

# ON-BILL SCHEMES TO SUPPORT MEMBER STATES IN IMPLEMENTING THEIR RECOVERY AND RESILIENCE PLANS



September 2021

## POLICY BRIEFING

### National recovery and resilience plans

[NextGenerationEU](#), a temporary recovery instrument proposed by the European Commission in 2020, was established to tackle the severe effects of the COVID-19 crisis by offering Member States €750 billion of aid to boost the recovery of the EU economy in a sustainable way. The Recovery and Resilience Facility (RRF), one of the NextGenerationEU cornerstones, supports investments by making €672.5 billion of loans and grants available to Member States. To apply for funds offered by the RRF, Member States must prepare and submit their recovery and resilience plans (RRPs) to the European Commission.<sup>1</sup>

While preparing their RRP, Member States should be ready to demonstrate their commitment to a green transition as one of the pillars of the Annual Sustainable Growth Strategy 2021. Commitment to the green transition principle requires countries to accelerate the reduction of greenhouse gas emissions through fast deployment of renewable energy and increased energy efficiency of buildings. In addition, each RRP should use at least 37% of its expenditures for covering climate investments and reforms. The strategy also states that by means of job creation, savings on energy bills and reduced energy poverty, building renovation is expected to be an indispensable support to the economic recovery. Regulatory reforms are considered necessary for making these investments by Member States possible and sustainable.<sup>2 3 4</sup>

At the time of writing this paper,<sup>5</sup> almost all Member States have submitted their national recovery and resilience plans to the European Commission for further assessment, which implies the RRP implementation phase will soon begin. It is indicative that in their plans, Member States pay significant attention to renovation of buildings and usually count on between 5 and 15% of the RRF grants provided to each of them for this purpose.<sup>6</sup>

1 Member States are invited to notify their plans until mid-2022.

2 [Annual Sustainable Growth Strategy 2021](#)

3 [Council approves conclusions on an EU renovation wave](#)

4 [Renovation Wave: doubling the renovation rate](#)

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6 [National recovery and resilience plans](#)

## Role of governments

Soon after they become officially approved, RRFs will be converted to legally binding acts that will fall under the competence and responsibility of national governments in each Member State. National governments will then have the important task of mobilising the funds provided by the RRF and investing in accordance with the submitted plans.



**In its recovery and resilience plans guideline, the European Commission identified renovation as one of the priority areas, and on-bill schemes as an important measure that could be promoted in these plans.**

To achieve these goals, national governments should strongly promote building renovation activities among all potential stakeholders. Given the wide range of building renovation stakeholders, governments will have to focus with equal attention on both the demand and supply side of energy renovation.

## On-bill schemes to support the implementation of RRFs

On-bill schemes are an innovative way of financing energy renovation of buildings. They rely on the utility bill as the repayment vehicle, and therefore on strong involvement of utility companies in the investment cycle. There are two main on-bill mechanisms: on-bill financing and on-bill repayment. In each of these mechanisms a utility company holds a central position as the demand aggregator and, in the case of on-bill financing, also as the investor. More about on-bill schemes can be found in the [RenOnBill policy briefing 'On-bill schemes to deliver the Renovation Wave and economic recovery'](#) which covers this topic in detail.

An important feature of on-bill schemes is that they can be easily applied to residential buildings, which implies a high potential for supporting renovation uptake and improving renovation rates. Based on the important role utility companies play, it is clear that one of the key elements for fully deploying the potential of on-bill programmes is to promote them among utility companies and support the companies in developing their on-bill offers.

### Purpose of the paper



This paper will explore some of the critical challenges utilities may face when preparing for and utilising on-bill schemes. The paper will also propose actions national and/or local governments in EU Member States may take to mobilise utility companies to adopt on-bill schemes as a strong support to the implementation of national recovery and resilience plans.

