help planning the renewable heating transition.

Improve framework conditions

Some policy and economic tools do not benefit the rental sector directly, but they do create the right framework conditions for thriving renewable heating markets. Thriving markets result in cost reductions via economies of scale, shifting social norms, etc. which indirectly benefit landlords and tenants.

End support for fossil-fuel heating

As a first step, Governments should stop subsidising fossil-fuel heating. The recast Energy Performance of Buildings Directive (EPBD) includes a phase out of subsidies for stand-alone boilers by 2025¹⁶, but the text will still grant a lot of flexibility to technologies that will still partly or substantially rely on fossil fuels. To fully embrace the renewable heating revolution, Member States must look away from false solutions such as hybrid technologies, as these will be potentially forcing millions of



households to continue using dangerous and expensive fossil fuels for much longer and ultimately, jeopardise the achievement of the EU's climate goals.

Phase out fossil-fuel heating

The recast EPBD also signals a complete phase out of fossil-fuel boilers by 2040. In addition, the European Commission has touted 2029 as the end date for the sale of new stand-alone boilers. It is up to Member States to set clear and more ambitious targets for heating decarbonisation to speed up the uptake of renewable heating solutions.

Proper taxation of environmentally harmful fuels used for heating (oil, gas, coal, biomass)

Electricity is disproportionately taxed compared to fossil fuels in most European countries, despite being less GHG emission-intensive. Aligning taxes and levies of energy products and electricity with European climate policies (such as paying for environmental impact) would encourage investments in key decarbonisation technologies, such as heat pumps and solar thermal¹⁷.

Provide financial support

Most financial support for renewable heating is addressed to all owners, regardless of whether they are owneroccupants or landlords. While financial support does not address all aspects of

¹⁶ CAN Europe. CAN Europe's reaction Final Energy Performance of Buildings (EPBD) Trilogue. 8 December 2023.

¹⁷ Jan Rosenow, Samuel Thomas, Duncan Gibb, Ruben Baetens, Andries De Brouwer, Jan Cornillie. Levelling the playing field: Aligning heating energy taxes and levies in Europe with climate goals. 12 July 2022.

the split incentives between landlord and tenants, it reduces some of the "economic friction" for landlords to install renewable heating systems. Such support should be continued and improved, in particular to ensure that it benefits first and foremost vulnerable owners and tenants in the worst performing buildings. The type of support to be provided should be carefully designed to ensure an additionality of public funds, as is further analysed below; the architecture of funding mechanisms can differentiate between different types of households depending on their financial capabilities in order to maximise the additionality of public resources.

Grants

Grants provide building owners capital to acquire and/or install renewable heating systems. Rebates require the owner to make the upfront payment, and then claim the money back. Grants and rebates are important elements of developing mature renewable heating markets¹⁸. However, some criteria should apply. Firstly, they must only be used in circumstances where private funding is not available to homeowners for example because they lack the required equity or are beyond a certain age. Homeowners that are able to finance the switch to a renewable heating system themselves (or through loan-based instruments) should not receive grants as public funding is scarce and should rather be incentivised with the right regulatory instruments to make the required investments. Secondly, grant-based public finance should prioritise the roll-out of heat pumps carefully designed and articulated, aligned with deep renovation plans, and with a social justice lens to ensure that low income households are prioritised.

Loans

Loans provide upfront capital for owners but they have to be paid back. They are the right tool for owners that do not have the cash flow to buy and install a renewable heating system, but have the financial capacity to repay those loans. Zero- or low-interest loans are also used to encourage better off building owners to change the system, by improving the return-on-investment profile of investments in heat pumps.

On-bill and off-bill financing

These financial mechanisms also avoid the need for upfront payments. On-bill is repaid via the energy bill. Off-bill is repaid through property taxes. On-bill and off-bill financing are transferred to the next owner, thus further reducing risks for owners.

Tax cuts

Like subsidised loans, tax cuts provide incentives by reducing costs for building owners and improving the private return-on-investment profile of heat pump investments. They can take many forms: VAT reduction on the purchase or installation of renewable heating systems¹⁹, or property tax reduction/exemption for renovation works^{20,21}, among others. Taxation and pricing need to be designed in a socially progressive way.

