## 10. Ecostal

# Attacking flat Roofs



recentre

A young company deriving from a family connected with alternative heating systems, Ecostal, managed by Alexandre Dauvister, has been carrying out its activities as a wholesaler of renewable energy solutions since 2008. Active in Belgium and abroad, the company established in Jalhay is currently specialised above all in the sale of photovoltaic panels, but hopes to diversify to supply a set of products and in particular to incorporate heating solutions. Although it does not (yet) have an ecoteam, the company has a precious green asset, in the innovations department. In fact it has just developed an unusual product: the Stalroof. This support intended to accommodate photovoltaic panels on flat roofs was created to fill a lack on the market. "A customer wanted to install panels on his flat roof", explains Benoît Fellin, director of development and marketing at Ecostal. "We found only very few appropriate supports on the market and none of them was available with the desired characteristics within reasonable periods of time. This is what drove Ecostal to create a new product." To put the finishing touches on the support, the company called on the services of a consultancy in the Liège region: Prospective Design. Based on realistic and precise specifications, the designer Georges Vroonen designed an ingenious and innovative fastening system that allows the integration of a wide choice of photovoltaic panels.

### A precious green asset in the innovation department.

"The systems offered until then on the market necessitated tedious stability studies or constituted a potential risk in terms of waterproofing," Benoît Fellin repeats. Some solutions necessitate drilling through the roof to anchor the structures accommodating the panels on the building. This can pose problems in particular for buildings that house a food processing industry. Other systems are made up of compartments ballasted with gravel. But some buildings are limited concerning their

ballasting: they are not designed to resist additional weight. "Our support was designed to respond to these two problems. It makes it possible to avoid ballasting and drilling through flat roofs." Lightweight, the Stalroof was designed in such a way that the wind presses down on the support and creates its adhesion to the structure. This ventilation provides another function: aerating the panel in an effective way, it makes it possible to avoid any overheating and therefore to ensure an optimum energy yield.

### There are few alternative solutions that are really competitive. It is a unique product that is still little known: we really believe in it!

Manufactured entirely in Belgium, the Stalroof is composed of recycled plastic (chlorine-free high density polyethylene) (HDPE) with high resistance to UV as well as to temperature (from –40 to 85°C). "We could have taken a less expensive plastic, but this would not fit with the image and the determination to work in the field of renewable energy. We tried to orient ourselves to a raw material that would be a mix between our wish to promote renewable energies and functionality," justifies Benoît Fellin. "The product was tested in the wind tunnel at the University of Liège, but the greatest proof of stability of the panels is that on the installations already carried out: they resisted the various small tornadoes and storms of this summer of 2010."

The Ecostal is also proud of having equipped its Stalroof support with another sizable advantage: its ease of installation. The elements of the Stalroof can be stacked easily on top of each other, which enables easy storage and quick transport. The Stalroof is delivered in a kit, with a reduced number of fastening pieces, bringing about a major saving of time during installation. Simple clips make it possible to consolidate all the structures inside

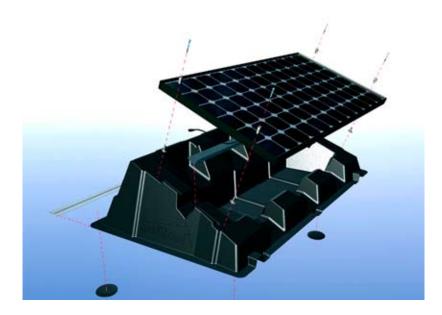
#### Sustainable Success Stories

each other. The Stalroof is light in addition, which makes it manipulable by a single person. Finally, its degree of incline, calculated in relation to our geographical area and devised to optimise the surface of the solar panels on a roof, makes it possible to restrict to the maximum extent possible the difference between two lines. Between two panels in the same line, the difference is small to even non-existent.

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Nearly two years were required between the beginning of the project and its accession to the stage of commercial development, in 2010. Development cost more than 100.000 euro, and it was done with shareholders' funds. benefiting from aid from the Walloon region, and in particular from AWEX. "Today, photovoltaic panels producing together more than a megawatt have already been installed with the Stalroof system, and without marketing, based solely on word of mouth," Benoît Fellini is delighted to report. "We hope to commercialise it on our market and more specifically in Wallonia. We will be seeing quite a few installation projects being carried out within the SME, in any case we hope so, from the end of 2010 or the beginning of 2011. Flat roofs are a potential that is being made very little use of for photovoltaic, both in Belgium and abroad. They represent 80% of industrial roofs, but a number of them are still empty and are just waiting to receive panels." Although Ecostal's principal markets are currently located in Belgium and France, the wholesaler also sells a little in Luxembourg, Italy and Spain, and hopes that this product will allow it to go farther, little by little. "It could be developed differently for the USA, for example. We want to target the marketing





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Stalroof © Ecostal

### Sustainable Success Stories

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and sales of this product market by market via dealers or its own network. There are few alternative solutions that are really competitive. It is a unique product that is still little known: we really believe in it!" On a very hostile market, at the same time local and international, Ecostal protects itself by offering technical and after-sales service ... The company has discovered a new vocation, with the creation of new products. The Stalroof could in fact be the foundation stone of a new success story, and perhaps the first of a series of innovations in the area of accessories useful for renewable energies!

Isabelle Masson for REcentre
Interviewee / Benoît Fellin, Director marketing and development

#### Ecostal hyba

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Sector • Renewable energy solutions

Year of foundation • 2008

Number of employees • 15

Turnover (2009) • 23 million EUR

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