

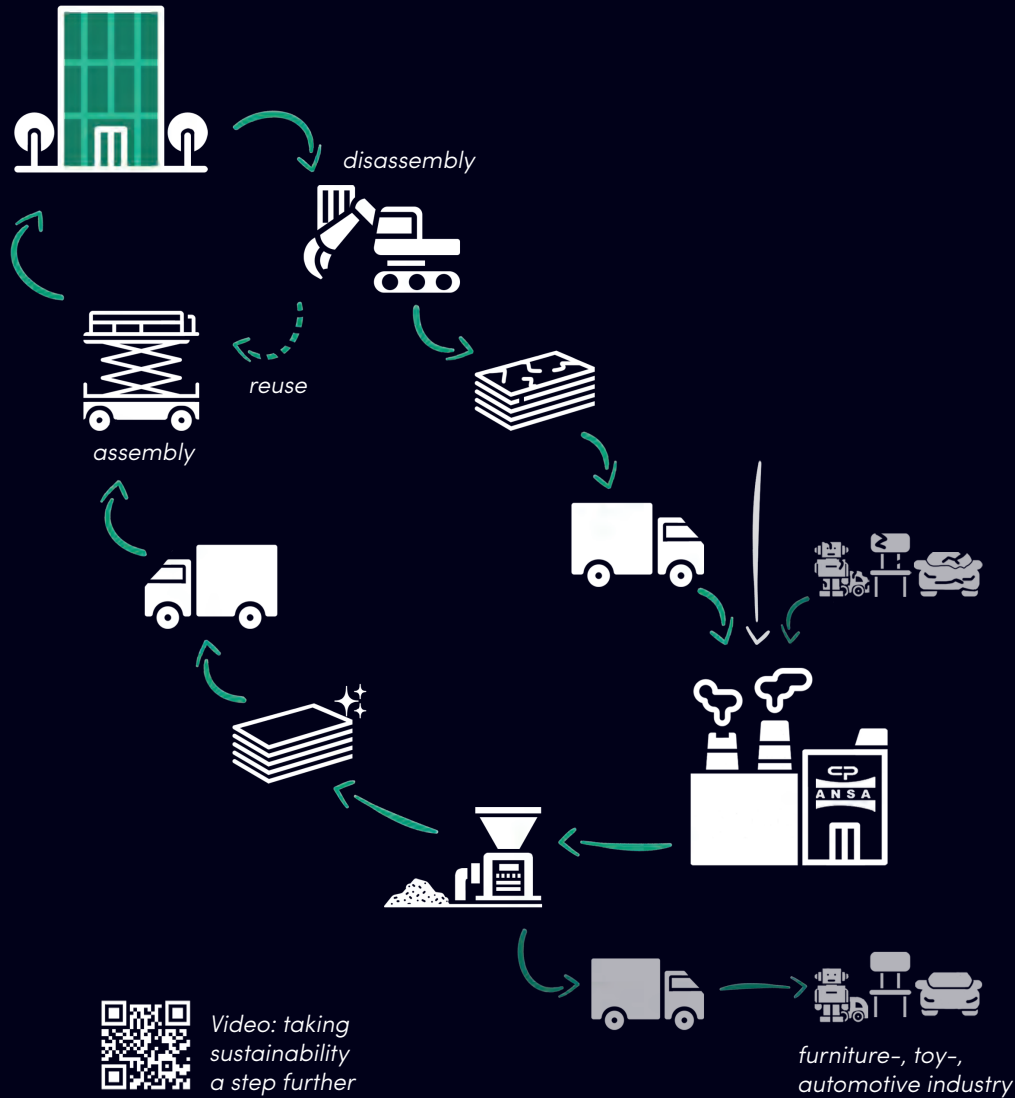
# Taking Polycarbonate a step further



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→ **In Detail.**  
Discover Rodeca's  
approach to sustainability.



# Reduce, reuse and recycle

It is a common misconception that plastics and sustainability are incompatible. Polycarbonate is a raw material that can be reused indefinitely. Rodeca translucent building elements are manufactured under stringent quality standards, ensuring a lifespan of several decades. Even after their use as daylight elements, the raw material can easily be repurposed for new applications. However, it is essential that the recycling chain is well organized.

Rodeca GmbH is part of a group that also includes Ansa Termoplastici SRL. Ansa specializes in producing new granules from recycled plastics, among other activities. These granules are also supplied to third parties for the production of new products. Another key activity of Ansa SRL is the manufacturing of Rodeca Savenergy panels.

# Rodeca Savenergy panel

Savenergy panels are in fact standard Rodeca 40mm elements, made from partly regenerated polycarbonate. A major advantage is that these panels can be used in the well-developed Rodeca profile systems which fulfils most any application need.

There are also limitations; a bright or clear panel is not possible. The panels may have minimal imperfections (so-called small 'black spots') that are barely noticeable in practical use.

A Savenergy panel production slot can never be 100% reproduced true to colour. If a raw material batch runs out, the next batch will vary slightly in colour due to the differences in the reprocessed post-consumer materials.

