



SUSTAINABILITY BOOKLET 2023

Driving innovation in cartonboard packaging

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the full Sustainability Report](#)



CEO LETTER

Dear All,

In 2023, RDM Group deepened its commitment to sustainability, to circularity, to health and safety, and to the strategic direction we have set for ourselves, despite challenging economic and commercial conditions.

We remain committed to creating lasting value for our stakeholders and communities.

We are convinced that the best way to achieve this is through a circular-economy business model that invests in operational excellence and innovation to drive efficiencies and reduce our environmental impacts.

We believe this is the best long-term strategy to strengthen our financial performance and simultaneously advance in our Environmental, Social and Governance (ESG) goals.

We consolidated our position as Europe's leading producer of 100% recycled and fully recyclable cartonboard; reinforcing our multi-mill, multi-country strategy that allows us to be close to our local customers while having the visibility of a pan-European producer.




Michele Bianchi
RDM Group CEO

ABOUT US

RDM Group is the European leading packaging board producer. The Group is committed to the development of cartonboard solutions based on recycled fibers.

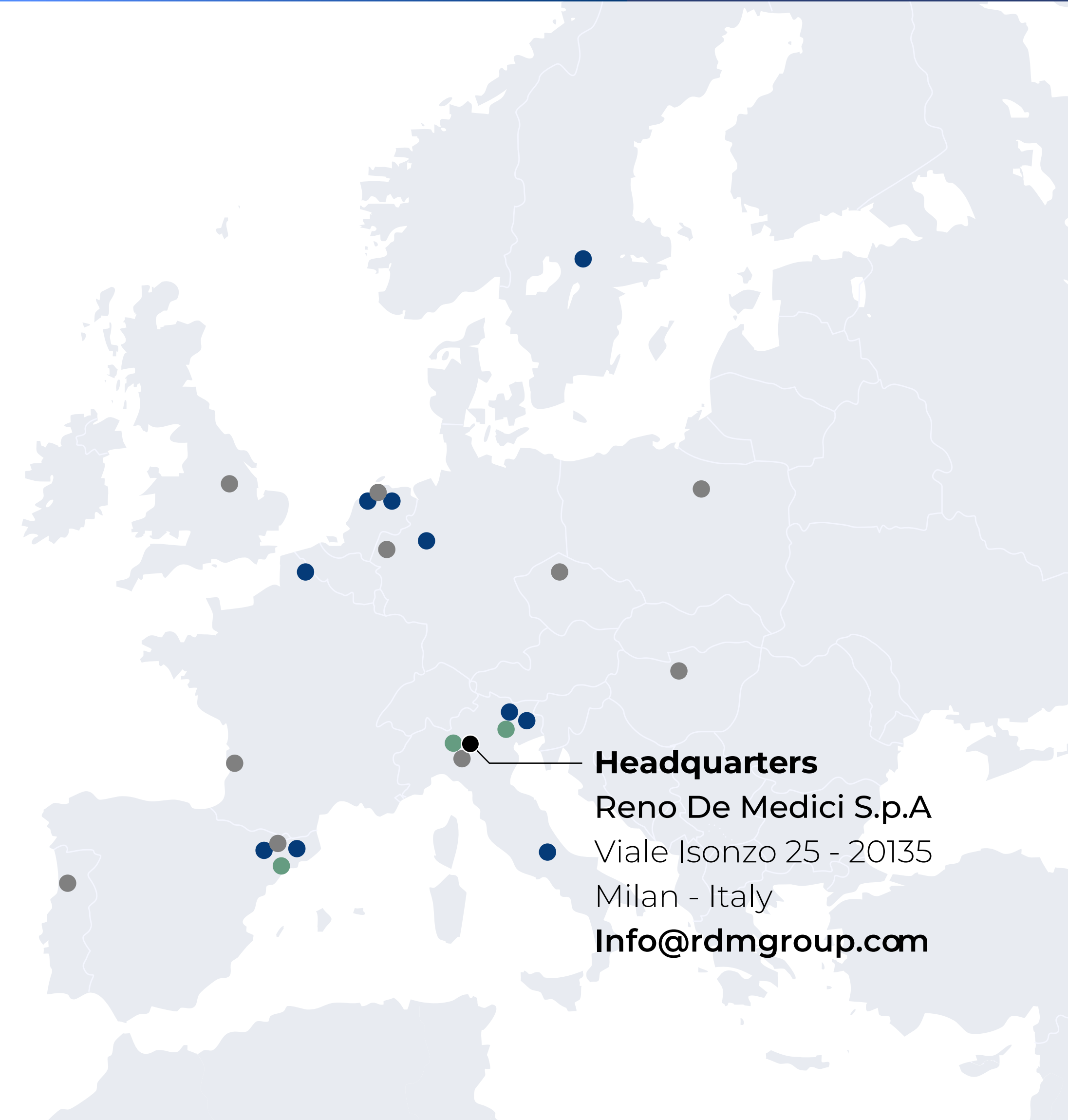
Our main business areas are **White-Lined Chipboard** (WLC) and **Solid Board**.

