

WATCHES AND JEWELRY

Rolex Awards Laureate leads recycling breakthrough

August 14, 2025



Novoloop was founded by Miranda Wang and Jeanny Yao in 2015. Image credit: Rolex

By KIRAN GILL

Swiss watchmaker **Rolex** is innovating in the plastic recycling space.

American chemical recycling company Novoloop, founded by Rolex Awards Laureate Miranda Wang, completed an individual-scale demonstration plant in Surat, India, that converts plastic waste into high-quality chemical building blocks. The demo plant, constructed in less than six months with support from the Rolex Perpetual Planet Initiative, achieved 100 hours of continuous operation in 2024, processing post-consumer polyethylene into virgin-quality materials.

"This smaller, model plant is essentially the blueprint for world-size factories," said Ms. Wang, in a statement.

"They will no longer use fossil fuel to make valuable materials, but instead consume waste, twenty-four seven, fully automated," Ms. Wang said. "In the future, we can use this technology to turn the tap off on fossil fuel consumption and make the plastic economy circular."

Waste reduction

Novoloop's technology produces up to 91 percent fewer carbon emissions than conventional methods, and is intended to offer cost and quality parity with fossil fuel-derived plastics. The company estimates that by 2030, it could convert 192,904 tons of carbon dioxide emissions each year.



The Surat facility has the capacity for 77 tons. Image credit: Rolex

Polyethylene, one of the most widely used plastics, is typically considered difficult to recycle. Globally, more than 400 million metric tons of plastic are produced annually, primarily from virgin fossil fuels, while less than 9 percent of plastic waste is recycled.

While mechanical recycling often results in lower-quality material, thereby limiting its commercial applications, Novoloop's process creates monomers, chemical building blocks, that can then be used to produce intermediate materials such as polyols and thermoplastic polyurethane. These materials can then be used in footwear and other high-performance goods.

"I have a one-year-old son now, and every day I want to make a better future for him," said Ms. Wang, in a statement.

"We have to believe it's possible," Ms. Wang said. "It's hard, but when I look at the other people who are working tirelessly for a better future for our planet, and many are part of the Rolex family, whether a mountaineer, conservationist, or entrepreneur, it gives me hope.

"The future is in our hands."

To aid the commercialization of this process, samples from the plant have been shipped to manufacturing partners in China.

A green future

Alongside a growing number of Digital Product Passports (DPPs) in the European Union ([see story](#)), luxury brands are prioritizing sustainability initiatives as savvy consumers demand greener solutions ([see story](#)) and favor circular fashion ([see story](#)).



The company is bolstering its existing Green Mind philosophy. Image credit: Zegna

While Rolex's waste reduction innovations represent one way forward for brands, Italian menswear brand Zegna is exploring global reforestation and biodiversity enhancement programs ([see story](#)), and Italian luxury yacht manufacturer Baglietto is committing to new standards ([see story](#)).

U.S. fashion group Tapestry is exploring recycled material with a new, three-year-long contract with an established partner, English circular material manufacturer Gen Phoenix ([see story](#)).

Despite the need for sustainable solutions, global consulting management firm Kearney's 2025 Circular Fashion Index (CFI) reported that 80 percent of apparel brands are missing the mark on the sustainability front ([see story](#)).