

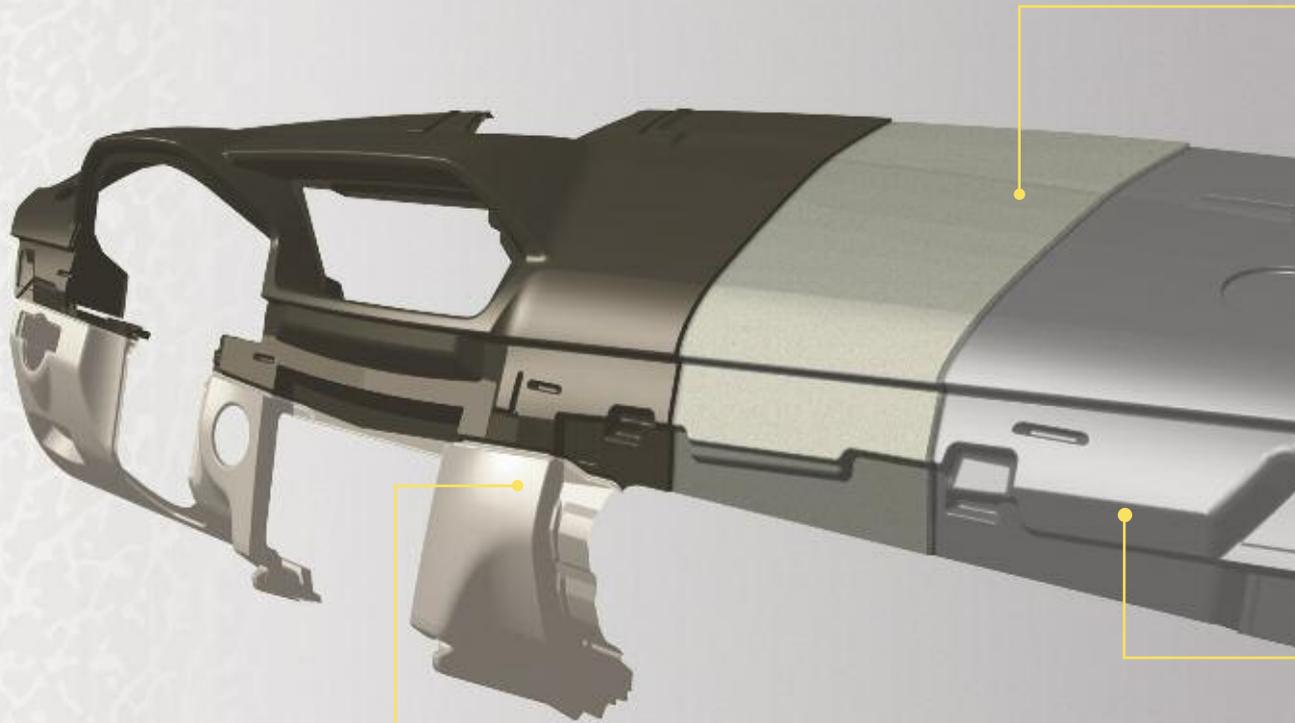
GO GREEN

RECTICEL car interiors are delivering a functional response to the increase in environmental awareness – that's why we are *AUTOMOTIVE*.



# INNOVATIONS FOR A NEW WAY OF THINKING

The automobile means quality of life for modern man. Individual mobility requires realistic solutions in ecology-minded car production. Our PU interiors are the answer to future needs.



## Recycling as a challenge

Green  Concept



Today thermal recycling of PU scrap is still the common method of re-use. RECTICEL Automotive, though, grants a second and sensible life to PU skin and foam scrap:

### PHYSICAL RECYCLING

The PU is milled to granulate or flakes and used as filling material for certain composite foam applications.

Automotive engineering as well as other sectors like agriculture, packaging, sports, shoes, or floors make use of the recycled comfort material. Successful brands like Recfoam®, Recmat®, and Renoflex® are examples of this recycling method.

### CHEMICAL RECYCLING

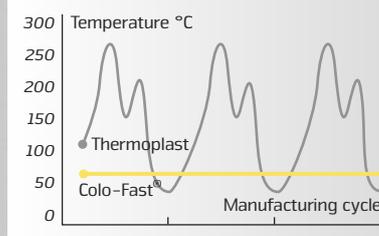
Glycolysis and hydrolysis are mature processes which allow the PU raw materials to be regenerated.