Heat-as-a-Service (HaaS)

Heat-as-a-Service is a general term for business models that offer a service (leasing of a renewable heating system, a number of "warm hours", a minimum temperature in the home), instead of a product (kWh of electricity or fuel). In exchange for a monthly fee, the upfront investment and the risks (of variable energy costs and of maintenance) are transferred to the company providing the service²², typically a utility.

¹⁸ Lowes, R., Gibb, D., Rosenow, J., Thomas, S., Malinowski, M., Ross, A. & Graham, P. A policy toolkit for global mass heat pump deployment. November 2022.

¹⁹ Government of the United Kingdom. Energy saving materials and heating equipment (VAT Notice 708/6).

²⁰ French Ministry of Economy. Ai-je droit pour ma taxe foncière à l'exonération en faveur des économies d'énergie ?

²¹ Flemish Energy Agency. Reduction of property tax for major energy renovation.

²² Pieterse, R., LCP Delta. Defining heat as a service. 10 July 2019.

Plan the transition

Heating and cooling plans

The revised Energy Efficiency Directive (EED) requires Member states to draft heating and cooling plans as part of their national climate and energy plans. It also requires municipalities with populations higher than 45,000 to develop local heating and cooling plans. These requirements should especially help the deployment of district heating and cooling, an effective way of delivering renewable heat in densely populated areas, as well as individual renewable heating systems.

National Building Renovation Plans (NBRPs)

The Energy Performance of Buildings Directive (EPBD) requests countries to prepare National Building Renovation Plans, which are strategic plans that create an overview of the national building stock, define policies and actions to stimulate (deep) renovations, and define progress indicators and indicative milestones for 2030 and 2040 to ultimately reach climate neutrality by 2050. If well designed, NBRPs could be a key tool to encourage deep renovations that integrate renewable heating, and protect the most vulnerable²³.

Recommendations:

- Member States will need to outline their plans as far as Minimum Energy Performance Standards (MEPS)²⁴ implementation, especially as it concerns the residential sector. A focus on worst-performing buildings shall be strongly kept, and the design of an enabling framework (encompassing financing, technical assistance and social safeguards) shall prioritise the most vulnerable households, and those already experiencing energy poverty.
- National Building Renovation Plans shall include planned policies and measures to ensure that the decarbonisation of heating and cooling in buildings (and a complete phase out of fossil fuels boilers) happens by 2040. Such policies and measures shall look into all types of tenures, including tenancies, while focussing on the most vulnerable households.

²³ CAN Europe. Social Safeguards are the Cornerstone of a Bold and Fair Buildings Directive. November 2023.

²⁴ Minimum Energy Performance Standards requirements are enshrined in Article 9 of EPBD recast 2023. These are legal instruments that require Member States to renovate parts of their building stock, mostly identified as energy inefficient by a certain date (non-residential) or contributing to a progressive reduction of the average energy consumption to ultimately reach climate neutrality by 2050 (residential)

2. Social & affordable housing: address supplyside barriers while prioritising the most vulnerable

Social housing is typically rental housing owned and managed by the state, or by non-profits, with the aim of providing affordable housing. Social housing providers also typically own large stocks of homes. They might be more willing to improve the conditions of tenants, as they are not primarily guided by the profit motive, unlike the vast majority of individuals or corporate investors that rent out their properties in the private rental sector.

Analysis from Housing Europe, the European Federation of Public, Cooperative & Social Housing, shows that the share of social housing varies from no social rental housing sector in Greece, to 29% of the total housing stock in the Netherlands²⁵.

There is a strong renovation movement within the social housing sector. Limited profit housing associations in Austria for instance have already renovated 96% of homes built before 1980. In Czechia, housing cooperatives have renovated 80% of pre-fabricated panel blocks. Social and affordable housing providers are involved in exemplary projects and initiatives that are paving the way for affordable, high quality housing^{26,27,28,29}.

