

## A SELF-MADE ECO VILLAGE TO FACE AN EMERGENCY

On April 2009, a 6.3 magnitude earthquake occurred in central Italy causing the destruction of L'Aquila (the biggest city in its region, Abruzzo) and of several villages in the surrounding. The earthquake caused the displacement of around 67.000 people out of a population of approximately 73.000 citizens.

In Pescomaggiore, a typical rural village, ten kilometres far from L'Aquila, some inhabitants have taken the initiative to create a self-built new village, energetically autonomous and self-financed, to allow villagers to remain living in their place.

To facing the scarcity of housing and the magnitude of the disaster, in fact, the national and local governments adopted a plan to move the families whom house has suffered damages in new construction sites located in 20 areas identified by the emergency authorities and spread around their region. For the inhabitants of Pescomaggiore, this transfer and the long times of the reconstruction process would have meant the abandonment of the village. To contrast this effect a pre-existent committee, created to improve the quality of life and working of the historic village centre of Pescomaggiore, decided to extend its activity to face this emergency situation.

The new village is called EVA acronym for *Eco Villaggio Autocostruito* and it is built implementing Alternative Technologies solutions, like the use of straw for the walls construction, solar panels or water purification system. The village was designed by the architects Paul Robazza and Fabrizio Savini with the technical assistance of Caleb Murray Burdeau, an expert in green architecture.

The project carried out, a few hundred meters from the village, a series of houses. These are composed by two or three rooms, characterised by low-cost budget and with very low environmental impact in accordance with applicable anti-seismic standards and building codes. The construction

technology involves the use of a wooden frame and straw bale. The modular structure facilitates their reproducibility. Two typologies of houses were built (40 m<sup>2</sup> and 56 m<sup>2</sup>), very similar each other, with wooden structure that responds to heavy load of snow.

The use of straw fits naturally into the agricultural environment and it reduces the chain in the field building. The raw material are straw bales supplied by cereal fields located in the same area, that are also used to produce flour, used to make bread in the common village's oven.



The electricity is supplied by photovoltaic panels placed on the houses and the heating is supplied by a wood stove, which needs just a couple of hours per day to heat the house, thanks to the straw and its insulating properties.

The most important aspect of the project is the involvement of the residents in the construction, to ensure the quality of the space. For this reason the actors involved in the project are mainly Pescomaggiore's inhabitants, citizens of neighbourhood villages, but it also benefits of a strong network of volunteers from Italy and other countries.

This way to use Alternative Technologies is a good example to overcome housing crisis, using a modern architectural approach. This low-cost experiment is connected with the intention to communicate the importance to protect local territories, their biodiversity and local resources.

### To know more

[Architecture in development](#)

[Volunteering at an Eco Village in Italy](#)

[Article in \*El mundo\* website](#)

[Article in Inhabitat](#)

[Analysis of the straw houses of Pescomaggiore](#)

<http://www.pescomaggiore.org/>

[Beyond Architecture Group](#)