For us, sustainability is one of the core value on which our business model is built.

Over the last years the Group has expanded operations across Europe and beyond. The Group employs more than 2,300 people at 10 board mills, 4 sheeting centers, and various office locations in Europe, North America, and Asia. RDM Group has been a private company under the Apollo Fund's ownership since 2021.



- Sales offices
- Board mills
- Sheeting centers



PRODUCTS

Our business areas

1. WHITE-LINED CHIPBOARD (WLC)

Recycled coated cartonboard for packaging made from recycled fibers. It serves a broad range of end-use segments such as food packaging, personal care, and home care. WLC includes 3 segments: Liner, GD/GT and coated cartonboard.

Liner

Coated cartonboard with grey back and low grammage (140 to 250 g/m²). It is converted in combination with other paper to manufacture packaging requiring high quality printing.

GD/GT

Multi-layer coated cartonboard with grey, white, manilla or kraft back (240 to 500 g/m²) used as sole material for end-user packaging requiring excellent printability and strength.

Coated cartonboard

Cartonboard with extruded thin polyethylene layer for protection against moisture ingress and moist content protection within the cartonboard.

2. SOLID BOARD

Recycled cartonboard in high grammages and thicknesses well-suited for specialty products, luxury packaging, displays, puzzles, games, stationery and publishing markets.