Social housing providers typically work with residents by offering advice and coaching on energy use, and provide help to access available subsidies and financial inclusion services. During the energy crisis, social housing providers in Denmark, Finland, Sweden did not index rents at their usual rate; housing cooperatives in Italy set up solidarity funds to support those who could not keep up with increasing energy bills³⁰.

The large building stocks of social housing providers and their social mission, positioned the social housing sector in an ideal place to spearhead the transition towards affordable, high-quality rental homes that benefit from renewable heating systems across Europe.

Social Rental Agencies

Social rental agency schemes are a form of public or non-profit social intermediation between landlords and low-incometenants. They provide guarantees to private landlords in exchange for renting their properties at a reduced price to vulnerable households. They help expand the offer of affordable housing.

Properties managed by social rental agencies help identify vulnerable tenants. In Flanders, landlords are excluded from subsidies and subsidised loans, except for those who rent out a house or apartment through a social rental agency for a minimum length of nine years are entitled to the highest subsidies —on par with those given to vulnerable homeowners—regardless of their income³¹. This encourages both affordable housing and renovation, including heating measures.

Market aggregation

There are some successful examples in the public, cooperative and social housing sector of aggregating demand for

²⁵ Housing Europe. State of Housing 2023. 2023.

²⁶ Housing Solutions Platform. 50 Out-of-the-Box Solutions to Homelessness & Housing Exclusion. Toits d'Abord: A Lasting Commitment for Integration Through Housing. 2019.

²⁷ Housing Solutions Platform. 50 Out-of-the-Box Solutions to Homelessness & Housing Exclusion. Helping the Most Vulnerable Owner-Occupants of Unhealthy Dwellings Renovate their Home. 2019.

²⁸ Housing Solutions Platform, 2019, 50 Out-of-the-Box Solutions to Homelessness & Housing Exclusion. Bilbao-Bolueta: High-Standard, Low-Energy Housing. 2019.

²⁹ <u>Housing Solutions Platform, 2019. 50 Out-of-the-Box Solutions to Homelessness & Housing Exclusion. ASTER: Access to Sustainability Through Energy-Effective Retrofit. 2019.</u>

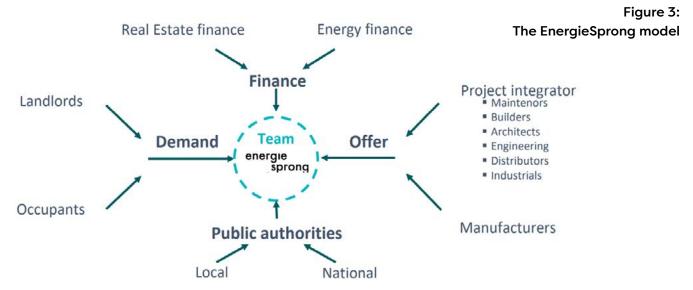
³⁰ Housing Europe. State of Housing 2023. 2023.

³¹ Flemish Energy Agency. Who can apply for My Renovation Premium?

energy retrofits while prioritising the most vulnerable.

The EnergieSprong³² experience bears witness to the importance of social housing in developing a mass-market for deep energy retrofits. Born in the Netherlands, the EnergieSprong concept aims at providing net-zero energy retrofits, which typically include solar rooftops and heat

pumps, in addition to thermal insulation. Financial institutions involvement makes the retrofit financially feasible, and paid back thanks to savings in energy cost and in the budget for planned maintenance and repairs over 30 years. The EnergieSprong "market development teams" sit in the middle of the different actors of the retrofit (landlords, tenants, retrofit providers, financial institutions and public authorities) to ensure best results.



The EnergieSprong approach is particularly interesting for two reasons: 1) it prioritises the social housing sector, effectively working with the most vulnerable; 2) it aims at industrialising deep-energy home retrofits. It builds on the idea that the success of a green renovation wave cannot work just by addressing issues of demand, but also needs to focus on improving supply-side barriers, such as lack of skilled workers and supply-chain issues³³.

By providing large segments of homes for deep renovations, and encouraging financial and industrial innovation (e.g. via ready-to-wear prefabricated insulation units), EnergieSprong aims at achieving "more volume, more volume and more volume" which can help build a deep renovation industry while prioritising the most vulnerable.

