

POWER HOUSE nZEC & Solar Decathlon Europe 2012, Madrid

- The Symposium
- The Award
- The Jury
- The Report

The "Housing Europe meets Solar Decathlon 2012 Award"



To conclude the event, a Team of Jurors coordinated by Housing Europe evaluated the 20 proposed projects and awarded the "Housing Europe meets Solar Decathlon Europe 2012 Award - For a Fair Energy Transition in the EU".



First classified - Canopée Nano Towers, France

The winning Team selected by the Jury was Canopée Nano Towers and was based in the Rhone-Alpes region of France. The team aspired to provide a solution to the problems of densification of the cities through

Canopea, a habitat which combines qualities of the individual house and availability of urban services. Canopea is a collective of small buildings, called "nanotowers", which is situated within a neighbourhood. Each nanotower is equipped with a system of mutualized external passageways, which offers space qualities similar to those of a detached house. Canopea Nano Towers was selected on the basis of its holistic urban approach, with grids for heat and energy, waste removal and treatment systems and its emphasis on social connectivity and common space. The winning team also pointed out affordability, mobility and adaptability to hot and cold climate as the reasons why their project had been selected.





Special Mention for Mediterranean climates - Med in Italy, Italy

Med in Italy house, rooted in the tradition of the Southern Mediterranean and in its real culture, aimed to demonstrate that high-performance solar houses can be designed to suit the Mediterranean climate and building traditions. A particular attention was given to the in-between space that acts as buffer zone, where the main activities of daily life of the house were traditionally located. Its design was based on the contrast between low-tech and hi-tech construction. The low-tech part consisted on wooden frames walls, in order to increase their thermal inertia by local heavy materials infill, such as sand or soil. The high-tech part consisted of two features: an interior and an exterior one. The interior, a “core box”, hosts kitchen, bathroom, and technical spaces. The exterior, the PV envelope, shades both the roof surface and the East façade of the low-tech box, providing electricity and collecting water. This industrialized system of bi-dimensional and three-dimensional elements allows standard transportation and rapid assembly into multiple configurations. The house, conceived as autonomous house, is also the “type cell” of multiple kinds of aggregations.



Special Mention for Mediterranean climates - SML System, Spain

The challenge of the SML system proposal consisted in defining an architectural language where structural, composition and functional values were introduced in a coherent way, values all of them derived from sustainable construction. The unit or basic module was formed totally by prefabricated materials and dry-assembled, being wood the predominant material in the SML system, to create an entirely prefabricated module. Each of these units is transported fully equipped, only lacking the joints of the systems and its own assembly, taking special care of tightness and thermal bridges, an aspect studied from the initial design. Prefabrication serves the proposal's economy, assembly and disassembly speed, with reduced aids, and the mobility of the house given the dimensions of the unit that has been designed to be transported in conventional vehicles, reducing in this way displacement costs. The courtyard acts like a composition element, in all constructive units (base modules) there is a courtyard which divides the space, generating the access of the house, offering lighting and ventilation control and a great space value. In our proposal, the courtyards play an important role in air conditioning, favouring cross ventilation in the house's interior. On the other side, the necessity of elevating the house on top of a platform makes easier to capture the breeze. Besides, the moving walls of the courtyards and the permeability of some of them favour efficient ventilation.



Lower Banner

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