

RADICI
marine



**SUSTAINABLE
WEAVINGS
CHOICES**

RADICI CIRCULAR

Since 2013, Radici has implemented a comprehensive plan to define its sustainability goals. This plan has identified five areas of sustainable development on which to focus resources and take concrete actions. Our commitment extends to various key aspects: promoting well-being and engaging the community and local suppliers, adopting a short supply chain to obtain high-quality raw materials in full respect of the environment, reducing resources used in our production process, introducing fully recyclable or regenerated products, and improving the efficiency of our production machinery.

Despite the significant results achieved in recycling over the years, the company is revising the product design phase to make them monoproducts, hence fully disposable and regenerable into new fibers. Our sustainable future is based on eco-design and the creation of textile floorings designed to be easily disassembled and regenerated in all their components. We pay particular attention to reverse logistics at the time of product sale and provide the necessary means for the items to be properly collected and disposed of at the end of their life cycle.



1. How we produce



2. Production



3. Recycle



4. Certifications



RESOURCES

We are committed to taking concrete actions to reduce resource waste and promote sustainability. We have adopted a holistic approach that allows us to implement a range of initiatives, including material recovery and recycling, optimizing energy efficiency, and adopting sustainable practices in all stages of our operations. We strongly believe that our responsibility towards the environment and future generations requires a constant commitment to creating a more sustainable future, where resources are used responsibly and waste is minimized. Our determination to make a difference is reflected in our daily efforts to promote an eco-sustainable corporate culture and develop innovative solutions that contribute to preserving the environment and building a better world for all.



Since 2013, we have achieved the following reductions:



-80%

water consumption



-87%

waste production



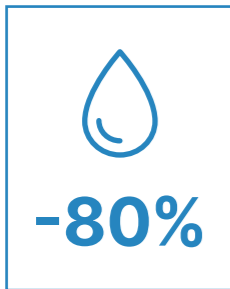
-39%

methane consumption



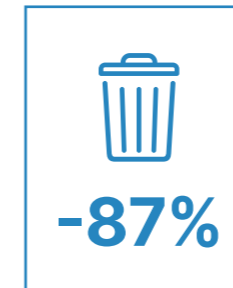
-30%

energy consumption



In recent years, we have invested in the development of a water recycling system that involves improving internal tanks and utilizing water from an underground source. As a result, we have reduced our water intake from the aqueduct by 80%.

Thanks to the implementation of advanced technologies, we have managed to reduce our methane consumption by 39%. This is a significant achievement for responsible resource management and the reduction of greenhouse gas emissions.



87% of the post-industrial waste generated by our production is directed towards energy recovery or material recycling through local suppliers who share our sustainable vision and commitment to the environment.

In addition to energy recovery from waste, we have implemented systems aimed at reducing overall energy consumption, resulting in a 30% reduction. In 2022, we installed a photovoltaic system that will cover 40% of our energy needs.

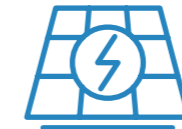
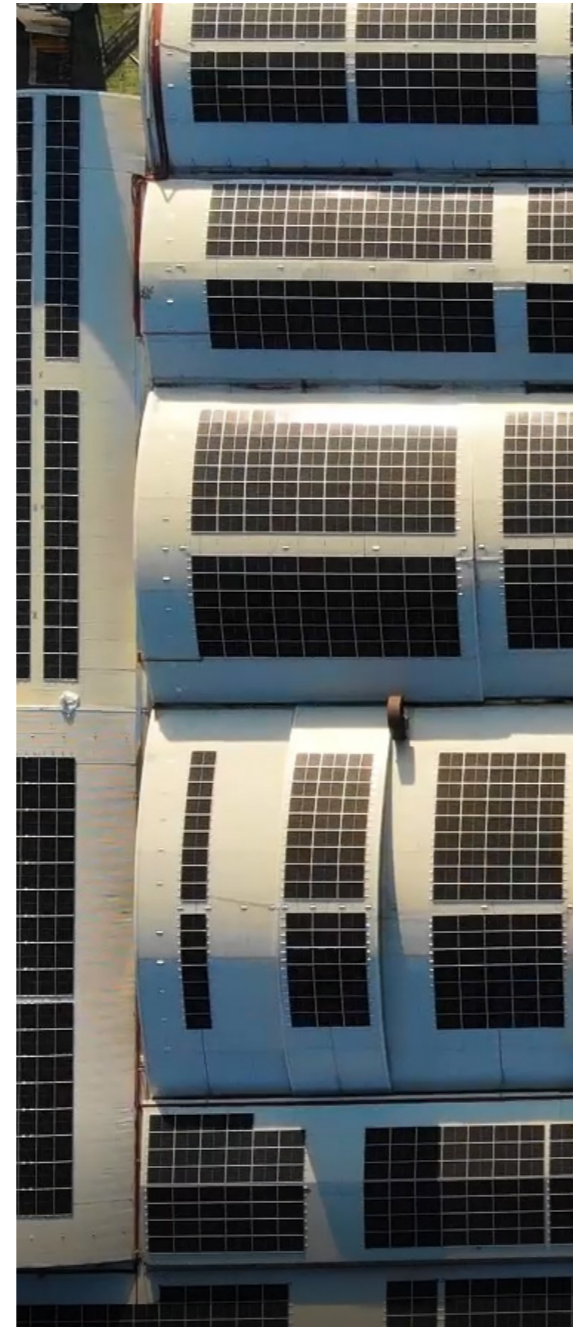