In France, for example, EnergieSprong worked with social housing provider Est Métropole Habitat in Vaulx-en-Velin to renovate 988 housing units, spread across 9 buildings, which were built in the 1970s. The renovation, with 42% of the facade prefabricated, made it it possible to renovate almost 1,000 homes in just 19 months³⁵.

Demand aggregation shall not be restricted to the social housing sector. There are opportunities to create economies of scale through the establishment of financing mechanisms that aggregate demand in different regions, for example, onstreet student private rented accommodation in university cities or public schools.

³² EnergieSprong

³³ CAN-Europe. Embracing a renewable heating revolution in our buildings! Overcoming barriers and going beyond fossil-fuel heating. February 2023.

³⁴ Personal communication with EnergieSprong's Head of Innovation

³⁵ EnergieSprong France. Rénovation de 988 logements collectifs - Vaulx-en-Velin.

³⁶ E3G. Incentivising energy efficiency improvements for UK private renters: Autumn Budget briefing. 19 July 2023

3. Fill the gaps: design tailor-made tools for the rental sector

In addition to measures that help shift markets towards renewable heating, some tools can help address the rental sector specifically. A careful policy mix of obligations/restrictions and financial incentives will be needed to attain the dual objective of encouraging deep renovations including the integration of renewable heating, while protecting the most vulnerable households. To ensure that landlords can fulfill such obligations, financial support may be needed. How to address this issue has been discussed in section 1 of this report "Build on what already exists". In addition, sufficient protection for tenants must be guaranteed to ensure affordable housing for all tenants, and to avoid displacements and gentrification. This is developed below.

Regulations

Minimum Energy Performance Standards (MEPS) & Social Safeguards in practice.

According to the EPBD recast 2023, MEPS are requirements that mandate existing buildings within a defined territory to meet a defined performance standard, or to contribute to a collective decrease in average energy performance levels by a certain milestone. Renovations can be prompted by natural trigger points (such as a new rental agreement, or the sale of the property) or being part of a broader renovation programme. The requirement can apply to all buildings or to particular building segments³⁷. If well-designed, MEPS hold an immense potential to support renewable heating in the rental sector, and help the most vulnerable.

Whichever the ultimate design of national MEPS and national renovation strategies will be to achieve the trajectory's targets, clear requirements to monitor their social impacts, the inclusion of social safeguards³⁸ and enabling measures to prevent/mitigate any possible negative impacts will be crucial, once the implementation phase will kick off.

Several examples of MEPS exist in the the EU and already a few countries have bridged the gap between regulation and social dimension by introducing social safeguards, such as:

In France, a renting ban was introduced for the Worst Performing Buildings (WPBs). It starts in 2025 with those in class G of the energy performance certificates, and is gradually extended to those in class E by 2034³⁹. If properly enforced, the measure provides landlords with an incentive to look into renewable heating to improve the energy rating of their property. As most energy poor live in WPBs, this should help improve their living conditions, and reduce energy bills. However, if the landlord does not carry out the necessary work, the tenant can take legal action to force him to do so. The obligation to carry out the work ordered by the judge may be accompanied by a fine and/or damages. Again, the power of information⁴⁰ and ensuring that the tenant has sufficient legal backing and support, make the difference for the measure to have its desired effect.

In Flanders, a renovation obligation at property transfer exists. New owners have five years to bring their building up to a minimum energy performance standard (MEPS) of 400 kWh/m2/year. As of 2028, the MEPS level rises to 300 kWh/m2/year, and new thresholds are envisaged in 2035, 2040, 2045 and 2050, when all

³⁷ BPIE. Minimum Standards Maximum Impact: How to Design Fair and Effective Minimum Energy Performance Standards for Buildings in Europe. 2023.

³⁸ CAN Europe. Social Safeguards are the Cornerstone of a Bold and Fair Buildings Directive. November 2023.