WLC



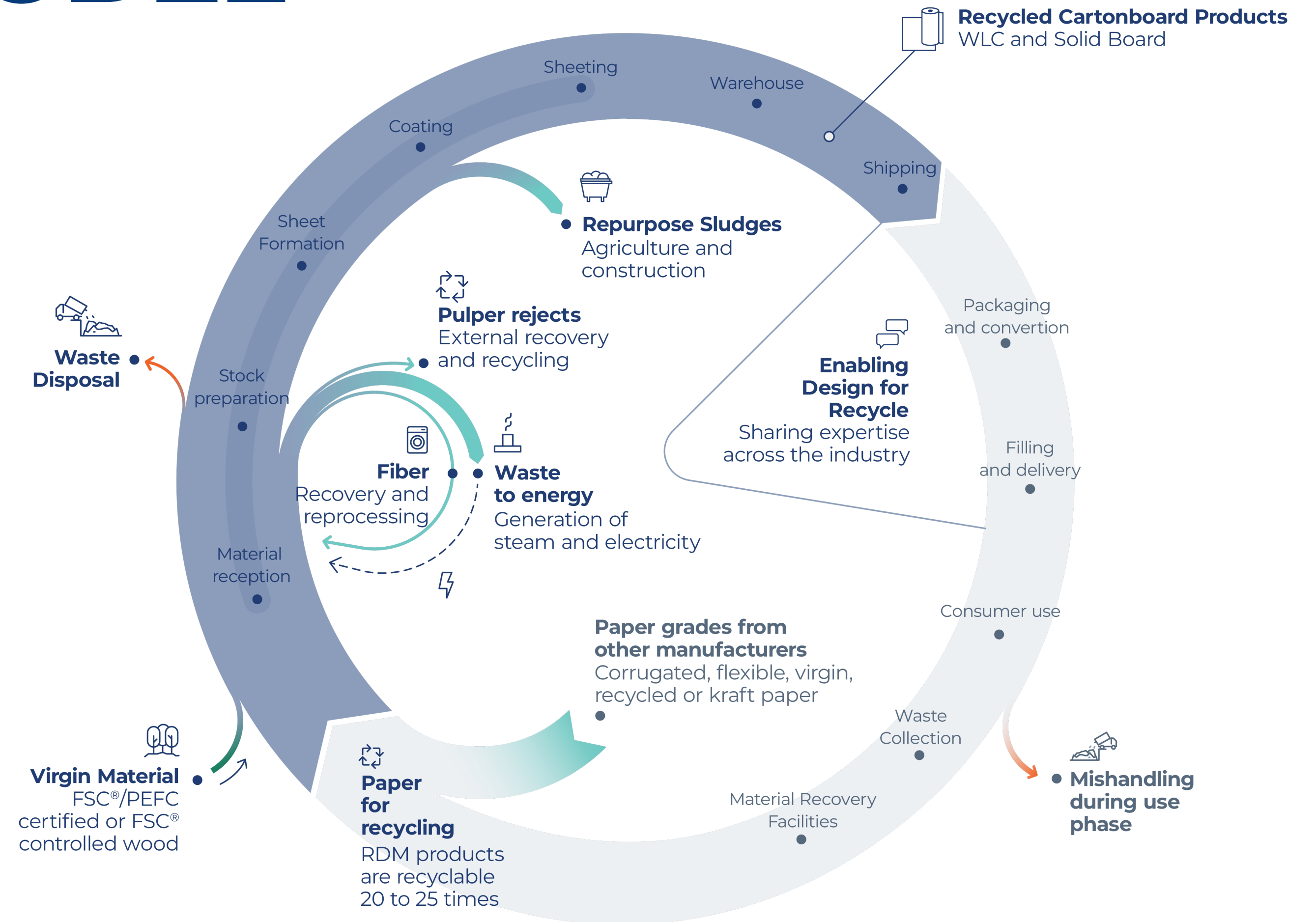
Solid Board

OUR BUSINESS MODEL

RDM Group's business model is built on the principles of the circular economy, based on regenerative resources and circulating materials.

Leveraging cutting-edge technologies, the raw materials are transformed into premium-quality recycled coated cartonboard for the converting and printing sector.



Once used, this fiber-based packaging can in turn be sent for recycling and find its way back to our mills as raw material. Our commitment to circularity goes beyond product design, ensuring optimal resource utilization during operations, reuse of water in multiple production cycles, and efficient waste management to increase recovery and recycling.



2020-2030 SUSTAINABILITY PLAN

OUR LONG-TERM SUSTAINABILITY GOALS

RDM Group’s 2020-2030 Sustainability plan with its 8 clear and measurable goals demonstrates the commitment towards sustainable practices and positive outcomes for stakeholders and the environment. The Group works to deliver its sustainability goals and targets with a continuous improvement approach and a clear investment plan.

GOALS	BASELINE 2020	PROGRESS 2023	STATUS
-30% scope 1 and scope 2 CO ₂ equivalent emissions per ton of net salable production by 2030	0.495 tCO ₂ e/t	0.500 tCO ₂ e/t	
-20% wastewater discharge per ton of net salable production by 2030	11.06 m ³ /t	9.39 m ³ /t	
Proportion of waste sent for recovery to 90% by 2030	73%	83%	
-20% of waste generated per ton of net salable production by 2030	181 kg/t	202 kg/t	
100% of key suppliers assessed and qualified according to ESG criteria by 2025 (for all relevant product categories)	New assessment to be started	Project set-up phase started	
Implement a behavior-based safety program at all mills by 2025	1 site	5 sites	
Increase the employee advocacy rate to 4.5	3.98	4.03	
+20% of women employed by RDM Group by 2030	9.5%	11.4%	

Please note that the 2023 figures also include the Fiskeby Board AB mill acquired in July 2023

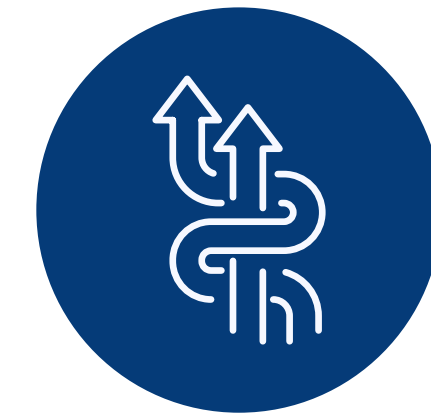
SUSTAINABILITY-LINKED BOND



Reduce scope 1 and scope 2 CO₂ equivalent emissions per ton of net salable production



Reduce wastewater discharge per ton of net salable production



Increase the proportion of waste sent for recovery

In 2021, RDM Group issued a Sustainability-Linked Bond (SLB) that ties yield to the achievement of three sustainability targets by 2025. In 2024, the SLB was renegotiated with even more challenging goals for water and waste. By linking its financial and sustainability goals, RDM Group reinforces its commitment to driving positive outcomes for its stakeholders and the environment.