PHOTOVOLTAIC PLANT

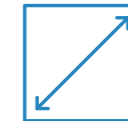
In 2022, we made an investment in a cutting-edge photovoltaic system. With a total of 6,060 solar panels, we can generate a power output of 2.4 MWp. Spanning an area of 25,000 square meters, this installation is one of the largest in Europe and represents a significant step towards our transition to cleaner and more sustainable energy.

Thanks to this new installation, we will be able to reduce CO2 emissions by a remarkable 750 tons per year, making a significant contribution to environmental preservation. Additionally, the photovoltaic system will cover 40% of our energy needs, allowing us to reduce our reliance on traditional energy sources and promote the use of renewable energy.



6.060

Solar panels



25.000

Square meters



40%

of our energetic demands



-750

tons of CO² per year



RAW MATERIALS

We consistently seek high-quality raw materials for the production of our products and apply the same selection policy to our suppliers, with a preference for local entities. This has created a short-distance industrial supply chain, which has positive effects on the environmental impact of the final product. Regarding the sourcing of raw materials, we incorporate approximately 50% of secondary raw materials in our production process. We also strive to find ecological solutions for auxiliary products. For example, we use a latex underlay for certain textile floorings and are exploring the possibility of replacing 60% of the calcium carbonate in the compound with a plant-based filler made from potato starch. Furthermore, in selecting the chemicals used in our woven carpet department, we are leaning towards environmentally friendly and less impactful alternatives.



50%

of secondary raw materials



35%

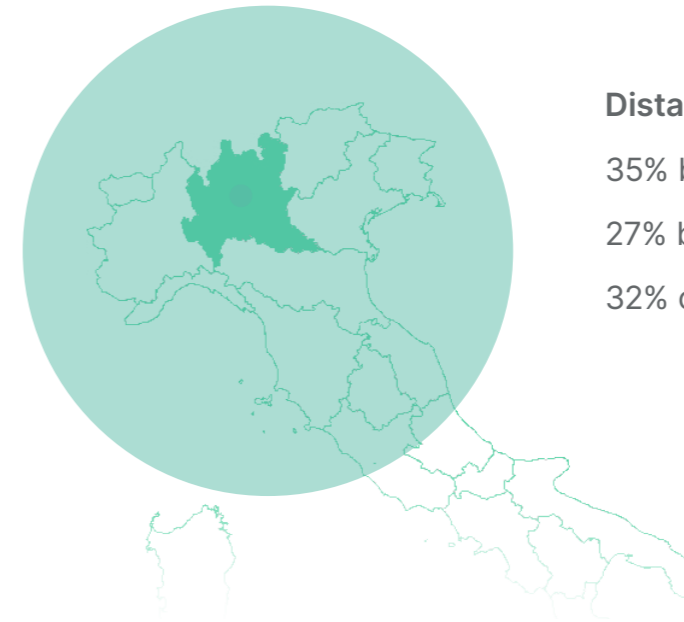
of suppliers within 10 km from the company



90%

of suppliers implements optimized deliveries

SHORT SUPPLY CHAIN



Distance from the company

35% between 10 km

27% between 11 and 500 km

32% over 500 km



RadiciGroup is strongly committed to the concept of 360° Sustainability, which encompasses the dynamism and growth that characterize a modern company.

A key element of the Group's success is its synergistic and vertical integration, particularly in the nylon supply chain. In fact, RadiciGroup has complete control over its production chain, which spans from chemical intermediates such as adipic acid to polyamide 6 and 6.6, plastic technopolymers, and synthetic yarns. The company pays great attention to the needs of its customers and strives to anticipate their demands by offering tailored products.

