

Sustainability report 2024

Shaping Sustainable Impact in a Changing World

Global Context

The year 2024 has seen a notable shift in global sustainability dynamics. While the momentum behind environmental action remains strong, political developments have reshaped the direction of policy in key regions. In the European Union, the pace of Green Deal implementation has slowed compared to earlier ambitions. In the United States, a newly installed administration has pivoted toward different priorities. Closer to home, the Netherlands also experienced a change in direction following the formation of a new government.

Despite these shifting winds, the flooring industry continues to grapple with its long-standing reliance on fossil-based raw materials. Although the sector accounts for only a modest share of global fossil resource usage, awareness is growing that meaningful change is necessary. At Rinos, we believe this calls for clear, transparent communication about our goals and our progress—and that's exactly what this report is designed to provide.

Within the flooring industry, however, there has not yet been a significant shift in attitudes toward sustainability. The sector remains highly dependent on fossil-based raw materials. While the global share of the carpet industry in fossil resource consumption is relatively small, the awareness that this needs to change is clearly present within the industry. This highlights the importance for Rinos to maintain transparent communication with all stakeholders regarding its environmental and sustainability policies and objectives.

Our Responsibility as a Family-Owned Manufacturer

With nearly a century of history, Rinos has always believed in building for the long term. Since our founding in 1925, sustainability has been a natural extension of our values as a family-owned business. We see it as our duty to operate responsibly—for our people, our planet, and the generations to come. Guided by our **Sustainability Path 2030**, introduced in 2021, we are working step-by-step toward a lower carbon footprint, smarter use of resources, and increased circularity in product design.

Aligning with the UN Sustainable Development Goals (SDGs)

Rinos has aligned its sustainability strategy with the United Nations Sustainable Development Goals. As a small-to-medium-sized manufacturing company, we have chosen to focus on four SDG's where we can make the greatest impact:

13 CLIMATE ACTION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



8 DECENT WORK AND ECONOMIC GROWTH



Our sustainability work is structured into three focus areas: reducing our operational emissions, improving the sustainability of our products, and driving innovation for circularity.

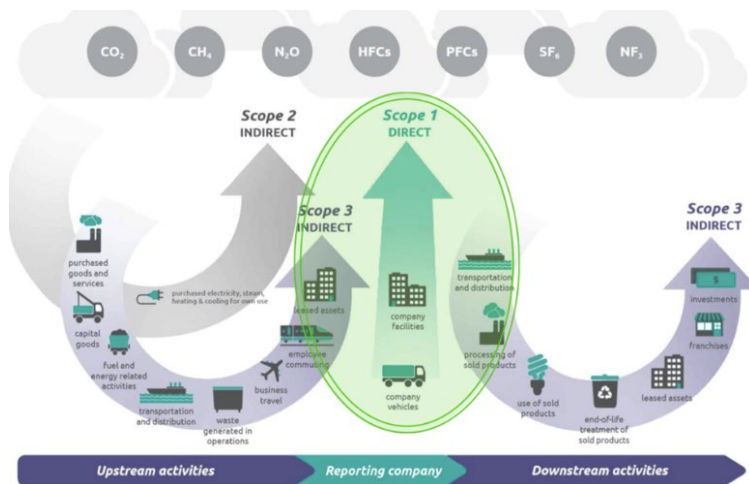
In recent years, Rinos has primarily concentrated on reducing Scope 1 and 2 emissions through energy savings and the use of green electricity. In 2023 and 2024, significant progress was made in reducing Scope 2 upstream emissions by incorporating recycled materials with lower CO₂ emissions. Looking ahead, Rinos will increasingly focus on reducing Scope 3 downstream emissions by developing concepts for full product recyclability.

Rinos manufactures entrance carpet and coir mats. The products are partly based on fossil raw materials and the manufacturing process requires energy. Thus the Global Warming Potential (GWP) of our products has the biggest impact on our environment. That is why "Climate Action" is our top priority. Through an approach of

responsible production and product innovation, we can reduce our Carbon Footprint and reduce the Global Warming Potential of our products. Parallel to this, as an employer we feel responsible for decent work, both in our own organisation and in our supply chain.