CIRCULARITY

RDM Group transforms and gives new life to waste materials through the production of recycled, fiber-based cartonboard.

In 2023, we recycled 967.000 tons of paper. Considering that the average European citizen produces about 76 kg of paper and cartonboard waste per year, and that the European recycling rate of this material is 82.5%, we gave new life to paper generated by almost 16 million people in 2023. This is more than the population of Sweden and Norway combined.

Fiber-based packaging material can be recycled more than 25 times without losing its mechanical or structural properties. This enables our cartonboard to be recycled again and again!

We believe that all actors of the value chain are responsible of promoting circular economy. RDM Group advocates a recycling culture that is capable of influencing consumer behavior also through the partnership with our customers.

RDM Group products are:



FULLY RECYCLABLE

designed to be reintroduced into the virtuous circular economy cycle after use



BIODEGRADABLE

if accidentally left in the environment

Fibers used for board manufacturing

95%

of the fiber-based raw materials come from paper for recycling

5%

of Virgin pulp (100% from certified/controlled sources)

INNOVATION

The recycled cartonboard industry navigates challenges like plastic substitution, tighter safety standards, superior printability and the need for eco-friendly materials, while capitalizing on market opportunities.

RDM GROUP IS INVESTING IN:

- The development of new barrier solutions that preserve the recyclability of the fiber-based products
- Lightweight cartonboard
- R&D collaboration with trade associations, research centers, clients and brand owners

CARTONBOARD, THE SUSTAINABLE, FULLY RECYCLABLE PACKAGING OF CHOICE

As regulators are determined to reduce plastic waste and consumers increasingly seeking sustainable packaging options, the cartonboard industry is presented with a

significant opportunity for growth. At RDM Group we are laying the groundwork to make cartonboard the sustainable, fully recyclable packaging of choice.



**Click here to see the full story
in our Sustainability Report**

ENERGY AND EMISSIONS

RDM Group works constantly to improve the energy performance of the mills, and pays careful attention to mitigate its environmental impacts.

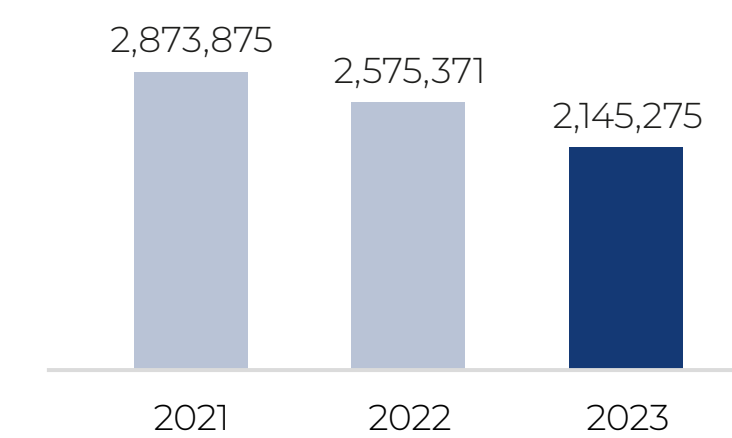
Most of the mills have combined heat and power (CHP) plants that use the most advanced energy-conversion technologies to produce steam and electricity. Two of our mills rely on waste-to-energy (WTE) plants to produce energy. In 2023, WTE plants enabled the saving of approximately 27,000 tons of CO₂. Fiber-based products are able to store CO₂. Carbon Dioxide is therefore incorporated into recycled products contributing to climate change mitigation.

RDM GROUP'S LATEST ENERGY INVESTMENTS

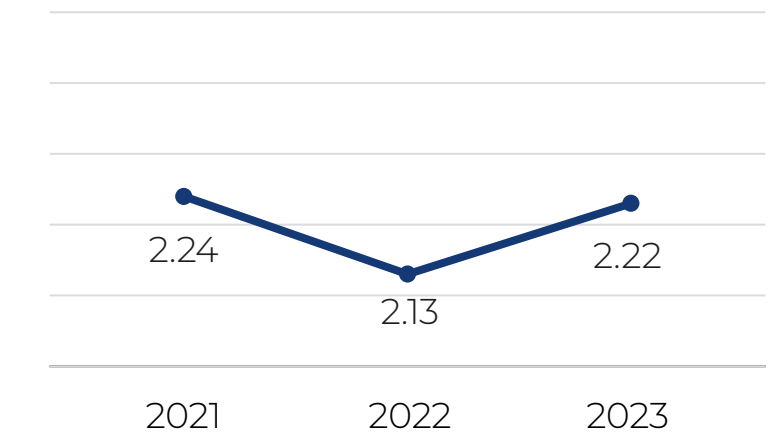
- New CHP plant at Barcelona mill (Spain) in 2024
- Two new gas-fired boilers and an e-boiler at Hoogezand mill (The Netherlands) in 2023
- New CHP plant at Ovaro mill (Italy) in 2022