# KEY CHALLENGES AND BUSINESS MODELS FOR THE IMPLEMENTATION OF ON-BILL SCHEMES BY UTILITY COMPANIES

## Utilities and on-bill schemes

On-bill schemes offer different potential advantages to utility companies. To note a few, on-bill projects usually imply long-term commercial relationships, increase the market coverage and boost customer loyalty. In addition, utilities would be able to diversify their business offerings by including energy efficiency in their services package, generating synergies with financial institutions and simplifying value chains,<sup>7</sup> resulting in more profitable investments.

In the US, on-bill programmes have been in use for over 30 years, resulting in over US\$2 billion<sup>8</sup> in projects. One of the main reasons for this success is strong legislative support that promoted on-bill schemes among utility companies. According to recent studies, more than 20 states are home to utilities that have implemented or are about to implement on-bill financing programmes, many of which have legislation in place that supports adoption in various ways. Some states even require utilities to implement on-bill programmes. In New York, for example, legislation has enabled utility companies to receive funding to update their billing systems.<sup>9</sup>

## Challenges for adoption of on-bill schemes

When applying an on-bill model, a utility company may face different operational, policy and other obstacles. Some of the most important examples of these are listed below.

### Fragmentation in the decision-making process for undertaking energy renovation

In general, collective decision-making for energy renovations in multifamily buildings is a long and complex process, involving multiple stakeholders. This makes it difficult for a utility company to engage such a building and successfully negotiate the renovation deal. Decision-making may be even more complex in the case of buildings where a large number of residents own their own apartments but parts of the building and communal areas such as gardens are jointly owned.

These collective decision problems are even more significant in buildings with a mixture of owner-occupants and tenants, or where the payback time is an issue, as in buildings with a high share of elderly people or owners who expect to move soon.<sup>10</sup> One way or the other, different residents (i.e. decision-makers) may have different views on what the investment should cover, how much it should cost and how it should be financed, or how it should be implemented.

7 Simpler value chains are typical for on-bill financing.

8 <https://www.aceee.org/toolkit/2017/02/bill-energy-efficiency>

9 [On-Bill Financing: Exploring the Energy Efficiency Opportunities and Diversity of Approaches](#)

10 [Energy renovations of EU multifamily buildings: do current policies target the real problems?](#)

## Customers' credit capacity

Residents on low incomes have less potential to raise funds as their low credit capacity makes them equally unattractive to financial institutions or utilities. Low credit capacity results in high-risk profiles of these customers and a high risk of their default on debt servicing. This high risk of default may significantly reduce the financial attractiveness of an investment, and therefore prevent utilities from developing on-bill products for these target groups.

Another important obstacle linked to this issue is that in some cases governments may be ready to subsidise only large-scale renovations. Since low-income households can usually afford only small-scale interventions, such a strategy may exclude them from governmental support schemes. As a result, utilities will remain exposed to the previously mentioned high risk of customer default, and consequently will be less interested in offering on-bill schemes to low-income customers.

## Utilities' level of expertise in building renovation

As a result of their existing business models and services offered, utilities may be skilled only in specific types of energy renovations. Examples may include replacement of boilers or installation of solar PV systems that can be fully implemented by the utility's in-house technicians and installers. However, in the case of deep renovations, utilities may lack the necessary skills, which is why they would need either to partner with specialised companies or simply exclude deep interventions from their on-bill offers. It should be mentioned that partnering may reduce the financial attractiveness of on-bill investments for utilities, which would again limit their on-bill offer to simple building renovation only.

## HOW CAN GOVERNMENTS HELP?

Although utilities could try to overcome some of the barriers by adjusting their business models, this may not always be possible nor compelling. In these cases, the challenges explained above may be powerful enough to prevent a utility from adopting on-bill schemes. Legislative support from local/central governments could play a crucial enabling role.

The RenOnBill project, funded under the EU's Horizon 2020 programme, explores different on-bill business models that can be adopted by utility companies. Research by RenOnBill highlights the following actions to be undertaken by governments to enable effective adoption of on-bill schemes among utilities.