Rinos Sustainability path

When we look at possibilities to reduce our Carbon Footprint, it is important to analyse where the impact on the environment originates in the total product lifecycle.



Scope 1 emissions are the emissions caused by the direct activities of Rinos itself. Think about the emission of CO₂ by using gas for our heating systems.

Scope 2 are the emissions caused by the generation of purchased electricity or externally generated steam or heat. In our case this is about electricity.

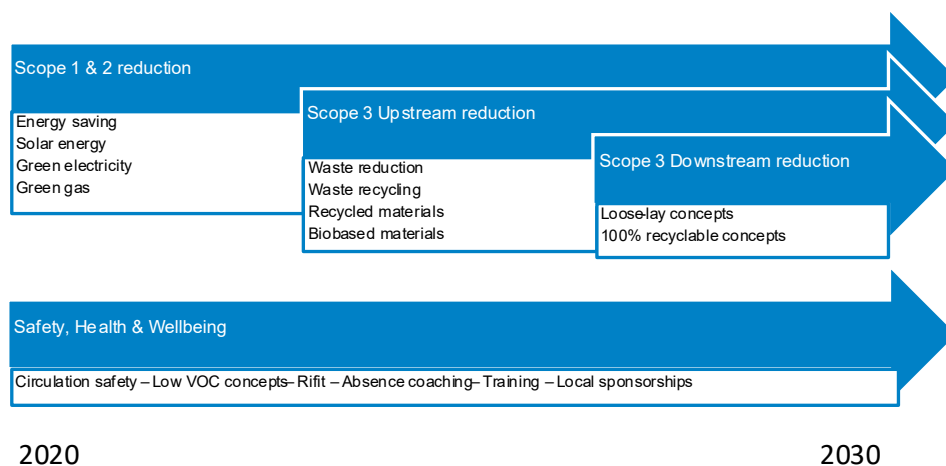
Scope 3 has to do with the emissions outside our own organisation, caused by the creation and transport of raw materials (Upstream), the emissions during the period of use of the product (transport, installation, maintenance) and the disposal of the product at the end of life (Downstream).

Based on these three emission scopes, we have defined a staged approach in the Rinos Sustainability Path. In the first stage we focus on reducing our Carbon Footprint by reducing the energy use within our own organisation and to migrate to climate-neutral energy sources.

In the second stage we take a look at the embedded Carbon Footprint in our products. Within this stage we see options to reduce our emissions by reducing waste, recycling manufacturing waste, making use of recycled materials and applying more biobased materials.

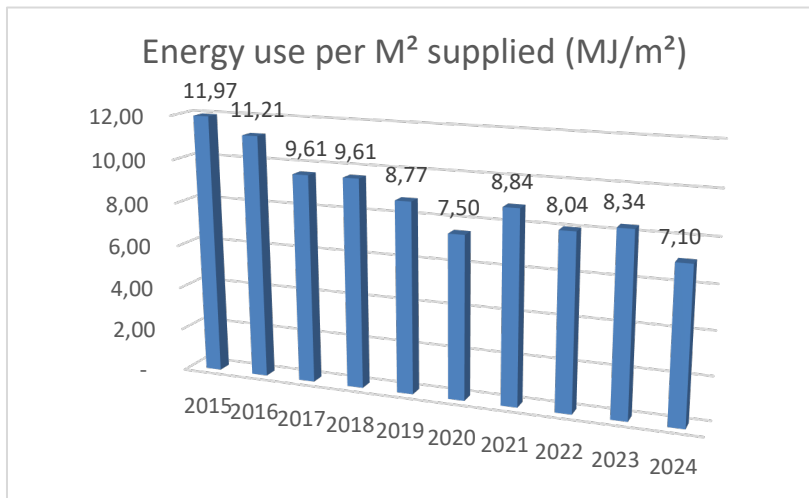
In the third stage we focus on product innovation with the ultimate goal of creating products that can be recycled at the end of the life cycle.

