Prêt-à-Loger represents the Dutch Solar Decathlon Team for the 2014 competition in Versailles.

The material and energy flows from the built environment to the ecosystem have failed to respect the latter’s integrity and balance. Looking into the future, the team firmly acknowledges the need to counter this violation. We believe that it is possible to correct the wrongs. That it is possible to take our built environment into the future. That it is possible for all of us to co-exist and thrive with the eco-system again. Prêt-à-Loger is determined to turn this possibility into reality. Visit our website for more information: www.pretaloger.nl
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**Drs. M.J.M. (Maxime) Verhagen,** chair of Bouwend Nederland
“Let’s face it, if we really want to make a difference...

...then the best place to start is in our very own home”
PROJECT DESCRIPTION

Home with a Skin

Delft Technical University is participating to the Solar Decathlon Europe 2014 competition with a large international group of students. The key concept of the Prêt-à-Loger team is to renew the existing, looking for a solution that would improve the performance of the existing built environment. The materialization of this goal is a modern insulated skin that, covering a part of the house, will provide a climatic buffer zone and the surface needed to produce its own power. This skin is the single tool of a larger project that has the ambition of involving different actors, from the single household, to the surrounding community, to even the greater metropolitan area of different cities.

Inspiration

Keeping in mind that only 1% of the built environment is renewed every year, it seems clear how the aim of Prêt-à-Loger is to operate on the large amount of existing dwellings already present in the Netherlands. The motto “Improve your House. Preserve your home.” represents explicitly both the idea of enhancing the performances of the dwelling and the aim of shielding the original feeling of the community and the neighbourhood. The skin has multiple consequences on the daily life of a family, producing the power need by the household and widening the space of the dwelling, facilitating the visual and physical connection with the surrounding environment.

Background

The city of Honselersdijk was chosen as a site. The area is close to the municipality of Delft and represents a typical urban settlement of the Netherlands; with its 7,500 inhabitants and its landscape dominated by the extensive presence of greenhouses. The selected building itself portrays one of the most prevalent models of Dutch households, the so called “Doorzonwoning”. 6 out of 10 Dutch live in this kind of dwelling, making the chosen study case the most widespread type of house in the Netherlands. This typology makes up 42% of the available building stock and constitutes a real mass market for the future spread of the Skin technology. Moreover the typological peculiarity, the house and the neighbourhood were also chosen for the “human factor”, a key component of the vision of the team. The fact that the family of Dennis IJsselstijn, Project Architect of the team, owned one of the houses in the neighbourhood for almost 40 years, gives the project ‘Home with a Skin’ a central role in the community environment preservation.

The Exhibition in Versailles

The goal of Prêt-à-Loger for the summer of 2014 was to bring in Versailles one of these typical houses modified with their design in order to enable any visitor of the Solar Decathlon Europe to experience the renewed space under the Skin. The entire exhibition aimed to show a realistic slice of a Dutch neighbourhood, giving the impression to experience an actual slice of Holland while roaming Versailles. The feeling that Prêt-à-Loger tried to recreate is a pure sense of comfort and intimacy that only a real home can deliver.
During the Solar Decathlon the Home with a Skin was the center of attention. It stood out with a design that was so different from the rest of the concepts by using and showing an existing row house, cladded in brick strips. When the visitors entered the home, they were often surprised by the very homely feeling the team successfully recreated. This successful representation of an existing home won some very nice awards during the competition. The team won the first prize in communication & social awareness and sustainability. It came second in energy efficiency and construction management and third overall, only 3 / 1.000 points behind the number 1. This emphasized that the team performed very well overall and was very closing to winning the competition, with a concept that was unique for the competition.

Official Opening in Delft

After the successful competition in Versailles, it was time to rebuild the house in the city where it all started: Delft. The Home with a Skin got rebuild on the old site of the former Faculty of Architecture, that burned down in May 2008. After a month of construction, it was time for the official opening on the 25th of August 2014. The Dutch Minister for Housing and the Central Government Sector Stef Blok ceremonially opened the house with the Rector Magnificus of the TU Delft, Karel Luyben. Both emphasized the importance of innovative student initiatives like this, and spoke their praises about the teams successes in the Solar Decathlon competition. The opening was well visited by influential people working in the Dutch building industry, as well as interested home owners and the teams partners and supporters, without which this project would not have been possible. As of today, the pavilion is open for interested companies, home owners, students and meetings, guided by a member of the team.

Media appearances

The team received a lot of media attention the last 2 years. Apparently the media noticed that Prêt-à-Loger was providing a real solution, for real people in the Netherlands. Several members of the team appeared on national television channels at different moments during the project, and the team was shown while in competition in a Dutch TV serie called ‘Altijd wat’. Most importantly, all this media attention helped Prêt-à-Loger spread it’s core message: the challenge of the sustainable future of the Netherlands lies in retrofitting the existing building stock.

The future

The dream of Prêt-à-Loger is to develop and apply The Skin on a large scale, not only making these houses sustainable, but also providing a happier and healthier living environment for the inhabitants. The Skin should be further developed in a toolbox, which could be easily adapted, customised and mass-produced. Dennis’ house was our first case study but we are now facing the need to bring our product to the market, our next competition.
“A home with a skin is a real solution, for real people in the Netherlands ... ”
“... to sustain their environment, sustain their memories and sustain their history.”

--- Osama Naji, Communications Coordinator
“This vision is not starting tomorrow ...
"... it is already here."

--- Osama Najj, Communications Coordinator
Prêt-à-Loger represents the Dutch Solar Decathlon Team for the 2014 competition in Versailles

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The material and the energy flows from the built environment to the eco-system have failed to respect the latter’s integrity and balance. Looking into the future, the team firmly acknowledges the need to counter this violation. We believe that is possible to correct the wrongs. That is possible to take our built environment into the future. That is possible for all of us to co-exist and thrive with the eco-system again.

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