ENERGY PERFORMANCE

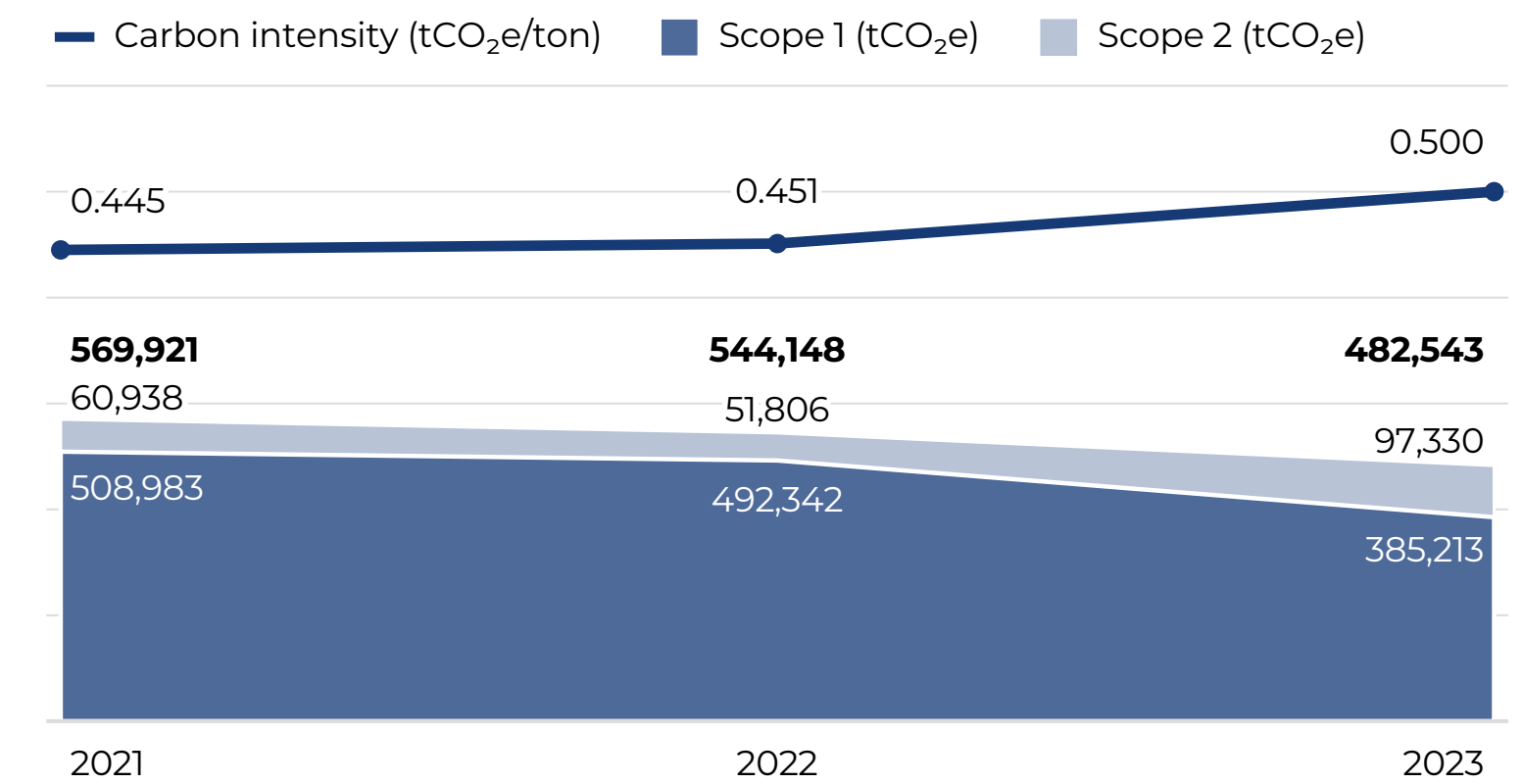
Total energy consumption (MWh)



Energy intensity (MWh/tons)



DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS



*Production standstills impacted energy and carbon intensity KPIs in 2023, but overall absolute energy consumption and scope 1 emissions decreased.

