



# Mur | Mur : Retrofitting private buildings to reduce energy consumption

## Grenoble-Alpes Metropole, France

### IN A NUTSHELL

*Mur | Mur is a major private housing renovation scheme developed by Grenoble Metropole. The first campaign aimed at reducing energy consumption through the retrofitting of condominiums built between 1945 and 1975. 4,467 dwellings in 84 condominiums were renovated, and in total 173 condominiums benefited from tailored support because of Mur | Mur from 2010 to 2014. The renovations resulted in 5,200 tonnes of saved CO2 emissions, which translates to savings of €135-250 per year.*

### Background

The serious and palpable consequences of climate change in the mountainous area of Grenoble led to the adoption in 2005 of an Air Energy Climate Plan by the French city. Among the most polluting sectors, industry and housing carry the highest levels of energy consumption; 40% and 24% respectively. Thus, to reduce CO2 emissions and achieve its 22% energy consumption reduction target, Grenoble conceived the Mur | Mur scheme.

The project focuses on the thermal insulation of private housing to make them more energy efficient and consequently reduce CO2 emissions. In France, there is a need for locally motivated retrofitting projects, such as Mur | Mur, as the only incentives available are national tax credit and 0% rate loans. Insulating old buildings well reduces tenants' heating and hot water bills, which make up 73% of buildings' energy consumption. The implementation of this project also contributes to the alleviation of fuel poverty; which remains a critical social concern in France due to high energy prices.

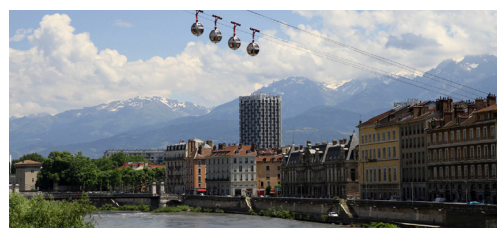
### Challenges and lessons learnt

As Mur | Mur targeted private co-owned housing, one main challenge was to persuade co-owners to go through the process of retrofitting. For renovations to begin, more than the majority of the co-owners in the building must vote in favour of the construction, which can often lead to the prolongation of the project.



Building being retrofitted under Mur | Mur  
(© Grenoble-Alpes Métropole)

## GRENOBLE ALPES METROPOLE



**Population:**

450,000

**Area**

541.17 km<sup>2</sup>

**Signatory  
to the Covenant  
of Mayors since:**

2008

**CO<sub>2</sub> emission  
reduction target:**

35% by 2020

Financial aid was a major concern for owners. Many of the families living in the buildings lacked the financial resources to renovate and depended heavily on the subsidies provided by the metropolitan authority and partners. In total, 1,161 households (only owners who lived in the retrofitted building were eligible) benefitted from an individual means-tested subsidy that could cover up to 90% of the renovation works. Nonetheless, the financial support was paid afterwards, which caused difficulties for a small number of families to pay their living expenses.

The project faced the difficulty of stimulating the building sector and citizens to transition to low energy renovations. Furthermore, finding enough workers to carry out the retrofitting of buildings proved challenging due to this economic sector's low activity in Grenoble.

The most important lesson learned from this project is that the process of retrofitting requires the simplification of procedures and dedicated support to home owners. Following the assessment of Mur|Mur, a one-stop shop was established to provide direct administrative support to owners. Dedicated sessions for both co-owners and building managers have been implemented. These meetings aim at understanding residents' feelings as well as to encourage them to overcome their fears about retrofitting by sharing their testimonies. As retrofitting depends on collective decision-making, these meetings are also crucial to increase support among owners.

## Results and the continuation of the Mur|Mur campaign

By the end of the project, 4,467 buildings were retrofitted out of the 5,000 targeted. These renovations resulted in 5,200 tonnes of saved CO2 emissions. In total, 36 professional stakeholders were encouraged to learn about and trained in low energy renovations. As Mur|Mur required a large share of the construction workforce, the campaign also had a positive effect on the creation of local jobs in this sector.

Due to the success of the campaign, Mur|Mur was extended for the period 2016-2021. This new project allowed for new types of housing in the 49 communes making up the Grenoble metropolitan area: single-family dwellings and private co-owned multi-occupancy buildings. Following the financial challenges of the first campaign, Mur|Mur 2 has identified specific collective bank loans to make them accessible for all and better administrative support through the establishment of the one-stop-shop. This has enabled the personalisation of financial plans in which an individual meeting with the owner is held and the various forms of financial aid are discussed. For Mur|Mur 2, guidance and support is available to all properties but only those built between 1945 and 1975 are eligible for subsidies for the work.

To address the challenges faced in the first Mur|Mur campaign and help persuade home owners to retrofit and increase awareness, a communication strategy was developed. It consists of site visits, information meetings, social media campaign, Mur|Mur 2 presentation brochure and video. Grenoble-Alpes Metropole now plans on strengthening assistance to retrofitting management with the objective of making it a permanent public policy.

### USEFUL LINKS

- ▶ <http://www.alec-grenoble.org/4262-mur-mur-campagne-isolation.htm>
- ▶ <https://www.lametro.fr/265-mur-mur.htm>



**4,467** dwellings in **87** private condominiums

**5,200** tons CO<sub>2</sub> saved

Savings of **€135-250** per dwelling per year



### FINANCING THE PROJECT

- + **Financing source(s):**  
Combination of financial assistance (from La metro and its partners) and financial incentives (block grants and grants for low income households)
- + **Total amount:**  
€61 million work; €39 million from co-owners and €22 million of subsidies



### CONTACT

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