

Greentech startup Levante presents at JEC Show 2025 the world's first Solar Panels made in Italy with Recycled Carbon Fiber



<u>Levante</u> is an Italian green-tech startup and design and engineering studio specializing in the development of advanced carbon fiber solar panels.

Levante is presenting at the 2025 JEC Show in Paris the **world's first solar panels made** with recycled carbon fiber.

These semi-rigid, frameless, and glass-free panels are lightweight, durable, portable, and robust, with a 60% lower carbon footprint than traditional panels.







Main features:

- 40% Lighter Than Traditional Semi-Rigid Panels
- Rigid Structure: Carbon Fiber Protects The Solar Cells, combining the performance of a rigid panel in a portable format
- Available in three formats: Small (13W), Medium (55W), and Large (110W)
- Developed and tested with outdoor experts Sailing Uma
- Blending quality craftsmanship and Italian motorsport engineering expertise
- Entirely designed and made in Italy with recycled carbon fiber
- Producing up to 60% lower CO2 emissions





An all-Italian collaboration

The solar panels are proudly and entirely made in Italy in collaboration with innovative Italian companies.

These collaborations represent Italian excellence in engineering and sustainability, merging advanced materials with high-quality craftsmanship to redefine solar technology.

<u>ReCarbon</u> exclusively supplies Levante with high-quality recycled carbon fiber, reinforcing a shared commitment to innovation and sustainability. Specializing in the recovery and transformation of composite materials, ReCarbon contributes to a circular economy approach by giving carbon fiber a second life.





Additionally, <u>Solbian</u>, partners with Levante to exclusively develop high-performance recycled carbon fiber solar panels. With their expertise in photovoltaic applications, they support Levante in creating efficient and durable solar solutions tailored for mobility and outdoor applications.

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What Makes Our Panels Advanced?

Levante's panels are the only solar panels on the market made with recycled carbon fiber (rCFRP). This innovative material provides unmatched durability and toughness, protecting the solar cells from breakage in a way that no other semi-rigid panels can.

The use of rCFRP makes the panels exceptionally robust yet lightweight, ensuring high performance even in the most demanding conditions. This combination of strength, portability, and sustainability sets Levante apart as a true innovator in the solar industry.

40% Lighter - Why It Matters

In off-grid applications, having a lightweight panel makes all the difference. It is easier to transport, install, and use, making it versatile and ideal for mobility sectors like automotive, yachting, and small mobility, as well as off-grid, emergency, and outdoor applications.



For example, in the mobility segment, a lightweight yet efficient solar panel means less weight on the vehicle, resulting in improved performance. Most lightweight panels currently on the market are flimsy and fragile, with cells prone to breaking. Levante's lightweight yet rigid panels solve this issue, offering durability without compromising performance.

60% Lower Carbon Footprint - How?

This reduction is achieved through material innovation, specifically the use of recycled carbon fiber (rCFRP), a scrap material repurposed for our production process. This data is confirmed by a Life Cycle Assessment (LCA) conducted by HFT Stuttgart University, which showed a 60% reduction in CO2 emissions compared to traditional panels (from 18.5 kg CO2-equivalent per square meter to 7.4 kg/m^2).

What Will This Change?

Our panels set a new standard for lightweight, rigid solar panels in the mobility market. They combine cutting-edge technology with Italian craftsmanship, enabling solar energy to seamlessly integrate into mobility applications while redefining solar aesthetics. Levante's panels are not only high-performance but also visually stunning, paving the way for sustainable energy products in mobility, outdoor and emergency response industries.

Levante at JEC 2025

For the first year, Levante is proud to be attending the <u>2025 JEC show</u>, the leading international composite show, representing Italian Innovation with other innovative startups in the Italian Pavilion.



A revolutionary technology presented at JEC 2025

In addition to the Recycled Carbon Fiber Panels, Levante at JEC will unveil a new Integrated Carbon Fiber Solar Technology that is developing with the partner <u>Advanced</u> <u>Composites Solutions Srl.</u>

This revolutionary photovoltaic innovation pushes the boundaries of traditional solar manufacturing and embodies the spirit of Italian Excellence.

Leveraging motorsport engineering expertise, these panels are up to 80% lighter and thinner, with A-class surface quality—set to revolutionize solar for mobility and various applications.



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About Levante

Levante was founded in 2021 by sailors and campers **Sara Plaga** and **Kim-Joar Myklebust**, a real-life couple united by their love for the outdoors and a deep respect for nature and the environment.

Their personal experiences and passion for sustainable living inspired them to create Levante, a company dedicated to advancing renewable energy solutions.



With sustainability at the core of its business, Levante's long-term ambition is to help facilitate the transition to sustainable mobility powered by renewable energy.



Through their travels over the years, the founders encountered a constant issue. "The idea started from a frustration of ours. Although the use of renewable energy in mobility is already widespread, the current solar panel solutions still have too many limitations," says Sara. "Rigid solar panels, whilst powerful, are bulky and heavy. Portable solar panels, on the other hand, are too flimsy, still bulky and cells easily break making them fragile and not easy to use."

Kim adds "To address these issues, we leveraged my expertise in **mechanical composite engineering**, developed through my experience in motorsport, to design solar panels made with recycled carbon fiber. This innovation makes our panels both robust enough to protect the solar cells and lightweight for ease of use."









Picture credit: Evergreen Design Studio - Property of Levante SRL

Levante's journey began with the development of the Origami Solar Panel, a product inspired by satellite technology and introduced through a successful Kickstarter campaign in the summer of 2023 that raised over \$100,000.

The Origami panel required the creation of a **rigid yet robust structure** to support its folding mechanism, which drove Levante to innovate and develop advanced technology for **rigid**, **lightweight panels** made with recycled carbon fiber.



This groundbreaking innovation became the foundation for Levante's commitment to creating sustainable, high-performance solar panels.

To ensure their products meet the highest standards, Levante collaborates with sailors and designers **Dan and Kika**, the creators of the popular YouTube channel **Sailing Uma**. Dan and Kika, who have lived on an electric sailboat traveling around the world for over nine years, helped test Levante's panels in tough marine environments. This partnership has been instrumental in refining the products for real-world applications.

Today, Levante is dedicated to creating **beautiful**, **durable solar panels**, proudly made in Italy, for the mobility industry. Combining Italian craftsmanship with cutting-edge engineering, Levante is redefining the possibilities of solar energy.

Visit <u>levante.eco</u> for more information about Levante.