European Federation of Public, Cooperative and Social Housing

Housing Exchanges

A webinar mini-series for Housing Europe members

7th September 2020

The Cost of the Renovation Wave



HOUSING EUROPE The Cost of the Renovation Wave

Contents

Introduction to the Renovation Wave
with Julien Dijol – Policy Director at Housing Europe
Context
What is the cost of the renovation wave for social hosing providers in different national contexts? – Housing Europe member's investment needs and opportunities to finance the renovation wave. 4
<i>Social target versus financial means</i> study in The Netherlands – The Association of Housing Corporations (AEDES) – with Jeroen Pepers, Director of AEDES
The Danish Green Housing Agreement for Renovation – Boligselskabernes Landsforening (B.L) with Solveig Råberg Tingey – Head of Economic Affairs Head, B.L
Österreichischer Verband Gemeinnütziger Bauvereinigungen (GbV) – Austria with Gerlinde Gutheil-Knopp-Kirchwald – Housing Economist, GBV 8
The French Recovery Plan 2021-2023 – L'Union Sociale pour l'Habitat (USH) with Carine Puyol, responsible for EU Affairs at USH 10
A <i>Split Incentive</i> model to finance Flemish renovation – Association of Flemish Social Housing Companies (VHH) – Belgium with Björn Mallants – Director, VVH 10
Questions and Answers
Conclusions 11

Summary

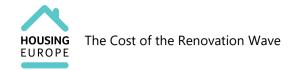
A Housing Europe MEMBERS' webinar to discuss the funding gap that different public, cooperative and social housing providers face in decarbonising their building stock and the potential impact that the 'Renovation Wave' will have on the affordability of housing, retrofitting and new construction.

Webinar moderation by Julien Dijol, Policy Director at Housing Europe. **Report edition** by Clara Mafé, Junior Project Manager at Housing Europe.



HOUSING The Cost of the Renovation Wave EUROPE

The European Federation of Public Cooperative and Social Housing 18, Square de Meeûs, B1050, Brussels Tel: +32 2 541 0561 info@housingeurope.eu - www.housingeurope.eu



Introduction to the Renovation Wave with Julien Dijol – Policy Director at Housing Europe

The European Commission is currently in the final stages of the preparation of its Renovation Wave strategy, which will formally be launched, albeit after a slight delay, on the 14th October. It is therefore essential to visit again the question of the financial viability of the initiative for public, cooperative and social housing providers at this very moment.

The objective of this webinar was to collect information and evidence on the funding gap and the challenges in bridging the difference between the cost of investment on renovation and the available financial resources of social housing providers.

Back in 2019, in its <u>European Green Deal Communication</u>, the European Commission said:

To address the twin challenge of energy efficiency and affordability, the EU and the Member States should engage in a renovation wave of public and private buildings (...) Particular attention will be paid to the renovation of social housing to help households who struggle to pay their energy bills.

What becomes clear form this statement is that the Renovation Wave will be an initiative that will put social housing right at its centre.

The European Commission might also use the Renovation Wave's momentum to propose new legislation in relation to energy efficiency in social housing. It is for this reason that Housing Europe has been actively engaged in regular discussions with the different Directorates involved in the drafting of the Renovation Wave to ensure that the needs of the public, cooperative and social housing providers are properly acknowledged, considered and eventually integrated into the initiative.

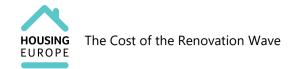
Context

Social, public and cooperative housing providers are front-runners in the transition to an energy-neutral building stock. They operate on the nexus of 'social' and 'green' policies and are therefore key actors for making the 'Renovation Wave' a success.

The *raison d'être* for social landlords remains offering housing which is affordable for those on low and moderate incomes. This implies that at least part of the investment in upgrading the energy performance of buildings cannot be earned back by increasing rents. This funding gap poses a challenge for the financial position of Housing Europe members and their ability to invest in decarbonised homes.

In the Netherlands, the Dutch association of social housing providers, AEDES, conducted a study together with the national government to analyse whether social housing providers have sufficient financial means available to build, improve and make enough homes sustainable in order to meet their ambitions. This study reported that by 2035 the funding gap in this regard will be €30bn.

This is reminiscent of the experience of many British social housing providers back in 2012. The 'UK Green Deal' shows that the Renovation Wave may eventually become an overly complicated process leading to poor quality work.