A concrete commitment to sustainability is demonstrated by RadiciGroup's active membership in the Ellen MacArthur Foundation, an organization that has theorized the principles of the circular economy. This confirms the company's orientation towards circular economy practices and its desire to contribute to a more



Fiberfil is a renowned company in the polyester staple fiber manufacturing sector. The distinctive feature of Fiberfil is its exclusive use of recycled PET bottle flakes in the production of its polyester staple fiber. This strategic choice significantly reduces the use of petroleum and CO2 emissions, contributing to the preservation of our planet. Additionally, Fiberfil is certified according to the Global Recycled Standard (GRS), ensuring the traceability and sustainable origin of the raw materials used. With this certification, customers can have the assurance that Fiberfil's polyester staple fiber is produced in compliance with high standards of quality and sustainability.



Wools of New Zealand is recognized as a benchmark for excellence in the wool market. The superior quality of their products is the result of the ongoing commitment of farming families who practice sustainable agricultural methods and care for the land to ensure a solid foundation for future generations. Each company affiliated with Wools of New Zealand undergoes rigorous checks by the compliance evaluation body, Wool of New Zealand, which is a New Zealand government entity. This organization verifies land management, animal welfare, social responsibility, and corporate transparency, ensuring that products are made in full compliance with the highest standards.

By choosing Wools of New Zealand products, you can be confident in obtaining superior quality wool that is produced ethically and sustainably.



For over 50 years, Aquafil has been one of the leading players in Italy and worldwide in the production of synthetic fibers, particularly polyamide 6. The Group is a reference point for quality, innovation, and new models of sustainable development. This strategic choice is realized through the continuous renewal of processes and products, thanks to ongoing investments in capital and know-how.



Econyl is a 100% regenerated and 100% sustainable PA6 yarn. This is made possible through an innovative regeneration process that involves several stages, including the recovery of pre- and post-consumer waste, the cleaning and compacting of the waste, the depolymerization of the nylon molecule, the transformation into yarn for carpets or apparel, and finally the commercialization of the resulting products.

2. production



For more than 70 years, the yarn of the finest materials is transformed before our eyes into quality products with equipment that allows us to put the most advanced textile technology at the service of creativity. Thanks to the complete control of the entire production chain, every stage of the textile creation presents an opportunity to search for production efficiency, as well as constant improvement and innovation.

We want to offer the market products with a low environmental impact by the use of recycled and regenerated post-industrial and post-consumer raw materials. When we started to develop a new quality for the cruise industry we had an idea printed in our minds: climate and nature need to be fully protected and this can only be achieved if we open ourselves to a sustainable life and a sustainable business.



A successful project starts with a clear vision.

The main characteristic of our new custom design quality is that it's composed by 100% Regenerated Nylon that guarantees, at the end of its life, recyclability, regeneration and above all the huge possibility of using it as a raw material. Our Bloom textile flooring is made with Econyl yarn, a special nylon in polyamide 6 that can be recycled, recreated and remoulded again and again. This Yarn is made from industrial waste as fishing net, fabric scraps, carpet flooring and industrial plastic and it is regenerated through a radical process that restores the original purity of the nylon. The nylon is then processed into yarn that we use to make our Bloom carpet, giving life to a sustainable blank canvas to the best designs. Our Bloom carpet can be recycled infinitely without losing its quality, ready to become a new carpet full of possibilities.