### Empowering building owners

In order to foster energy renovation decision-making, governments could introduce new, or amend existing, housing laws to address some of the barriers mentioned above. To support decision-making, updated regulations could lower the share of positive votes in a multi-family building required for a decision on energy renovation. For example, the share of positive votes could be reduced from 2/3 to 50%+1, or from 50%+1 to an even lower share, keeping in mind that current majority rules may differ widely across countries.

Such an update would significantly improve the speed and reduce the complexity of investment-related decision-making. If the share of positive votes is reduced, special attention should be devoted to the effect on the financial position of vulnerable residents.

In addition, national governments could increase awareness among residents and related homeowners' associations regarding their role in decision-making, design, financing and implementation of energy efficiency retrofits. Once properly aware of different aspects of the energy renovation process, residents of multi-family buildings should have a much better understanding of various energy renovation benefits and should be able to find common interest in energy renovation more easily.

## **Setting up national/municipal guarantee funds**

Local or central governments could set up specific on-bill guarantee funds (using RRF funding) that would complement financing provided by utilities or commercial banks. This could be done by fully or partially covering the losses utilities or commercial banks may face in case of customer default on debt servicing. In this way, national authorities would be able to significantly offset weak credit capacity among low-income homeowners, who could then become a valid market segment for the on-bill schemes offered by utilities.

Significantly, local authorities would not bear the full weight of financing these funds but could rely on participatory funding. For instance, some municipal revenues, potentially building performance related (such as energy performance taxation), could be used for this purpose. In addition to supporting the utilities this would also encourage citizens to reconsider investing in energy efficiency, and indirectly create demand for on-bill schemes.

## **Increasing competence of small utilities**

National governments could start with establishing programmes to provide training and promote skills among small utility companies that would help them expand their building renovation area of expertise and ability to deliver quality renovations.

These programmes could focus on increasing utilities' skills in the field of building performance, energy efficiency of different energy systems, or digitalisation issues. Examples include trainings on assessments of building energy performance, such as [energy performance of buildings standards](#), or on innovative renovation measures, including use of advanced materials, heat pumps and on-site renewable energy systems. In addition, training programmes can be organised in a way that, following their successful completion, utilities and their designers/installers become certified in the respective fields of energy renovation, which would allow their better positioning in the market and fulfilment of the standards required by relevant legislation.

## CONCLUSION

On-bill schemes are a useful tool and concept that can help Member States roll out impactful renovation programmes. This is especially relevant as the implementation phase of the RRP starts, and where a strong focus on building renovation means that ready-to-use and effective instruments should be accessible to national authorities as well as stakeholders. On-bill schemes can help in that process, but for that to happen, governments need to enable their adoption by utilities.

**This paper has suggested three areas of work which would truly leverage the recovery funds in favour of renovating the building stock in Europe:**



**Empowering  
building  
owners**



**Setting up  
national/municipal  
guarantee funds**



**Increasing  
competences of  
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## GLOSSARY

<b>Recovery and Resilience Facility (RRF)</b>	A temporary European Commission instrument to raise funds and help repair the economic and social damage from the COVID-19 pandemic.
<b>Recovery and resilience plans (RRP)</b>	Plans prepared by Member States to explain how they would benefit from the Facility. A plan should explain reforms and investments to be implemented by end of 2026.
<b>On-bill scheme</b>	A method of financing energy efficiency improvements using the utility bill as the repayment vehicle.
<b>Utility company</b>	A company which supplies utilities, such as gas, electricity, water, phones and similar.
<b>Energy performance taxation</b>	Taxation imposed by governments on production, distribution or consumption of energy, electricity or fuels. Such tax makes energy more expensive, which encourages people to use less energy
<b>Credit capacity</b>	The borrower's ability to repay a loan. Usually addressed by comparing borrower's income against their recurring debts.



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No #847056.

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