What is the cost of the renovation wave for social hosing providers in different national contexts? – Housing Europe member's investment needs and opportunities to finance the renovation wave.

Social targets versus financial means study in The Netherlands – The Association of Housing Corporations (AEDES) – with Jeroen Pepers, Director of AEDES

Access AEDES presentation here.

The study was carried out by AEDES together with three Ministries of the Dutch government - Interior Affairs, Economic Affairs and Financial Affairs. The aim was to provide an overview of the complete targets of the Dutch social housing sector and the financial means available to it to fulfil them against the objectives set by the <u>Paris Agreement</u> and the <u>Renovation Wave</u> for 2050.

Data on investment and cost of renovation of social housing was collected in a joint fact-finding process together with a set of policy options and their potential impacts in addressing the financial gap towards the future and generate clear information for decision-making were outlined.

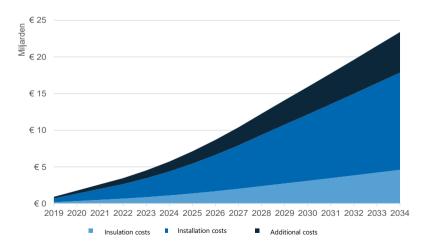
To calculate the needs of the Dutch social housing providers, the costs for the next five years were estimated, along with the costs incurred in the last year, including:

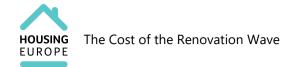
- Stock development: new construction (housing shortage), new construction as replacement for demolition, demolition, adaptation for housing-healthcare and sale.
- Renovation: insulation and natural gas free (renewables).

The European Federation of Public Cooperative and Social Housing 18, Square de Meeûs, B1050, Brussels Tel: +32 2 541 0561 info@housingeurope.eu - www.housingeurope.eu On average, Dutch housing associations have to build 25,000 dwellings a year until 2035 (a total of 378,400 dwellings). The demolition and new construction will account to nearly €75bn gross.

On building renovation, the sector will need to invest approximately €25bn to cover the costs of new insulation, the installation of renewable energy sources (heat pumps, mechanic ventilation or district heating connection) and other additional costs. In this case, the investments amount to nearly €2bn annually (see Figure 1). However, new installations require regular maintenance and replacement, for which housing providers keep specific reserves annually. As a result, costs of maintenance remain one of the main financial bottlenecks because of the cashflow restrictions they imply.

Figure 1 Social housing renovation costs





In the Netherlands investment in the social targets varies regionally, with higher investment rates in the west of the country, both for new construction and renovation in absolute and relative terms. Renovation efforts are concentrating mainly in the U16 and Food valley regions.

When looking at the investment cashflows of the sector, the required annual investments will reach the \notin 9mn in 2029 and the total target until 2035 will be \notin 116bn. The capacity to invest in the dwellings will diminish drastically over the next 15 years if the costs are not reduced (see Figure 2).

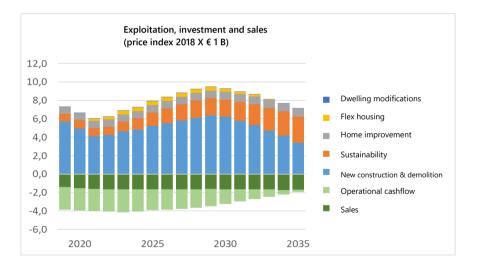


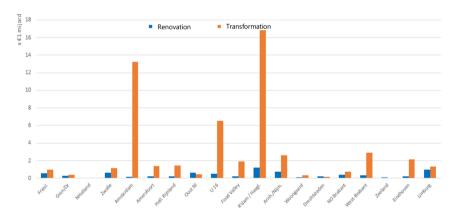
Figure 2 Social investment cashflows

One of the most relevant conclusions coming from the study is that only a few regions in the Netherlands can realise the social target until 2035. A total of €31bn in social targets will not be able to be executed (30%). This will

The European Federation of Public Cooperative and Social Housing 18, Square de Meeûs, B1050, Brussels Tel: +32 2 541 0561 info@housingeurope.eu - www.housingeurope.eu mean a shortage of 50,000 renovated buildings and a housing shortage of 126,000 dwellings (see Figure 3).

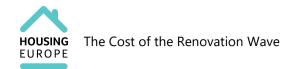
Fast-forwarding to 2050, not a single region in the Netherlands will be able to fulfil its social target. The shortfall in available funds compared to required investments will be nearly €75bn (46%). This will mean that there will be a 275,000 shortfall in renovations and a housing shortage of 205,000 units (see Figuer 3).

