

he residential sector accounts for 29% of final energy consumption in France. The energy-efficient retrofit of this private residential stock, representing 82% of french dwellings, is an important issue that Government and Regions have to tackle to implement their energy transition policies.

The residential retrofit market is diffuse and most individual owners are non-professional, having to work with SMEs — which make up 90% of firms offering home renovations — who are not spontaneously changing their day-to-day practices to make renovation easy. Therefore we ask:

- What is needed to enable home renovation projects at a scale to achieve energy savings which are consistent with the target of reducing by 40% GHG emissions in 2030 compared with 1990 level?
- How also do we maximize the collective benefits from public funding of the renovation of private dwellings?
- What conditions can be established so that households want and can afford to invest in energy-efficient
 works and can they be encouraged to change their energy consumption patterns, thus maximizing
 collective benefits?
- Finally, how can we ensure that energy-efficient retrofits grow in number and are financed by homeowners for their direct benefits with gradually less and less public intervention?

A group of experts from the renovation market, and from finance, was created with the support of the European Climate Foundation (ECF) to address these questions. This group worked using as a basis the platform created by the EU's EEFIG (Energy Efficiency Financial Institutions Group), supported by the European Commission and UNEP FI (United Nations Environment Programme Finance Initiative). The EEFIG provides a basis diagnosis for countries like France and an opportunity to compare insights with institutional investors and lenders on their role in the provision of long-term funding for energy efficiency projects. The EEFIG rapporteur from Climate Strategy also joined the French group.

UNEP FI was involved in the French working group and, in parallel published a sustainable real estate investment framework, co-authored by the EEFIG Rapporteur, that was launched in France in April, 2016. UNEP FI is supporting the deepening and enhancement of the proposals launched by the French working group through the PUCA (Plan Urbanisme Construction Architecture) experimental programme.













PUBLIC INCENTIVES TO ENERGY-EFFICIENT RETROFITS ARE INSUFFICIENT TO SHIFT SUPPLY AND DEMAND

There are many financial incentives and subsidies aimed at stimulating demand for energy-efficient renovation of private housing are complicated for households, with different criteria and application processes. The situation is even more complex for condominiums due to their legal status of shared ownership, which often makes it more difficult and time-consuming to obtain a consensus among owners. The role of local Energy Efficiency Offices ('Espaces Info Energie') which have been available to consumers for many years, should be strengthened with the deployment of additional services: "Local Platforms for Energy-Efficient Renovation" (Plateformes Territo-

riales de la Rénovation Energétique) introduced by the Energy transition law passed in August 2015 in order to enhance the public service through accompanying households until the execution of works.

On supply side, the technical capacity to undertake coordinated works with an energy performance target is concentrated in a small number of actors. Training programmes have a limited ripple effect as craftsmen and SMEs may "spend" resources in training only if they foresee a quick return from it, such as an increase of profitable activity.

SOLUTIONS OFFERED BY REGIONS AND LOCAL COMMUNITIES

Regions and local communities are considering 3 main tracks in order to grow the energy-efficient retrofit market in their territories:

- **1.** To extend subsidy schemes to households whose income is just above ceilings considered by the National Agency for Home Improvement¹, especially within condominiums where Anah's income ceiling criterium creates a division between households who can get subsidies and those who are not eligible, that is then an additional obstacle to renovation projects;
- **2.** To facilitate loan applications through retail banking networks: this requires an understanding and consideration of banks' constraints.

Bank retrofit finance offers for individual owners consist of two kinds of loans:

- Unsecured Personal short-term loans which are easy and quick to deliver; and;
- long-term secured real-estate loans requiring a more complex process and therefore adapted to bigger amounts, generally related to home acquisitions. Such real estate loans are generally refinanced by banks through issuance of covered bonds.

The failure of the regulated zero-interest rate loan² can largely be explained to its hybrid nature between these two categories.

Regions can lever two opportunities to improve the banking network financing offers:

- At home purchase: ensure that the Local Platforms for Energy-Efficient Renovation provide a fully explained evaluation of the amount of energy-efficiency works and benefits just in time to allow the client and the bank to see the benefit and extra investment required by the energy saving works, without adversely affecting the sale process and the Bank-client relationship.
- developing local relationships based on affinity and useful investment advice which can reward banking networks.
- **3.** Create Third Party financing companies: to tackle the issue of a "turn-key" offering for efficient-energy retrofits and to grow the market with a financing offer that exceeds bank criteria.

The feedback from the working group and experimental programme³ and from EEFIG, is that a key condition to move the renovation market towards energy efficiency is a better coordination at national level of tax incentives and subsidy schemes. This needs to be coordinated with interventions of State agencies such as Anah and Ademe⁴ and with the implementation, at regional and local levels, of the concrete actions connecting craft professionals and association networks to set-up "one-stop shops" and coordinated offers (encompassing technical audit and advice, a financing plan, support to define an appropriate work programme and to select competent professionals with appropriate follow-up of energy savings after work is completed).

1. Anah = Agence Nationale d'amélioration de l'habitat.

2. Eco PTZ (Prêt à Taux Zéro).

3. Plan Urbanisme Construction Architecture (PUCA) and Plan Bâtiment Durable (PBD) under the Ministries of Housing and of Sustainable Development.

4. Ademe =
Agence de
l'environnement
et de la maîtrise
de l'énergie.

THE PROPOSALS OF THE WORKING GROUP

The three key levers identified by the working group to promote and develop the market for home energy efficiency renovation are: To give confidence to consumers in a global offering of renovation based on quality and performance commitments; To induce banks and real estate professionals to play an active role in the prescription of this offering; and to make these refurbishment works accessible to the lower-middle class, over and above existing public efforts to reduce fuel poverty.