To combat this problem, it is possible to produce the top layer of the panel from non-recycled material using the DecoColor technique. Here there is a guarantee for exterior colour consistency.



## Good thermal insulation

1.4 W/m<sup>2</sup>K<sub>vertical</sub> / 1.5 W/m<sup>2</sup>K<sub>horizontal</sub>



## Weatherproof

high quality UV-protection,  
low maintenance, humidity-resistant



## Fire safe

B-s2,d0 according to EN13501



## Light transmissive

translucent or opaque



## Design freedom

infinite palette of possible colours

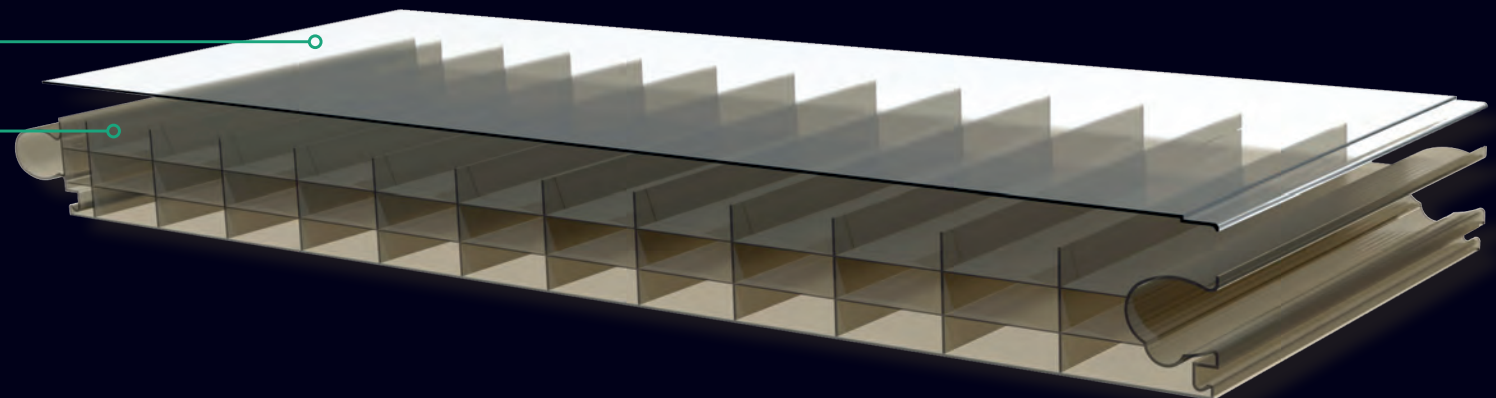


## Price advantage

a slight price advantage applies

Top layer made of virgin  
polycarbonate

Body made of regenerated  
polycarbonate





## Happy pigs in De Heurne

**Sustainable stables to give pigs a better life.**

The Sun Pig project was set up to give pigs a better life. The stables have been designed differently, allowing for ample day light to enter, giving the animals a healthier ambient. It has been shown that a beneficial income for the farmer can go hand in hand with maximum animal welfare, minimum emissions of CO<sub>2</sub>, ammonia, particulate matter and odour. An additional advantage is that the stables have a very eye appealing architecture and blend aesthetically within the landscape.

For 'Zonvarken', Rodeca developed Savenergy Panels in a shade of green in a deco- colour variant with a top layer of Atlantic Green, with which subsequent 'Zonvarken' projects will have an almost identical colour.



## From Schiphol to port Antwerpen

Excellent opportunity to convert 8,000 m<sup>2</sup> of outdated corrugated sheet with 25 years of kerosene deposits into a new product.

At the beginning of 2022, Rodeca Systems was commissioned to provide warehouse 8 at Schiphol Airport with a new facade. Polycarbonate corrugated sheets were replaced by Rodeca PC 2550-10 DuoColour MAT seaglass elements. The dismantled corrugated sheets were sent to ANSA Termoplastici.

At ANSA, the old sheets were processed into new raw material. This raw material was then used for PC 2540-4 Savenergy panels and applied as a translucent protective wall for conveyor belts transporting luggage and supplies / goods at Verbrugge Terminals. The intention is that the remainder of the returned raw materials will be used to expand another warehouse at Schiphol.



End result warehouse 8



Conveyor belts Verbrugge Terminals

## From Veldhoven to Utrecht

How a temporary facade made from regenerated material is ultimately used in a warehouse improving insulation and reduces heating costs.