Figure 3 Regional backlog



In a nutshell, the main conclusions of the study are:

- The cost of renovation to meet the Paris Agreement and the EU Green Deal goals is substantial.
- Investment in renovation of social housing implies high installation costs, of which maintenance costs represent a big share.



- Housing affordability, access to social housing and the Renovation Wave are three goals that need to be delicately balanced. The Dutch government and European Commission need to understand this.
- The social housing sector must not be unfairly burden by the cost of the renovation of dwellings.
- In the Netherlands, the study shows that it will not be possible to meet all three goals on time.

Additional information

From the Dutch study, maintenance has been identified as the highest type of costs. How have the rents been affected by the renovation?

Rents are cost neutral for tenants, meaning their increase should not be higher than the reduction in the energy bill. The maintenance costs are directly pressing on the cash flow and the ability of social housing providers to invest.

How are the average costs from the study calculated?

The average costs had to be agreed with by the three ministries. They wanted to use the costs defined by the Dutch <u>Environmental Planning Bureau</u>.

Have you done the analysis on average cost at building level or based on component costs?

A rough guideline was made for every building in the Netherlands (on basis of specific elements and location of the building) and the most probable

solution in term of climate renovation. After that an average cost in terms of the different solutions was used.

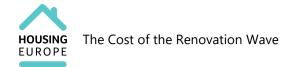
The Danish Green Housing Agreement for Renovation –
Boligselskabernes Landsforening (B.L) with Solveig Råberg Tingey –
Head of Economic Affairs Head, B.L

Access B.L presentation here.

In May 2020, the political parties in Denmark agreed to allocate DKK30bn (\notin 4 B) from the National Building Fund (NBF) to renovation of social housing during the period 2020-2026. DKK18.4bn (\notin 2.4B) will be used to renovate the 72,000 social housing dwellings already in the fund's support queue – many tenants have waited for up to 10 years for renovations, since the annual need for renovations has consistently been larger than the annual financial resources allocated by the public authorities.

The remaining DKK11.6bn (\in 1.5bn) will serve future renovations until 2026, with a focus on the green transition.

The NBF is used to finance both the construction of new social and affordable housing and the renovation of existing properties. The use of funds is regulated by the state who determines how much the funds can dedicate and to what extent offer their support. The funds are supported by rents from the tenants (1/3 of the rent goes to the NBF) and loans from local authorities. These funds are then invested into renovations, improvements and social masterplans. Renovation and improvement work relate to the physical transformation of an area and involves the renovation of dwellings, the surrounding re-creational area and even the urban structures or movement patterns when needed. On the other hand, social masterplans supported by NBF focus strongly on promoting employment in targeted



areas. They are locally designed programs organised in partnerships between housing organizations and municipalities to address segregation and exclusion in vulnerable housing areas. The most frequent activities in the social masterplan cover leisure jobs, homework cafes, pocket money activities, housing social clubs, job and education guidance, etc.

Housing associations can apply for funds from the NBF which allows for the effective self-financing of the social housing sector in Denmark.

The investment frame of the NBF in social housing has been around DKK2bn a year, with a slightly higher amount in 2012, just after the financial crisis of 2007 (see Figure 4).

The state has used the NBF as a counter-cyclical mechanism in times of recession to trigger economic growth by allowing for more renovation work to be funded and generating more jobs in the construction sector. Now, the Danish government has used the NBF to fund more renovation work in social housing and create more jobs in the current economic contraction caused by the pandemic.

The Danish proposal for a green recovery implies important savings in CO2 emissions, reduced energy bills for tenants and job creation in the construction sector.

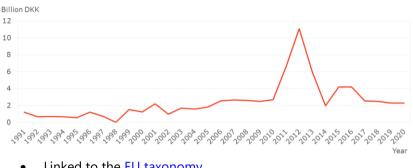
Figure 4 NBF's annual investment into the renovation of social housing.

Environmental

• 2/3 of the projects in the renovation gueue relate to climate proofing (facades, roofs and windows) and will thus reduce heat consumption and increase energy savings.

info@housingeurope.eu - www.housingeurope.eu

Reduction of up to 50,000 tonnes of CO₂ yearly.



Linked to the EU taxonomy.

