Energy renovation: almost everything for low-cost

by Nicolas Desquinabo | Feb 27, 2022 | Blog

Nicolas Desquinabo is a public policy expert. He works with Agir pour le climat on a project for the Observatory of territorial policies which aim to promote good practices and point out the shortcomings of local authorities in terms of transition policies. In this file, he deciphers the aid for energy renovation offered by the State, and their results.

Buildings are the main energy challenge in France. They represent 45% of national final consumption (750 Twh/year (1) out of 1650 Twh/year), half of which comes from imported oil and gas (key figures).

Out of 30 million main residences, about 6 million households are in fuel poverty, spending more than 10% of their income on heating and/or suffering from the cold (Onpe 2016), or even live in dangerous and/or uncomfortable housing.

The April 2018 building renovation plan continued the objectives of the previous government (renovating 500,000 housing units per year, including 100,000 social housing units and 150,000 of the 4 million “thermal sieves” (energy labels F or G) occupied by “modest” households (the 40% with the lowest incomes).

The long term objective is to bring all housing to “low consumption” (70 to 100 kWh/m²/year) by 2050, with priority given to those with no insulation, built before the first thermal regulations of 1975.

Main objectives, amounts and results of energy renovation schemes
Sources: Tax expenditures (Ways and Means II), Anah balance sheets, Savings Fund balance sheet and CEE

newsletters

*An "efficient" renovation saves at least 40% of energy use and 2 energy grades (e.g. from E to C). Each year not 500,000, but about 250,000 "efficient" energy renovations are completed in private housing, including work spread over 2 to 3 years (Open 2015 and Tremi 2018 and 2020).

Adding 50 to 80,000 high-performance social housing renovations per year, the total reaches at best 2/3 of the targeted objective. However, given ten years of under-delivery, it would now require at least 700,000 efficient renovations per year to meet the 2030 target.

Generally, energy use of buildings is falling by 0.5% per year at constant climate, as against the 1.5 to 2% the policy anticipated.

In spite of the delayed uptake, the "overall" resources for this policy fell by approximately €1 billion/year between 2017 and 2019 (i.e. -20% of €6 billion/year in 2016-2017). On top of the reduced total expenditure (public and "private" in the case of Energy Efficiency Certificates), the methods of aid, competition between different aids, and their tariffs all get in the way.

“Inversions”: bargains at 1 euro, regressive prices, and support for poor workmanship
Competition between systems is the main obstacle to mobilising aid for “efficient” housing renovations. High-performance renovations have to compete with more aid for less work (e.g. lofts or boilers at 1 euro, whose effectiveness is also limited). Windfall profits are also widespread.

Support for "small works" (from Ma prime rénov’, MPR, which replaces the energy transition tax credit - CITE), energy saving certificates (CEE

(2)) and reduced VAT (at 5.5%) are six times higher (3) than support for “efficient” renovations (through the Habiter Mieux program and certain local aid). A substantial part of these small works are gas boilers, the majority within the “Coup de Pouce à 1 euro” operations until the end of 2021 (e.g. 30,000 gas boilers per month at the end of 2019, source: letters d EEC info):

The “regressive” pricing of energy (= prices are higher for reduced consumption), also favours “small works”, or no works at all. It makes energy renovations half as profitable as if tariffs were “progressive” and discourages moderation of consumption. In 2019, the price of domestic gas was €70/MWh for large users and €100/MWh for the smallest ones. CGEDD studies suggest that a price cut of 30% increases consumption by 10%.

A recent increase in fraud and poor workmanship
The greatest windfall effects, combined with a lack of control, have also led to an explosion of fraud and poor workmanship.

Since 2017, insulation offers for attics and then boilers at "1 euro" has been made possible by the upgrading and improvement of CEEs. These disproportionate bonuses have resulted in a sharp increase in irrelevant and over-invoiced work, illegal practices on the rise (CGEDD RGE) and the deployment of organized crooks (Customs and Tracfin).

The virtual absence of control of this work and the excessively subsidies (sometimes more than 1,000 euros for work that costs less than 1,000 euros, etc.) imply significant windfall effects, but also:
• Subsidies passed on to energy bills (CGEDD-IGF 2014), amount to about €500 million in 2017 for UFC 2019 households alone and more than €1.5 billion in 2019 (Eval CEE);

- Inflation for targeted works, the costs of which have increased given the excessively high level of subsidies (as during the photovoltaic boom);
- Work whose energy impacts are much more limited than expected: owing to overestimation of real gains by the "CEE sheets" (CEE Mines PSL), to which are added poor workmanship, over-declarations of surface areas, and non-existent work.

This policy imitates in particular the English experience of the ECO, which has however shown significant limits: only the most profitable works were financed by the energy suppliers, at the cost of a sharp rise in the price of electricity and of maintaining gas heaters (see HCC study).

Since controls are almost non-existent, the effects of this poor workmanship and fraud is not quantified, but estimated at 10% for the “non-quality” reported by the beneficiaries questioned (Eval CEE Atema/Ademe). However, since quality problems are mainly detected in the medium term or by experts, faulty workmanship is probably much more frequent. And two-thirds of the complaints to the authorities, concern companies that are nevertheless labelled RGE (Webinar Dgccrf 2021).

And for organized fraud, a single recent case described by the National Gendarmerie accumulated more than 40,000 "EEC" sites with poor workmanship (and illegal work) over two years, before disappearing abroad.

Almost nothing for tertiary buildings
State support for renovating tertiary buildings (in particular those of local authorities) is limited to a loan offer at 1.5% - but most authorities can get better rates on the market. The often limited use of these buildings (especially schools), means that the work is only profitable in the very long term. Projects developed during the zero-interest

"green growth" loans (€1.5 billion in 2016–2017), have collapsed since these ended (to less than €100 million of State loans in 2018–2019).

Renovation "obligations" planned since 2010 for the private tertiary sector were not specified until 2019, and the objectives have been pushed back to 2030, with multiple derogations and a limited to owners of buildings over 1000m².

The next part of this series will show that these malfunctions in energy renovation policy will have little known but yet major impacts on energy supply policy, in particular with regard to “peak consumption” constraints.