³⁹ <u>French Ministry of Environment. Loi Climat et Résilience.</u>

⁴⁰ See the section Information is power.

buildings should reach an A level⁴². The National Bank of Belgium stated that there is a growing price gap between the worst performing dwellings and energy efficient one⁴². According to economists at the national bank and at the private bank KBC, buyers of non-efficient houses will factor in renovation costs when making a bid, leading to a downward impact on the price of the worst performing houses⁴³. In other words, the MEPS allows new owners to acquire a home and still afford the cost of renovation works. Some stakeholders are now advocating for the inclusion of a clean heating obligation, which would arguably reduce the price of buildings reliant on fossil fuels for heating.

Financial Safeguards

Financial safeguards are needed to shield vulnerable tenants from higher housing costs that may follow renovations and fail to ensure housing accessibility for all residents.

Rent ceilings

In Germany, for example, existing law allows landlords to pass on renovation costs by as much as 8% per year following renovation works, be them energy renovations or not⁴⁴. This is adding financial stress to the already stretched budget of less well-off tenants. The current governing coalition announced in its Coalition Agreement from 2021 from 2021 that it would change the law to stipulate a "costneutrality" model that the rise in rent after renovations must be at least balanced by the savings in energy costs for tenants, but that has yet to happen⁴⁵. Such costneutrality-after-renovation model should be "a minimum requirement of all energy legislation", according to tenants' groups⁴⁶.

There are other ways of implementing rent increase ceilings. In the French MEPS example from above, property owners of G- and F- rated buildings are banned since 2023 from increasing the rent between two lettings without undertaking energy renovations⁴⁷.

And in Flanders, the regional government implemented a similar "rent indexation stop" for the worst performing buildings as a response to the energy crisis. The measure not only protected tenants from rising living costs, but also led to an increased number of renovations, according to the Flemish Rent Platform⁴⁸. Unfortunately, the Flemish Government decided to discontinue the measure⁴⁹.

Public support... with strings attached

Governments can also require that rents do not rise, even in the event of a renovation. In France, the "Denormandie scheme"50 provides tax cuts for owners buying and renovating an empty dwelling that they then rent out for a long period (six, nine or twelve years) at a capped price per square meter. The renovation must reach at least 20% in efficiency improvements (30% for houses) by implementing from a menu of measures: wall, cavity and window insulation; boiler and hot-water system replacement. To further encourage renewable heating, the scheme could raise the 20% threshold of efficiency improvements, which would indirectly encourage the installation of renewable heating systems. Or it could simply request that boilers and water heating systems are replaced by renewable heating alternatives.

⁴¹ Flanders Energy Agency. Renovation Obligation for Residential Buildings.

⁴² National Bank of Belgium. The impact of changes in housing characteristics and preferences on Belgian house prices. April 2022.

⁴³ Knack Magazine. House prices are gradually falling: is something quietly changing in our real estate market? 1 April 2023.

⁴⁴ (German) Civil Code (BGB). § 559 Rent increase after modernization measures.

⁴⁵ DUH. Paths to socially acceptable building renovation.

¹⁶ International Union of Tenants. IUT Priorities for the European Parliament (2024-2029). 2023.

⁴⁷ French Ministry of Environment. Loi Climat et Résilience.

⁴⁸ Flemish Rent Platform. Plea for structural blocking of rental price indexation for energy-consuming rental properties. 29 August 2023.

⁴⁹ Angelos Koutsis. Rent indexation stop: A renovation catalyst? 24 November 2023.

⁵⁰ French Ministry of Economy. Rénovation d'un logement ancien : tout savoir sur la réduction d'impôt « Denormandie »

4. Information is power: provide relevant, timely information and opportunities to participate

None of the above will happen without information, education and participation of all relevant actors.

Energy Performance Certificates

Energy Performance Certificates (EPCs) are at the core of several regulations. They are used to define performance thresholds of MEPS (e.g. a minimum E-level in order to rent out a dwelling), and they are used to define thresholds for financial support (e.g. renovations should reach a minimum energy class, e.g. "A", to qualify for financial support). Because EPCs take into consideration heating systems in their methodology, they help encourage renewable heating. They also provide a valuable common language for landlords and tenants to discuss about energy. Member States and the European Commission need to support the penetration of EPCs, as they are not widespread across the EU, especially in the context of worst performing buildings, where having an EPC would be particularly beneficial.

