RECO NYLON, **ENVISIONING A SUSTAINABLE** TEXTILE INDUSTRY









50 YEARS NYLON PRODUCTION EXPERTISE

NUREL is a European polymer and fiber producer based in Spain, with over five decades of production expertise.

We strive hard to improve our efficiency by reducing energy and water consumption, greenhouse effect emissions and by minimizing waste in our processes.

NUREL is ISO 14.001 and 50.001 certified.







WE USE 100% RENEWABLE ENERGY IN OUR PRODUCTION

SGS states that 100% of the energy used in our production site comes from renewable resources.

NUREL is the **first company** in our sector to obtain this certification.

Our company group is accredited to **produce** around **3.5 Megatons of renewable energy** from our Wind Energy and Concentrated Solar Power premises as well as from our own high efficiency cogeneration plants.







ECO-DESIGN FOR A CIRCULAR ECONOMY

We are committed to **Eco-design**. We actively collaborate in developing new packaging and textiles **solutions** to encourage **circular economy**.

Our R&D team works in two development lines, **mono-material solutions** to facilitate recycling and in creating new polymers and fibers from **reclaimed materials**.

If you have in mind any project linked to circular economy and recycled nylon, please count on us.





FOCUSED ON OUR ZERO WASTE POLICY

At all stages of our product life cycle we strive to use resources efficiently, favor the use of sustainablymanaged resources and target zero waste.

We **recover** all the generated industrial **waste** for new polymer and fiber production.







WHAT IS RECONYLON?





A NEW LIFE TO NYLON FROM RECLAIMED MATERIAL

At NUREL we revalorize the nylon pre-consumer waste produced during our manufacturing process by **re-converting it into a high quality sustainable yarn.**

RECO NYLON IS A 100% RECYCLED NYLON 6 YARN

Reco Nylon performance is similar to standard nylon 6 yarns adding **sustainable advantages**:

- Reducing dependence on non-renewable resources
- Maintaining a clean land field
- Decreasing environmental impact







WHY RECONYLON?





BECAUSE SUSTAINABILITY DOES MATTER

GRS Certification

- Contains 100% recycled Nylon
- NUREL meets the fair labor and environmental impact requirements of the GRS

Sustainable facts

- Life Cycle Assestments
- Improvements vs. Standard Nylon
- Sustanability achievements
- Reduces environmental impacts

Material of choice

- Matching sustainable consumer trends
- Outstanding performance and quality for most demanding applications





RECONYLON HAS ACHIEVED GRS CERTIFICATION

GRS certifies that NUREL **recycles the discarded nylon** material divertied from the waste stream during the manufacturing process and **reconverts it into Reco Nylon** yarn.

Therefore, we meet the fair labor and environmental impact requirements of the GRS

What is Global Recycled Standard?

- It is a mecanism created by Textile Exchange
- It aims to substantiate the recycled content
- It attests that all processes in the entire supply chain have undergone the proper steps to ensure the integrity of the final product.
- It also adresses issues pertaining to environmental and social criteria.







IN NUREL WE UNDERTAKE LCA OF OUR PRODUCTS

NUREL aims to promote sustainability of all our products and processes. We are involved in **examining the cradle-to gate impacts** of our products by initiating Life Cycle Assessments.

Environmental Product Declaration (EPD) evaluates the environmental impact of **1kg of product** by analysing all the different processing steps.









RECONYLON CONSIDERABLY REDUCES RESOURCES CONSUMPTION



Standard Nylon 6

*These data proceed from an independent LCA. They correspond to 1 kg of same count Standard Nylon and Reco Nylon manufactured at NUREL premises.



Natural Gas Consump. reduced by 88%



Nitrogen Consump. reduced by 99%



Electricity Consump. reduced by 83%



Water Consump. reduced by 88%





RECONYLON MINIMIZES CO₂ EMISSIONS AND WASTE



CO₂ **Emissions** reduced by **88%**



Spills reduced by 84%





Standard Nylon 6

*These data proceed from an independent LCA. They correspond to 1 kg of same count Standard Nylon and Reco Nylon manufactured at NUREL premises.

Non-Hazardous Waste reduced by 96%



Hazardous Waste reduced by 96%





RECONYLON CARES ABOUT THE AIR QUALITY

The production of Reco Nylon generates almost **9 times less CO**, **emissions** than standard nylon 6.

Therefore, a production of 1 ton. of Reco Nylon reduces the emissions of an equivalent to:



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CO₂ produced by a car driving 8.191 km

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CO₂ produced by 265.451 phones being charged

CO₂ absorbed by 101.000m² of forest in a year

*These equivalences have been calculated on the CO₂ Equivalences Calculator by the United States Environmental Protection Agency.





ZERO KILOMETER ZERO WASTE

The production process of Reco Nylon takes place entirely in our premises in Zaragoza (Spain), thereby **saving the environment CO₂ emissions** produced during the **manufacture and transport** of raw material.

OUR PROCESS

- At a first stage we **select and adequate** the reclaimed material from all the waste generated in our textile facilities.
- Reclaimed material is remalted at our reclycling units in order to obtain a **recycled PA6 polymer**.
- Recovered polyamide polymer is **extruded and made back into fibers** at our spinning plant.





RECONYLON DECREASES ENVIRONMENTAL IMPACTS



Global Warming Potencial (GWP) Greenhouse gases impact reduced by 6 times

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Acidification Potential (AP) Ph-reduction minimized by 50% helping to preserve soil quality



Eutrophication Potential (EP) 10 times less impact in water bodies



Ozone Creation & Depletion Potencial No alteration of natural levels of ozone in the environment

*These data proceed from an independent LCA.





RECONYLON, MATERIAL OF CHOICE





MATCHING WITH GLOBAL CONSUMER TRENDS

In recent studies, **63%** of asked consumers indicated their **willingness to put time and effort** into finding **sustainable clothing**.



Global Concern for Sustainabiliy.

% saying concerns about environmental change are very real and require change in our behaviour





SUSTAINABILITY & OUTSTANDING PERFORMANCE

TEXTILE EXCHANGE points recycled nylon as a prefered fiber for its more sustainable properties.

Reco Nylon delivers **similar quality to standard nylon 6 yarns**.

It is available in high range from **22 to 78 dtex** and different formats, flat and textured.

NUREL excellence in fiber production ensures an optimal performance for sustainable fabrics oriented to sportswear, swimwear and underwear.





BRANDING: RECONYLON HANGTAGS

We help you to **comunicate Reco Nylon** sustainable advantages to your final consumer.

Hangtags can be provided free of charge after following NUREL's approval for branding process.





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