

Home renovations for Europe's low-income families get a boost

March 25 2024, by Gareth Willmer



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Upgrading social housing is a central part of EU projects to make city life healthier and happier.

In the northeastern Italian city of Trieste, a construction project intended as a model for Europe is getting underway. On the southeastern outskirts of the city, eight buildings with social housing dating from the early 1950s will be demolished and replaced by energy-efficient apartments.

What's more, [green spaces](#) will be created and existing ones improved around the new homes to enhance the attractiveness of the area and foster outdoor activity and [social interaction](#).

Community care

The buildings are currently empty after former inhabitants were moved into other social housing. Ideas for improvements will be gathered from surrounding-area residents to feed into the whole neighborhood upgrade, which aims to ensure that low-income inhabitants have healthy housing and pleasant surroundings.

"This is not the problem of a single person or a single family," said Cristina Davi, manager at Italian public-housing agency ATER Trieste. "It's a problem of the community. It's important for them to say something about the space in which they live and the services provided."

Trieste, located on the Adriatic Sea, has a population of around 200,000 and is Italy's largest seaport by freight. Also the most important seaport of the Austro-Hungarian Empire in the 19th century and near Italy's border with Slovenia, the city has long been ethnically and religiously diverse.

At present, roughly a tenth of Trieste's population lives in social housing managed by ATER Trieste, according to Davi. Their average annual income is below €15,000, with many over 65 years of age or single parents.

"As a social-housing agency, we have to help guide the energy choices of inhabitants," said Davi.

ATER Trieste is part of a Europe-wide research project that received EU funding to accelerate the renovation of homes of people who struggle to pay their energy bills.

Called [SUPERSHINE](#), the project began in November 2022 and is due to run until the end of March 2026.

SUPERSHINE is inspired by the [New European Bauhaus](#) (NEB) initiative to make living in Europe more sustainable, healthy and inclusive. The EU is organizing an [NEB festival](#) in the Belgian capital Brussels on 9-13 April.

Shining lights

Trieste is a microcosm of Europe with regard to "energy poverty," which occurs when a household is forced to cut energy use to a degree that is detrimental to inhabitants' health and well-being.

The triggers include low incomes, high fuel costs and poorly insulated buildings. In 2022, more than [9%](#) of Europeans were unable to keep their homes adequately warm, according to the EU.

"When we talk about energy poverty, we have to think not only about how you buy energy and its sources but also about how to use it efficiently," said Riccardo Coletta, a senior project manager at the Agency for the Promotion of European Research in the Italian capital Rome.

He leads SUPERSHINE, which is creating model city districts characterized by energy-efficient buildings and smart electricity grids. Trieste acts as a test case along with Herning in Denmark and Riga in Latvia.

The project will later examine how these models can be applied in four other participating cities: Setúbal in Portugal, Belgrade in Serbia, Zaragoza in Spain and Istanbul in Turkey.

The locations chosen all have a large number of [social-housing](#) buildings.

"These places should inspire other districts to work in the same

direction," said Coletta.

"We need to look at the bigger picture by working with people in districts and find a way to give them tools and money to keep interventions maintained."

The ultimate goal is to create energy communities in which residents are fully involved in decisions about the environment in which they live, homes are more sustainable and the surrounding areas have greater aesthetic appeal.

In Trieste, the project covers 16 dwellings arranged over four stories in each of the eight buildings. Planned improvements include rooftop solar panels, energy-efficient lighting and thermal doors and windows.

Around the buildings, potential additions include gardens with areas for growing food, community parks and recreational spaces. To reduce the risk of flooding and the load on urban-drainage systems, the planners are considering vegetated buffer zones and pavements made with permeable materials.

The works are due to be completed by the end of 2026.

Service hubs

Most homes and buildings in the EU are decades old, needing renovation to achieve the [EU's goal](#) of a zero-emission building stock by 2050.

Some 85% of EU buildings were built before 2000. Of those, an estimated 75% have poor energy performance.

Upgrading Europe's building stock can be bolstered by independent service hubs offering property owners and residents technical advice and

funding information about renovation.

A separate EU-funded project developed such hubs—called one-stop shops—in Rotterdam in the Netherlands and Valencia in Spain.

Called [Save the Homes](#), the project wrapped up in February 2024 after three and a half years.

Valencia, Rotterdam showcases

In Valencia, Save the Homes established 27 one-stop shops. It also assessed the homes of around 1,600 people in the city for energy-efficient or renewable renovations, many of which have now been completed.

In Rotterdam, the project carried out renovations on 33 homes.

Undertaken by building contractors in the two cities, the renovations included installing energy-efficient insulation under the floor and in the walls and photovoltaic panels on the roof. The result was average energy savings of 50% to 60%.

"We really have to increase renovations," said Ana Tisov, who led Save the Homes and is a project manager at Dutch engineering and building consultancy Huygen.

She said the project sought to help increase the number of homes undertaking renovations for energy efficiency to 5% a year from 1% currently.

Tisov said approaches need to be tailored to particular places because, even as their overall objective is the same, local conditions differ.

Raising people's awareness of the benefit of renovations, for instance, was a bigger challenge—and more of a focus—for the project in Valencia than in Rotterdam.

As a further example, Tisov said the housing stock is more uniform in the Netherlands than in Slovenia, making mass renovations on Dutch homes easier.

"You cannot directly copy and paste," she said. "Vulnerable groups and building stock are not the same in Slovenia as those in the Netherlands."

More information:

- [SUPERSHINE](#)
- [Save the Homes](#)
- [EU Energy efficient buildings](#)
- [REPowerEU Plan](#)

Provided by Horizon: The EU Research & Innovation Magazine

Citation: Home renovations for Europe's low-income families get a boost (2024, March 25)
retrieved 27 April 2024 from

<https://phys.org/news/2024-03-home-renovations-europe-income-families.html>

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