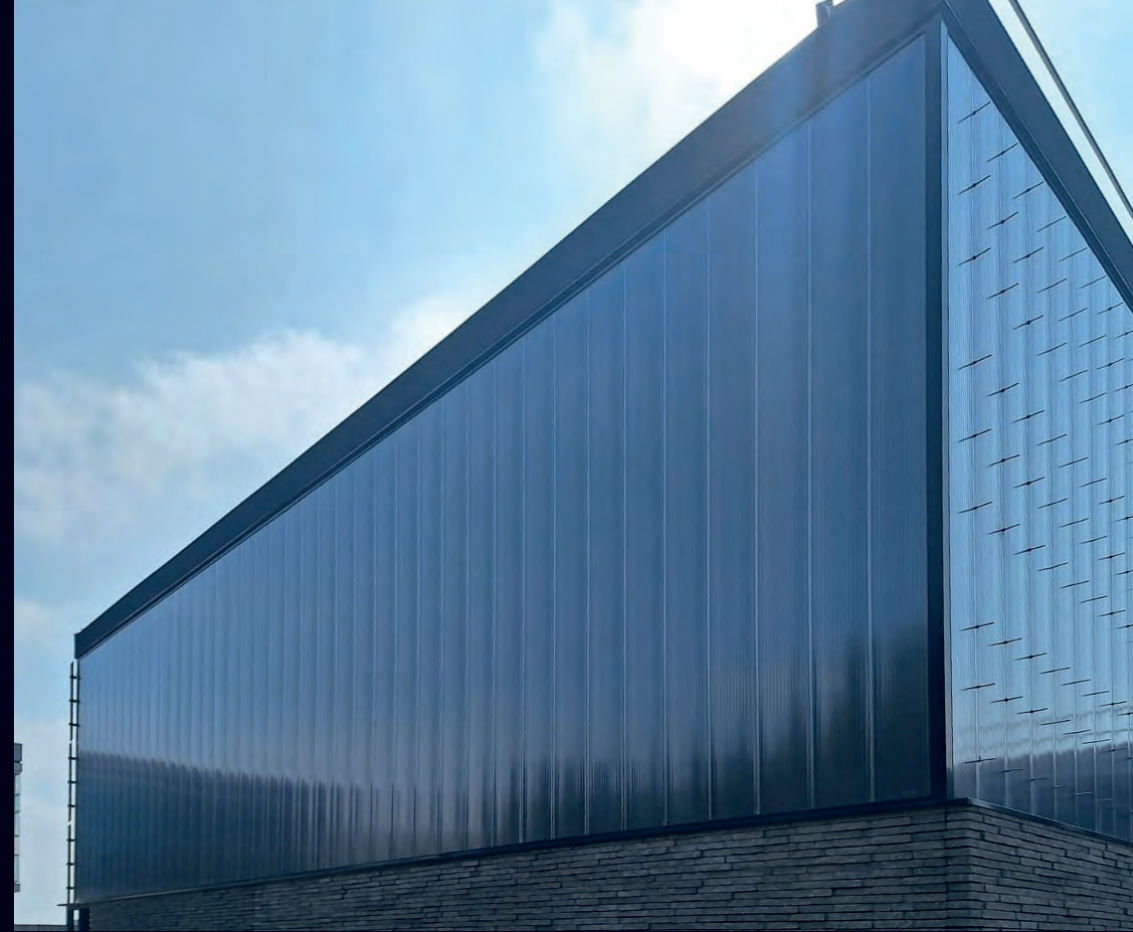
Construction company Hurks started expanding the Merefelt nursing home in Eindhoven in 2009. The challenge was that the new building had to be provided with a temporary facade for several years. Rodeca Systems was commissioned to make this facade. Given its temporary nature, it was logical that people were looking for a bargain. That solution could be found in the use of recycled polycarbonate.

Also, part of the assignment for Rodeca was the dismantling of the panels, frame profiles and anchoring systems. In the intervening period we received a request for renovation of several glass roofs above the Platra warehouse in Utrecht. That turned out to be an excellent opportunity to give the panels, including frame and anchor profiles, a new life.



## Savenergy for a recycling centre

Cure Afvalbeheer is a collaboration between the municipalities of Eindhoven, Valkenswaard, and Geldrop-Mierlo. The Eindhoven Acht location was in need of an expansion. Naturally, the new building was expected to showcase a high level of sustainability. Initially, the client was looking for materials that were fully circular. However, at the time of construction, such materials were not available (there was some debate about whether the ex-Leolux panels could be used here). The next best option was to use panels made from regenerated materials. The walls are made of Rodeca Savenergy panels, featuring a grid structure made from used, discarded scaffolding wood.



## Rodeca GmbH

Rodeca GmbH is a central part of the 3-R Evolution Group, a network of specialized companies dedicated to designing and manufacturing tailored solutions that meet the specific needs of their respective markets. The group's foundation is built on over 65 years of combined experience in thermo-plastic production and recycling, which enables it to provide innovative, sustainable, and future-oriented products.

By focusing on circular economy principles, the 3-R Evolution Group offers solutions that not only meet modern economic and environmental standards but also set new benchmarks for resource efficiency and product longevity. Rodeca GmbH plays a vital role in this vision, contributing its expertise and innovative spirit to create high-quality, energy-efficient, and versatile products that help shape a more sustainable built environment.

This combined effort ensures that customers receive reliable, environmentally conscious solutions that address both current and future challenges in construction, architecture, and beyond.

