



The closed loop glass recycling process begins with finished thermoset composite materials, which are seen here being fed into the line at the beginning of the process.

SUSTAINA® Loop: Owens Corning's circular glass fibre platform

Chris Skinner, VP Strategic Marketing & R&D, explains how Owens Corning is incorporating glass fibre waste into new glass fibre products without compromising performance.

The composites industry is under increasing pressure to demonstrate full circularity to compete against traditional materials. In response, Owens Corning's glass reinforcements business has launched SUSTAINA® Loop, a new 100% circular glass fibre product platform.

SUSTAINA Loop is sourced today from industry manufacturing scrap and end-of-life glass fibre materials (post industry) that would otherwise be wasted. While the technology currently involves remelting of glass fibre waste, SUSTAINA Loop is paving the way for remelting processed end-of-life composite waste. By transforming manufacturing scrap into high-performance fibre, SUSTAINA Loop helps 'close the loop' in composites without conceding performance.

A closed-loop innovation in glass fibres

At the core of SUSTAINA Loop is an advanced process that blends reclaimed glass fibre waste with traditional input materials to produce new fibre reinforcement that is identical in performance to traditional glass fibre. It incorporates circular glass content – up to 100% certified with ISCC+ via a mass balance approach. A proprietary melting technology enables glass fibre waste to be remelted into new fibre with no loss of quality, performance, or specifications. Importantly, the feedstock for SUSTAINA Loop is end-of-line manufacturing scrap – trimmings and off-cuts from production – giving new life to materials that often end up in landfill.



Through pyrolysis, organic parts (thermoset resin) and inorganic parts (glass fibres and fillers) are separated enabling components to be recycled independently in a closed loop approach.

Plug-and-play performance and broad application

Crucially, SUSTAINA Loop provides the same product performance and is available in the sizing of the customer's choice for traditional glass fibre.

SUSTAINA Loop offers plug-and-play compatibility with existing composite applications. Its fibres match the mechanical performance of conventional ECR-glass, allowing manufacturers in automotive, wind energy, construction and other sectors to use them as a direct substitute with no process changes.

Real-world trials underscore the viability. For example, unveiled at JEC World 2025, a fully recycled composite pressure tank for a truck braking system was recently produced using SUSTAINA Loop fibres combined with recycled resin. This first-of-its-kind component demonstrates that even demanding, safety-critical applications can successfully utilise circular materials.

Advancing circularity and sustainability

SUSTAINA Loop also reflects Owens Corning's commitment to its broader sustainability goals. By reclaiming glass fibre waste from our customers, we strive for zero waste to landfill. This circular approach has become a core element of our sustainability strategy. As a result, SUSTAINA Loop is shrinking the environmental footprint of glass fibre products while enabling customers to advance their own sustainability goals.

Looking ahead to end-of-life circularity

SUSTAINA Loop offers a scalable path toward end-of-life composites circularity and shows that with innovation and collaboration, high-performance products can indeed be made from recycled inputs, fostering a more circular value chain.



Manufactured from a combination of post-industrial circular glass fibres and traditional glass input materials, SUSTAINA Loop maintains the same high level of performance and quality as virgin glass fibre.

Our circular glass fibre platform sets a new benchmark for sustainability in composites – where performance and environmental responsibility go hand in hand and ‘closing the loop’ becomes business-as-usual.

Further information

Owens Corning: www.owenscorning.com

* Sizings available are based on manufacturing location. Currently available in L'Ardoise, France.

[END]