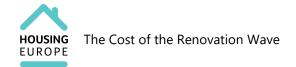
Social

- Lifting older properties to modern energy standards can lead to heat savings of about 30-40%.
- Potential to increase housing affordability and reduce energy poverty in thousands of public homes.
- Internship requirement (14 percent of the employees).

Economic

- By 2020, the proposal is estimated to provide 3,300 full-time jobs in the construction sector and 7,800 in 2021.
- Increases focus on digitisation for example, gathering better data ٠ on energy consumption.

Although the current renovation proposal gives priority today to those renovation projects in most urgent need, in the future, urgent and green



initiatives must go hand in hand and it is estimated that 85-90% of new projects will contain green initiatives:

- Requirements for green screening of renovation projects in the support queue.
- Green reassessment of projects with great energy efficiency potential.
- A green guarantee scheme under NBF, which can increase the incentive for more energy renovation work in projects without support from NBF.
- A special pool is set aside for sustainable investments in, for example, recyclable building materials, digital management of energy consumption and improvement of the indoor climate.
- Österreichischer Verband Gemeinnütziger Bauvereinigungen (GbV) – Austria with Gerlinde Gutheil-Knopp-Kirchwald – Housing Economist, GBV.

Access GBV presentation here.

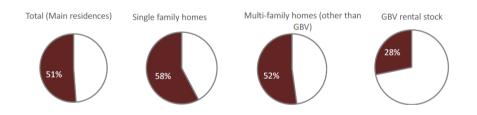
In Austria, most homes were built before 1980 and a total of 1 million homes are in need of renovation or re-construction (42%) (see Figure 5). Of the social rental stock owned by GBV's members, 96% of the buildings have already been renovated, re-built or are only newly constructed.

Figure 5 Share of units that have not yet been thermally refurbished

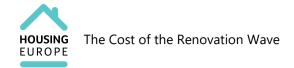


Looking all main residences in Austria, there are a total of 2 million homes with a fossil fuel heating system (oil, gas, electricity from non-renewable sources), in need of de-carbonisation (see Figure 6).

Figure 6 Share of all main residences with fossil (oil, gas, electricity) heating system



The total investment cost of renovation and thermal insulation in Austria for multi-family houses amounts €7bn (250,000 units built before 1980 are not yet renovated) and €200mn in GBV rental stock (8,000 units built before 1980 not yet renovated).



The replacement of fossil heating systems and the installation of PVs accounts for \notin 4.8bn for multi-family housing (807,000 units with oil or gas heating). In the GBV rental stock this accounts for \notin 800mn (133,000 units with fossil heating; mostly gas).

Most pre-1990 social housing owned by GBV has already been renovated – considering a renovation cycle of 30-35 years. The current level of renovation is around 8,000 buildings per year, although post-1990 stock is due to be renovated – considering that the average construction per year for a social housing provider in 1990 was around 13,000. The renovation rate of GBV is expected to increase and the ratio C02 reduction/€ invested will decrease.

Renovation is a key part of GBV's business model thanks to **GBV's Renovation Fund** (EVB: Erhaltungs- und Verbesserungsbeitrag) where part of tenants' rent goes into a deposit fund dedicated to building renovation. The fund is allocated depending on the age of the building¹ and it prevents rent increases due to renovation.

A Mandatory Renovation Deposit, inspired by the GBV Renovation Fund, is now being discussed in the amendment of the Austrian 'Condominium Act'.

Overall, Austrian social housing providers in GBV have a sound financial basis to upkeep and renovate their rental stock. However, there is evidence that financial gap is rising:

- Increasing costs for deep renovation and maintenance.
- Regulatory barriers (esp. for exchange of de-centralized heating systems).

- Large investment gap in condominium houses.
- Need for adaptation to climate change.

Although the biggest challenge for the de-carbonisation of the building stock in Austria is in the privately owned houses and apartments.

Since May 2020, Austrian social housing providers can also benefit from public funding mechanisms for renovation such as the national "Oil Exit Bonus", a renovation cheque for private homeowners and housing providers (rental apartments and condominiums) that includes ≤ 100 mn per year for the replacement of oil boilers and ≤ 42.7 mn for renovation with a maximum of ≤ 5 000 per unit. On the contrary, most investment programmes with EIB (commercial banks + EIB) have mainly been focused on new construction thus far.