Rinos Sustainability Path



Climate action: Driving Down Emissions

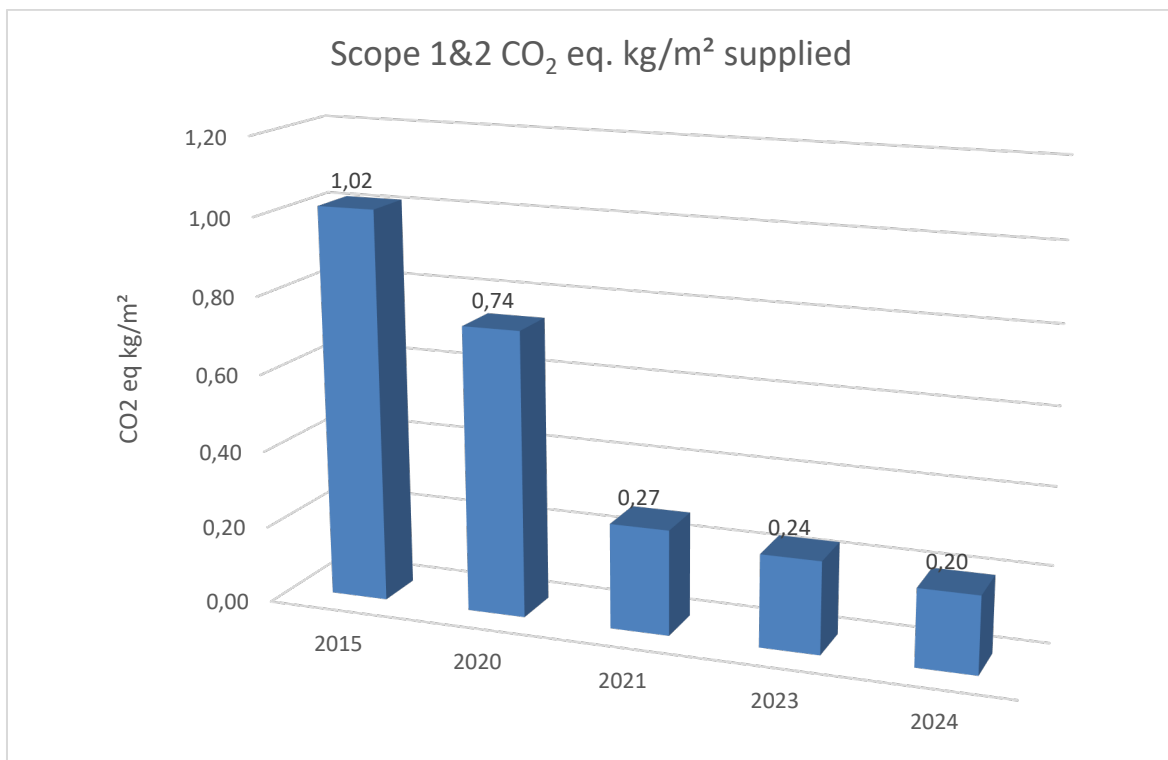
41% Reduction in Energy Use per m²



One of our first major steps has been reducing the energy consumption of our production processes. Through process optimisation and investments in more efficient, electrically powered ovens, we've reduced energy use by 41% per square metre of product supplied (compared to our base year of 2015). Renewable energy now accounts for 49% of our total energy consumption, sourced from both on-site solar panels and certified green power.

Achieving 80% CO₂ Reduction in Scope 1 & 2

Originally, Rinos set a target to reduce scope 1 and 2 emissions by 55% by 2030, in line with EU targets. By 2024, we've already surpassed this, achieving an 80% reduction in CO₂ emissions compared to 2015. Emissions per square metre now stand at just 0.20 kg CO₂ eq. To progress even further, we will need to phase out grey gas or explore innovative low-emission production technologies.