One-stop shops

The EU's recast Energy Efficiency Directive⁵¹ mandates Member States to establish dedicated one-stop shops or similar mechanisms for the provision of technical, administrative and financial advice for energy efficiency, such as energy checks for households, energy renovations of

buildings, information on the replacement of old and inefficient heating systems with modern and more efficient ones. According to the Directive, such facilities shall "provide holistic support to all households, with a particular focus on households affected by energy poverty and on worst performing buildings [...] provide support covering the different stages of the retrofit project, including to facilitate the implementation of a minimum energy performance standard where such a standard is provided for in a European Union legislative act."

The contribution of one-stop shops can be very important for landlords and tenants, as they could receive reliable and accessible information about energy efficiency improvements, including available support, existing regulations, etc. Landlords could be made aware of the increase in value of renovated properties⁵² that count on renewable heating systems⁵³. Access to information about the right to housing and tenants' rights against rising rent prices is also essential. It is key that Member States establish networks of national, regional and local one-stop-shops⁵⁴ free-of-charge, independent information, that takes into account the different needs of an owner occupant, landlord or tenant. The European Commission needs to support, monitor, evaluate and enforce their set up.

Information campaigns, participatory processes

The deployment of renewable heating works best when governments prioritise consumer awareness and education to improve and refine consumers' understanding and attitudes about transitioning their homes to renewable heating technologies⁵⁵.

⁵¹ European Union. Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast) (Text with EEA relevance). 13 September 2023.

⁵²A study on the <u>impact of energy performance certificates</u> (2014), based on an analysis of residential markets in Europe, found that higher energy savings resulted in substantially higher sale or rental prices on average.

⁵³ Xingchi Shen, Pengfei Liu, Yueming (Lucy) Qiu, Anand Patwardhan & Parth Vaishnav . Nature energy. Estimation of change in house sales prices in the United States after heat pump adoption. 19 October 2020.

⁵⁴ CAN-Europe. Embracing a renewable heating revolution in our buildings! Overcoming barriers and going beyond fossil-fuel heating. February 2023.

⁵⁵ Lowes, R., Gibb, D., Rosenow, J., Thomas, S., Malinowski, M., Ross, A. & Graham, P. A policy toolkit for global mass heat pump deployment. November 2022.

Existing EU law already includes clear information and participation requirements. The EED requires Member States to "take appropriate measures to support multilateral dialogue among relevant partners", including owners' and tenants' organisations, so they can suggest "measures, incentives and guidelines pertinent to split incentives between owners and tenants" 56.

The Directive also requires Member States to "establish a network of experts from various sectors" that would "offer advice on, among others, methods and measures to ensure affordability of living costs, the promotion of housing cost neutrality, or ways to ensure that public funding invested in energy efficiency improvement measures benefit both owners and tenants of buildings and building units, in particular regarding people affected by energy poverty, vulnerable customers, people in low-income households, and, where applicable, people living in social housing." Again, Member States need to take implementation of these requirements seriously. And the European Commission must monitor, evaluate and enforce such implementation.

Smart meters and other communication tools can also help tenants understand and act on their energy consumption before the bill arrives, when it's already too late. In Spain, ECODES pioneered a project to encourage efficient energy consumption and expense control for families, especially the most vulnerable, through a prepayment system of electricity through smart meters, where participants were texted weekly to let them know about their consumption⁵⁷.

Citizens-led projects

Community heating and cooling projects (CH&C) are thermal energy systems owned by its participating citizens, as well as any other participating members such as municipalities, or SMEs. CH&C projects are often among the cheapest and most durable heating and cooling solutions, as they focus on social and environmental benefits such as thermal well-being, rather than profit maximisation. This allows energy cooperatives and energy communities to be inclusive towards lowincome households, who often lack the resources to switch to renewable heating and cooling. CH&C projects by energy communities have a democratic ownership, provide value to the community, and are not-for-profit. However, these citizenowned projects often face barriers to their uptake, especially for young energy cooperatives who often lack administrative and financial capacity to carry out such projects, which are typically complex and capital-intensive.