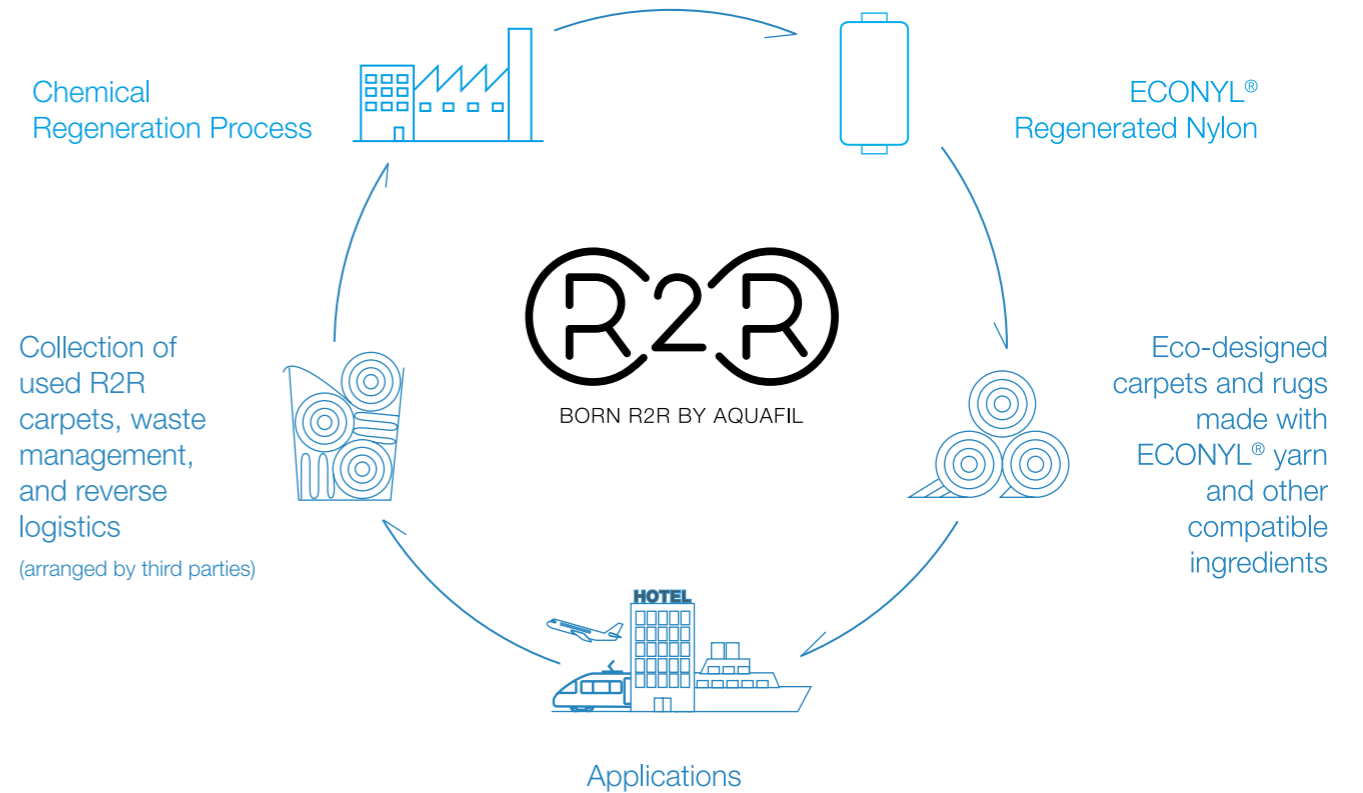
BLOOM BACK + R2R

Another step towards sustainability

We are dedicated to creating a carpet that can be fully recycled or regenerated into new fibers, ensuring minimal waste and optimal resource efficiency. Our focus on circularity is evident in our introduction of a backing made with polyamide 6, the same material used for the pile. This backing facilitates a streamlined process for regenerating our products at the end of their useful life. While our commitment to circularity aligns with the current state of the art of Aquafil technology, we continuously strive to push boundaries and explore innovative solutions to further enhance the circularity of our products. By embracing this circular approach, we are taking significant strides towards a more sustainable and environmentally friendly future.



