



European
Commission



Rewarding Eco-Innovation for Jobs and Growth



ECONATION

Let there be light

Leo Goovaerts can clearly remember when he first saw the potential for magnifying natural daylight to brighten the inside of buildings. The lawyer and former Belgian politician was teaching at Vlerick, a leading international business school in Ghent.

— One of my students came to me with this idea for a dome. We immediately went to the University of Ghent and found two engineers to make it a reality.

LEO GOOVAERTS

A partnership between that initial idea and research expertise led to the development of the LightCatcher. The concept is straightforward: a small polycarbonate dome is placed on the roof of a building.

It contains a mirror programmed to always seek the optimum light, which is usually, but not always, the sun. This is then reflected, filtered and amplified through a series of lenses before being spread downwards throughout the building. The technique means that a one-square-metre

dome can provide sufficient natural light for a floor area of up to 100 square metres.

The LightCatcher has been marketed for the past four years by EcoNation, a Ghent-based company co-founded by Goovaerts, who is its chairman and majority shareholder. An innovative business model, allowing clients to pay with the money they have saved as a result of its use, has helped its success.

CEO Marc De Groote talks passionately about the LightCatcher, which won the product and services category in the 2014-2015 **European Business Awards for the Environment**. It was something of an adventure – he left the relative comfort of a position as CEO of an IT company in the banking sector to take on the challenge of building up EcoNation's business.

— I decided to move because I am really convinced of the potential. We have a nice piece of technology that has demonstrated its added value.

MARC DE GROOTE

It's not just about saving money. The main benefits are to human and animal health, he says. Bringing natural light into large surface areas such as factory floors, warehouses, sports halls and even airports – the revolutionary device is used in Schiphol, for instance – can have hugely beneficial effects. People feel and work better when not relying on artificial light.

There are also considerable financial benefits. It's relatively cheap and easy to install, particularly in new buildings where its positioning can be factored into the construction plans. The technology measures the natural light it brings in and, depending on the intensity, artificial lighting is switched on, off or dimmed.

The whole process is monitored, making it possible to calculate at the end of the month how long artificial light has been switched off and the savings made. The company estimates these can amount to over 3 500 hours a year. 'Right from the start you are saving money,' says De Groote.

He notes other advantages: the energy is clean and sustainable, the dome is considerably more versatile and better insulated than normal skylights and the fluctuations in temperature which can be caused by a bright summer sun, for instance, do not occur.

The company, which employs six people, had revenue of EUR 1.2 million in 2013 and is aiming for a turnover of EUR 5 million this year. Its achievement was recognised in 2010 by the Flemish Energy Agency, which awarded Light-Catcher Best Available Technology status and more recently the company featured in the world top five Zayed Future Energy Prize in Abu Dhabi.

EcoNation continues to collaborate with the University of Ghent as it aims to move to the next stage of its development by making LightCatcher simpler and more versatile. Initial growth is focused on Belgium and neighbouring countries, but as Goovaerts explains: 'Our commercial aim is to make our product workable and known throughout Europe.'



Showcasing Europe's leading eco-innovators

The European Business Awards for the Environment

Presented every two years, the awards recognise businesses that have taken steps to improve their environmental performance and contribute to sustainable economic development. Companies compete in five categories, which reward green innovation in management, product and services, process, international business cooperation, or in combining business and biodiversity.

Businesses of any size, from any sector, can compete. Standards are high, as the competitors are already 'the best of the best': to enter the European Business Awards for the Environment, you need to have been a finalist in a national competition first.

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