All of this being considered, GBV have very concrete needs to help bridge the financial gap in Austria and achieve the Renovation Wave objectives:

- Creating and securing funds that enable a fair and affordable energy transition in housing.
- District/neighbourhood approach for energy efficiency.
- Fair and easy access to (EU and national) finance schemes for social/affordable housing providers.
- Not a "one size fits all" approach for renovation, but according to regional/sectoral needs: in Austria, focusing on the replacement of the heating systems, in terms of energy efficiency of the building envelope the homework is done.

¹ From 0.53 ct/m²/month (ys 1-5) up to 2.13 ct/m²/month (from year 30 onwards).

HOUSING The Cost of the Renovation Wave

The French Recovery Plan 2021-2023 – L'Union Sociale pour l'Habitat (USH) with Carine Puyol, responsible for EU Affairs at USH.

Access USH presentation here.

In early September, the French Government presented their <u>National</u> <u>Recovery Plan 2021-2023</u>, a mechanism which has to be adopted by all EU member States by October 2020. The French Recovery Plan involves €100bn to support green policy, competitivity and social cohesion - 40% of which will be financed by the European Union.

Energy renovation in buildings is one of the top priorities of the Plan, accounting for a total of \in 6.7bn, which will be distributed as follows:

- Renovation of private buildings: €2bn
- Renovation of public buildings: €4bn (i.e. Universities, schools, hospitals, administrative buildings, etc.)
- Renovation of social housing: €500mn
- Renovation of SME's: €200mn

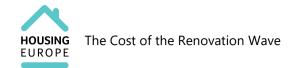
In the renovation of social housing, €40mn will be dedicated to a call for proposals to support the renovation of 10,000 social housing units with industrial solutions to achieve a higher energy performance by 2021 taking the <u>EnergieSprong France</u> standards as a benchmark. However, deep

renovation of social housing France has intended impacts beyond energy performance:

- A CO² emission decrease.
- Adapting housing to population needs with restructuration.
- Adapting housing to ageing population.
- Decrease of cost of renovation (€100,000 / houses to €70,000 euros) with industrial solution
- Support to SME's.
- Increase the attractiveness of the social housing stocks in shrinking territories.
- A Split Incentive model to finance Flemish renovation Association of Flemish Social Housing Companies (VHH) – Belgium with Björn Mallants, Director at VVH

According to VVH estimations on the investment need for renovation for 2020-2024, \notin 970mn would be needed for the replacement construction of 6,853 homes and \notin 1.5bn for energy renovation works on 33,110 homes. This amounts for a total of \notin 2.7bn together with other smaller renovation works.

One of the solutions that Flemish social housing is putting forward to bridge the gap between social rents and renovation costs is the so-called 'Split Incentive' model, a self-financing mechanism to become more independent from public subsidies.



The model consists of increasing the social rent as much as the energy savings received as a result of the renovation - operating on the principle that energy savings must always be higher than investment costs.

According to Flemish Housing Law, the costs that social housing providers can charge to tenants are subject to conditions. For instance, changes in the law enable social housing providers to recover investment costs for renewables such as financing costs, installation or maintenance (enabled by Parliamentary Decree 2018 and Government Decision 2019). Similarly, real time monitoring and monthly correction to ensure net benefit to the tenant is also required by law:

- Max. 80% of effectively installed production capacity PV (1,8 2,7 kWp) at social tariff.
- This is the only cost tenant 'has' to pay (very low rates and also small production capacity).
- Due to new digital meters, the social 'advantage' ('*prosumententarief*') for low income tenants has disappeared.

More creative solutions like the Split Incentive model of the Flemish social housing federation could inspire other national contexts in addressing the financial gap that building renovation might bring.

Conclusions

The draft of the Renovation Wave will be published on the 14th of October, representing the flagship of the 'EU Green Deal'. The European Commission has increasingly shown its interest in the renovation of social housing in this regard.

Overall, the Renovation Wave is being closely watched by many sectors, with a strong push for more obligations (renovation rates and standards) in recognition of the key role that buildings have to play in meeting the climate and environmental goals. However, little consideration has been given to the social impact and the burden that this might have on some sections of society.

Investment in social housing can achieve many goals: it can generate jobs, it can address fuel poverty, as well as meeting climate goals and the sector is willing partner in this, fully aware of its responsibilities.

The European Commission as a public entity has to consider both the social and environmental impact of its work.

We are still in a situation where long-term public funding is needed for the renovation of the building stock and to play a counter-cyclical role for the economy.