In the Netherlands, ThermoBello⁵⁸ developed a low-temperature district heating project in 2009. They used the thermal energy from a drinking water basin, by cooling it down with a heat pump to provide heating to +200 homes, two schools, and two office buildings.

Also in the Netherlands, the residential area of Duinwijck in the Netherlands is using solar thermal collectors⁵⁹ and storage to aid the phase out of fossil gas in their community. Citizens, municipalities and a foundation all participate in the project.

⁵⁶ European Union. Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast) (Text with EEA relevance). 13 September 2023.

⁵⁷ <u>Ecodes. Familias de Calatayud experimentan por primera vez en España el prepago de electricidad.</u>

⁵⁸Thermo Bello

⁵⁹ Solar thermal energy installation is the most economic H&C solution, and the one perceived as having the lowest risk: <u>European Commission</u>. <u>Overview of Heating and Cooling: Perceptions, markets and regulatory frameworks for decarbonisation</u>. <u>August 2022</u>.

Making Renewable Heating Accessible and Affordable

In Belgium, EcoPower⁶⁰ recovers the heat from a nearby company producing X-ray films, and will supply it to 340 homes, four SMEs, and the x-ray film company by 2026. Similarly, Beauvent⁶¹ is building a heat network running on geothermal energy

in combination with a heat pump. This project will provide citizen-owned heating and cooling to a center for psychiatry and psychotherapy, in combination with historical buildings.

⁶⁰ Ecopower

⁶¹ Beauvent

Conclusions

The aim of this briefing is to show that despite the landlord-tenant dilemma, it is possible to make renewable heating accessible and affordable in the rental sector. While specific tools tailored for the rental sector will be needed, a significant part of the solution involves ramping up existing efforts, accompanied by social safeguards. This includes implementing policies, financial incentives, and planning instruments that encourage renewable heating for all property owners.

The promotion of decarbonised social housing is also crucial in this regard, along with market aggregation for retrofits in social housing and other segments to provide affordable and decarbonised housing stock.

Equally important is providing information to facilitate public engagement in the energy transition. The emphasis being on showcasing how building and heating decarbonisation can promote social justice. Creating more energy efficient homes, saving energy and money, while protecting the right to a comfortable and healthy living environment for all.

In line with what has been described throughout the present briefing, EU institutions, and national, regional and local Governments should follow these key recommendations to make renewable heating accessible and affordable for all, including the rental sector, while overcoming market barriers:

Recognise the landlord-tenant dilemma:

> Acknowledge the split-incentive situation known as the landlord-tenant dilemma, where tenants have little control over their accommodations' heating installations, and landlords often lack the incentives and support to invest in renewable heating systems.

Ramp up efforts for the whole building stock:

> Continue efforts that support renewable heating across the entire building stock (e.g. Minimum Energy Performance Standards, phase out of fossil-fuel boilers), even if they do not specifically target the rental sector. This approach creates a broader market for renewable heating, reduces costs through economies of scale, and improves investment decisions for all building owners, including landlords.

Prioritise social housing providers:

> Recognise social housing providers and rental agencies as key players in the transition to renewable heating. Encourage these entities to play a crucial role in providing affordable, quality housing with renewable heating solutions, particularly for the most vulnerable populations.

Expand markets through innovation:

> Aggregating demand for energy retrofits (including renewable heating solutions) in the social housing sector would help increase the number of people that benefit from them. This approach addresses supply-side barriers, such as lack of skilled workers and supply-chain issues, while prioritizing vulnerable populations.

Adjust existing policy tools for the rental sector:

> Tweak existing renewable heating policy tools to make them more suitable for the rental sector. Develop new measures tailored to address the specific challenges faced by landlords and tenants, while ensuring that social safeguards are in place to protect tenants.

Empowering and activating local communities:

> Facilitate access to information on existing tools (e.g. Energy Performance Certificates) and provide independent guidance (one stop shops) to both landlords and tenants. Raise awareness of the benefits of renewable heating, reduce administrative burdens, and ensure informed decision-making. Community heating and cooling projects are part of the solution, showcasing democratic ownership and a not-for-profit approach to offer cost-effective thermal solutions to communities.





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