These so-called recycled polyols or other raw materials can be used in many PU applications of RECTICEL.

The circle will be completed when they can be re-used in their original application in car production. A Colo-Sense® skin based on recycled polyols is in development.



## Less energy for more quality



### RECTICEL Automotive – spray skin / foam / substrate

The exothermic reaction of the PU processes allows for producing at a consistently low energy level. The production temperature remains constant over a range of 60°C to 80°C (maximum). Other technologies need high and therefore energy-costly processing temperatures up to 250°C e.g. when using thermoplasts.

## Breaking new ground with renewable resources



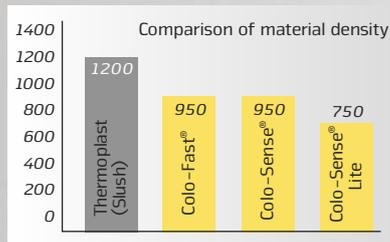
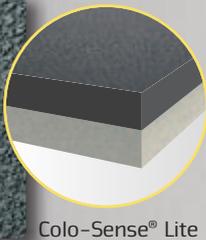
### RECTICEL Automotive – spray skin / foam / substrate

Certain plants deliver the so-called bio-polyols after extraction and modification. The use of such renewable raw materials makes PU less dependant on oil-based, synthetic polyols. Spray skin and foam concepts have already been developed: good for the environment and – at the same time – without any compromises regarding comfort and durability.

## Light-weight without compromise

### RECTICEL Automotive – spray skin

The advancement of Colo-Fast® provides a weight reduction of 25% compared to thermoplastic slush skin. With Colo-Sense® Lite weight reduction will be even more than 35%.



### RECTICEL Automotive – foam

The current status of development is the creation of comfort foam with low density and partially thinner foam layers maintaining its material properties.

### RECTICEL Automotive – Compolite substrate

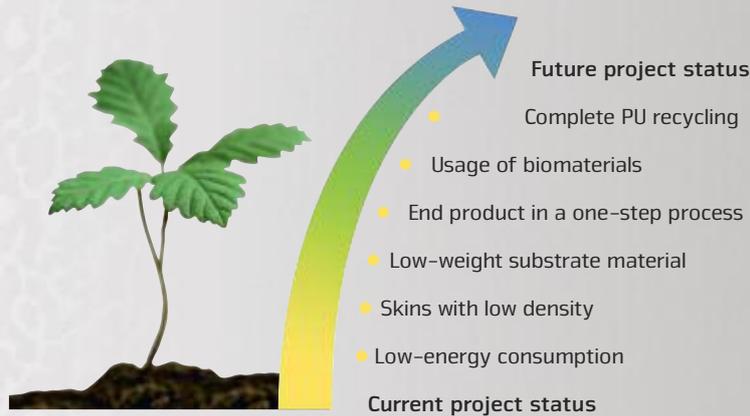
The 3-dimensional carriers made of *Compolite* are characterized by high stability at very low weight and are sprayed in a one-step process. A core of flexible foam – laminated with glass or natural fiber on both sides – stabilizes the sprayed PU skin in its desired shape.

Thus weight is reduced at 30 – 40% compared to the conventional natural fiber production processes. On top of that, a weight reduction of 50 – 70% should be realized against injection molded materials.



# ECOLOGY WITHOUT COMPROMISES

The balance between sophisticated interiors and high ecological responsibility is given priority by RECTICEL. From efficient production to the trend-setting components.



Colo-Fast® is the base material for all interior components manufactured by RECTICEL Automotive. As a result of a continuously improved production process and for the need to respond to the constantly increasing demands in the automotive market, Colo-Fast® as patented material has proven its excellence over many years, always setting standards for high quality automotive components and thus gaining a leading position in the market.

The various components require dedicated production processes:

- Spray technology in monotone and multi-tone
- Reaction injection molding (RIM)
- Reaction injection overmolding (ROM)



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RECTICEL Automotive is part of the Belgian corporate group RECTICEL, operating successfully in four business lines in Europe, USA, and Asia.