Responsible Production and Innovation

Reducing Scope 3 Upstream Emissions

In the second stage of our Sustainability Path, we are tackling scope 3 emissions by rethinking our raw material use. This includes minimizing waste, increasing post-industrial recycling, and incorporating more recycled or renewable inputs.

Waste Recycling Rate: 48%

Although 2024 brought setbacks—due to the discontinuation of a coir recycling stream—our overall recycling performance remains higher than pre-2023 levels. 48% of our production waste was recycled in 2024, supported by better material separation and ongoing process improvements.

Circularity Index: 70%

Our Circularity Index, which tracks the share of recycled and renewable raw materials, rose to 70% in 2024. This progress was driven by a broader use of recycled backing materials, increased integration of Econyl (regenerated nylon), and expanded use of biobased coir yarns—a material we've worked with since our founding.

Product Highlights:

Coir mats circularity index: 84%

Rinos is originally a manufacturer of coir mats. The yarn for these mats is made from the outer bark of coconuts that are harvested six times a year. Working with renewable materials is therefore in our DNA since 1925. The backing of these coir mats is made of a flexible PVC compound which contains calcium carbonate as a filler. Coir mats with the new, recycled calcium carbonate component now consist for 84% of renewable and recycled raw materials.

Econyl mats circularity index: 74%

Rinos was in 2010 the first manufacturer of entrance mats with an Econyl mat, made with regenerated (= chemically recycled) polyamide. Both existing and new polyamide entrance mats are made with this regenerated material where possible. Thanks to the new recycled calcium carbonate component, this type of mats has now reached a circularity index of 74%.

PVC-free products: Pura backing

The PVC backing, applied by Rinos, has been phthalate-free since 2010. One of the trends in the flooring market is that leading architects and customers, both in Europe and in the United States, avoid the use of PVC in commercial buildings for environmental reasons. Textile products that partly contain PVC are difficult to recycle and often refused because the chlorides damage the recycling installations. The plasticisers can migrate into porous subfloors and leave stains that cannot be removed.

That is why Rinos also markets a PVC-free alternative: Pura Backing. This backing is made of polyurethane. It does not contain chlorides or plasticisers. In addition, this material can be partly built up from renewable raw materials, which offers opportunities for further innovation and further increase of the circularity index.

Low VOC emission: Eurofins Gold



Pura Backing also contributes to a healthy living and working environment because the emission of Volatile Organic Compounds is lower compared to PVC. In 2022, we have measured the VOC emission at Eurofins. This proved that the VOC Emission with Pura Backing meets to most stringent European norms and applies to the Eurofins Gold Standard.

Based on these results, Pura Backing products have obtained the Blue Angel certificate

www.blauer-engel.de/uz128

Innovation: towards circular products

Designing for Circular End-of-Life

In the third stage of our strategy, we are working to address the end-of-life environmental impact of our products. Today, most entrance mats are incinerated or sent to landfill. Our Environmental Product Declarations (EPDs) provide a full cradle-to-grave analysis, clearly identifying where improvements are needed. We are exploring two parallel paths:

1. Material innovation to make mats easier to recycle economically.
2. Industry collaboration to integrate entrance mat recycling with broader flooring recycling streams.

Decent work and growth

We take pride in creating a workplace where people feel supported, valued, and safe.

In 2024, participation in our health and wellness program dropped due to changes in our health insurer's incentive scheme. Meanwhile, long-term illness among a small group of employees impacted overall availability. As a small, aging workforce, we remain focused on promoting work-life balance, vitality, and inclusivity across all ages.

Community Involvement

Rinos continues to deepen its connection with the community. The number of supported initiatives grew again in 2024. All contributions are now evaluated against a structured sponsorship policy, ensuring alignment with our values and impact objectives.

Looking Ahead

Rinos remains committed to its Sustainability Path 2030. By combining operational improvements, sustainable materials, and product innovation, we are working to shape a more circular and climate-resilient future—for our customers, our employees, and the generations after us.