Create a public quality and performance brand to build consumer confidence

Energy Efficient Renovation "one-stop Shops" and coordinated offers supported by local authorities can benefit from a brand promoted by the public sector, enabling consumers to differentiate these offers in the market and thereby gain a competitive advantage based on a reputation for quality and performance. This follows the approach in Germany creating the KfW Effizienzhaus brand, which makes public interventions visible and helps coordinate many aspects of the project: energy and technical standards / incentives / financing / control of works quality and performance.

This brand should be informed by and contain:

- An insurance offer providing compensation in case of poor post-renovation energy performance;
- A scheme for supporting the selection of construction companies and craftsmen and providing some control of their own pipeline and workflow, which can be supported at local level, by the Regional Council. Peer-to-peer networks may act as effective market stimulation tools. This control function can be organized by public authorities (State or local communities), and can converge with general modelling tools which can be incorporated into a housing construction and maintenance log, as provided by the Energy Transition Law.

Calibrate progressive tax incentives to promote the most efficient work in terms of delivered energy savings and demand reduction

Quality control and the monitoring of renovation energy performance is fundamental to building the public brand recognition and should also be a condition of access to public support and tax incentives. Public incentives can also be fine-tuned to promote most highly energy efficient works, as in Germany, where the grant percentage of the renovation increases according to the level of energy savings resulting from the works. This gradation can also apply to the provision of energy-saving certificates (*Certificats d'économie d'énergie*), which can be focused on works which are consistent with the public brand of quality and deep energy performance. This will also increase the certificates' value and hence price. Similarly, tax credits can be supplemented by other tax schemes targeting real estate sales and renting such as a modulation of property taxes based on energy performance.

Design financial instruments to reduce fuel poverty and to extend the maturities of loan offers

The Energy Transition Law has introduced, and further specified, three financial instruments: third party-financing, a form of reverse mortgage loan assigned to financing housing renovation: the PAM⁵, and a national guarantee fund directed towards lower income households and aimed at facilitating collective loans to condominiums.

Third party-financing companies' objective is to spread loans over 20 / 25-year repayment periods and take into account energy savings in households' repayment capability assessments. This extension of repayment maturities makes renovation works affordable to 15-30% of households which are not able to repay the same amount over a 7-10 years loan (7-10 years being the most common maturity proposed by banks in order to finance renovation works).

According to the law, third-party financing companies must be supervised by local authorities. Among them, some leaders are trialling a funding model whose assets are composed of groups of loans granted to households and condominiums as part of an aggregated offer including consulting, project design, financing and the follow-up measurement of energy savings and consumption. When starting their activity, third-party financing companies will develop a track record of the performance of their loan portfolio, based on financial and energy savings criteria. Their liabilities initially will consist of equity, which should cover counterparty risk and provide opportunity for the long term refinancing

5. PAM means Prêt Avance Mutation.



of these loans. Under the Junker Plan, the European Investment Bank has opened a 400 M€ loan program for Third party financing companies, which requires a 50% co-financing, and thus targets a total budget of 800 M€. A loan portfolio of such a size would match the objective of around 20,000 renovations, targeted by leading regional operators.

At the same time, regulated loans distributed by banking networks can be restructured. The attractiveness of the zero-rate Eco-loans (Eco-PTZ) is presently weak given the very low interbank lending rate over the last 3 years. But more importantly, to grow the number of these regulated loans, as with third party funding, a lengthening of the repayment period and therefore a respective decrease in monthly instalments is targeted to make these loans more attractive, which means that banks need to access longer refinancing markets. A debt aggregation vehicle can be set up, which would refinance loans originated by third party-financing operators and banking institutions willing to diversify their sources of refinancing. It could facilitate the credit rating of loan portfolios and the structuring of green bond issuance eligible for 'environmental and energy transition' labeled funds. The seed stage of this debt aggregation vehicle and the first bonds issuance programme will require public support in the form of a full or partial guarantee (by the State or Regional Councils). This could be an extension of the guarantee fund activity introduced by the Energy Transition law and could also be funded in part by European Structural funds managed by Regional Councils.

The set-up and generalization of digitized housing construction and maintenance logs could help securing long-term renovation loans: the report issued in January 2016 by the Ministry of Sustainable Development regarding the implementation of such digital log

notes suggests that notaries would be among the main contributors and users of these logs when administering real estate sales. A mention of loans that contribute to the financing of energy efficiency refurbishment works with the public quality and performance brand could also be included in the digital housing log. This would make it possible for lenders, whether banks or third party financing companies, to be alerted when a sale is being processed, so that they can check that the correct prepayment of the renovation loan is also implemented.

The workgroup intends to deepen these proposals and to design an effective action plan coordinated at the regional and national levels. The objectives would include the development of a national quality and performance label, built from a selection of professionals and through the quality control of renovation works, giving access to improved financial incentives when compared to average works and supported with a long-term financing offer. These drivers of demand for energy-efficient refurbishment works are also the main lever to favor firms who produce solid energy performance and quality, hence incentivize investments in modernization of their processes and cost reductions.

PUCA's experimental programme has been set up with leading Regional Councils and Cities to support holistic approaches of energy efficient refurbishments and to promote and deepen the proposals launched by this working group and to help coordinate actions the need to be implemented at local, regional and national levels over a pluri-annual action plan period.





















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