REGENERATIONS PROCESS



3. Recycle

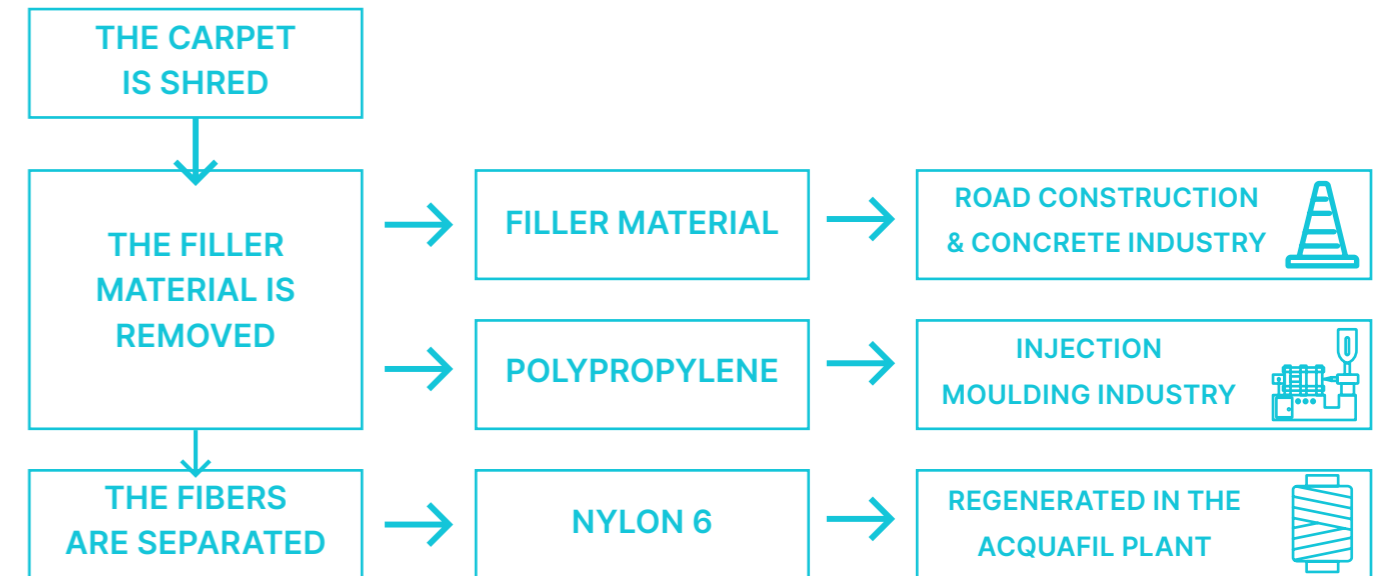


Bloom serves as a prime example of how eco-design can facilitate the complete regeneration of a product. However, we are also actively engaged in recycling all our other carpets through a collaborative project with Aquafil. This initiative involves a chemical recycling process known as Depolymerization, conducted at the AquafilSLO d.o.o. plant in Ljubljana, Slovenia.

AquafilSLO d.o.o. specializes in chemical recycling, which distinguishes the recycling of PA6 (polyamide 6) from other polymer recycling methods. Through a series of grinding and separation steps, the plant efficiently breaks down the multi-material carpets, enabling 100% of the material to be recycled. This chemical recycling approach not only offers the potential to restore the recycled material to its initial quality but also ensures a higher degree of quality retention compared to mechanical recycling methods.



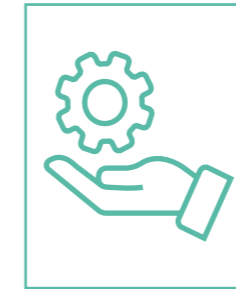
RECYCLE PROCESS



4. Certifications



Certifications in the field of environmental management play a crucial role in today's world, where sustainability and responsible business practices are becoming increasingly important. These certifications demonstrate our commitment to minimizing our environmental footprint, conserving resources, and implementing eco-friendly processes throughout our operations. By obtaining and maintaining these certifications, we showcase our dedication to responsible business practices, setting us apart as a company that prioritizes sustainability and strives to make a positive impact on the environment. With these certifications, our customers can trust that they are partnering with a company that is actively working towards a greener future and contributing to a more sustainable world.



ISO 9001:2015 is an international standard that sets out the criteria for a quality management system, ensuring that organizations meet customer expectations and continuously improve their processes.

ISO 14001:2015 is an international standard that provides a framework for organizations to establish and maintain an effective environmental management system, helping to manage their environmental impact and achieve sustainability goals.





REACH CONFORMITY

REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) conformity is of utmost importance for companies operating within the European Union. It ensures the safe and responsible handling of chemicals throughout their lifecycle. By adhering to REACH standards, companies demonstrate their commitment to protecting human health and the environment. REACH conformity also promotes transparency and accountability in the supply chain, enabling better traceability of chemicals and fostering a culture of responsible chemical management. Overall, REACH conformity plays a crucial role in enhancing chemical safety and sustainability within the European Union.



VOC TEST

VOC testing is an essential process for evaluating the levels of volatile organic compounds present in a given environment or product. By conducting VOC testing, we can accurately measure and identify the types and concentrations of these compounds. This information allows us to assess potential health risks, determine compliance with regulatory standards, and implement appropriate mitigation measures. Our thorough VOC testing protocols ensure that our products meet stringent quality and safety standards, providing our customers with confidence in the indoor air quality and overall environmental performance of our offerings. By prioritizing VOC testing, we demonstrate our commitment to delivering environmentally responsible and safe solutions.





Recycable plastic certification

The international laboratory CSI based in Milan certified our Bloom, textile flooring, composed by Polyamide 6 for the Marine business, is 100% recycled and regenerated thanks to its innovative eco-design and composition. This allows to turn waste into raw materials, ready to take a new shape and life, in full respect of the environment.

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