WATER STEWARDSHIP

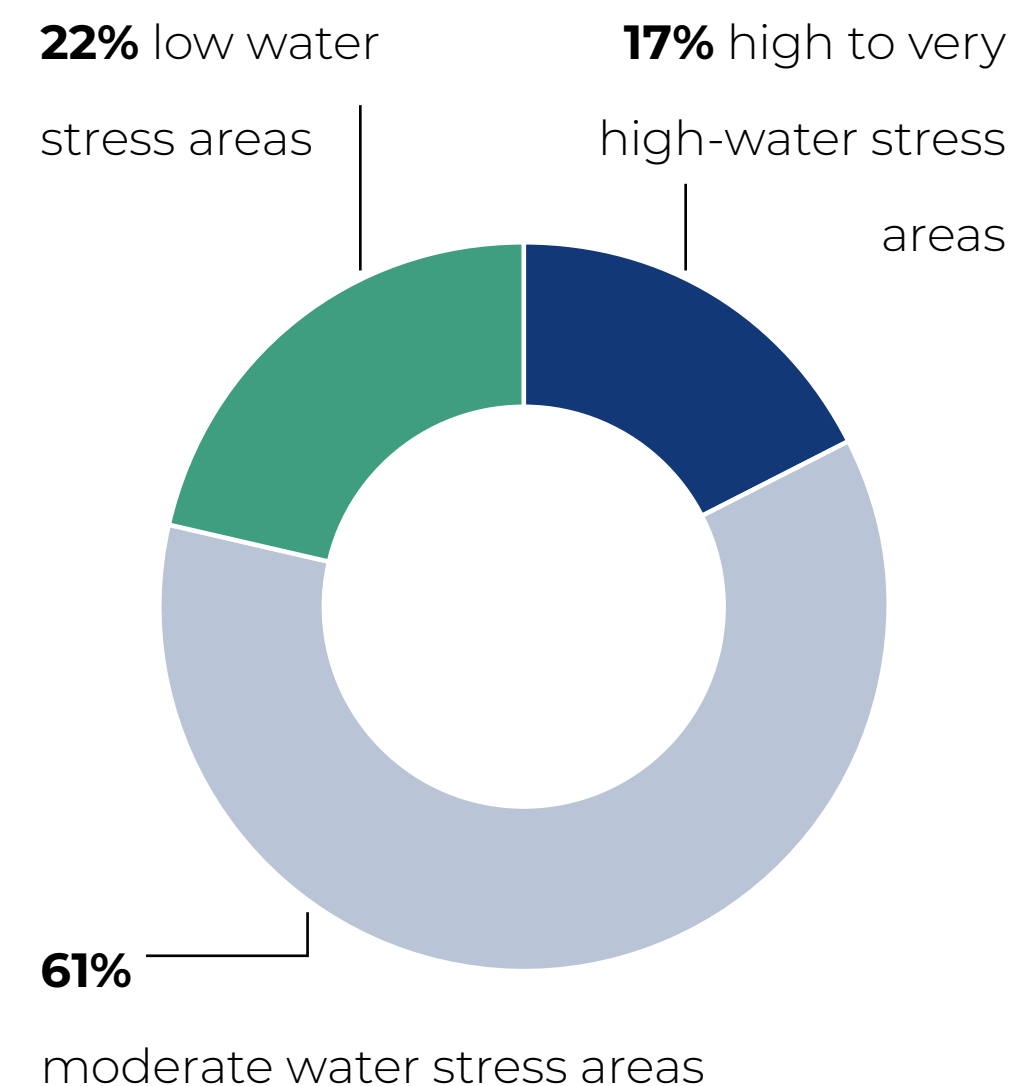
Water is an indispensable resource influencing every aspect of our manufacturing process. RDM Group is committed to managing water effectively by reducing its impact on the environment and implementing measures to continuously improve the quality of effluents to safeguard aquatic ecosystems.

By 2023, wastewater discharges had been reduced by 15% compared to the 2020 baseline, decreasing from 11.06 m³/ton to 9.39 m³/ton, inching closer to the 2030 target.

RDM GROUP'S LATEST WATER INVESTMENTS

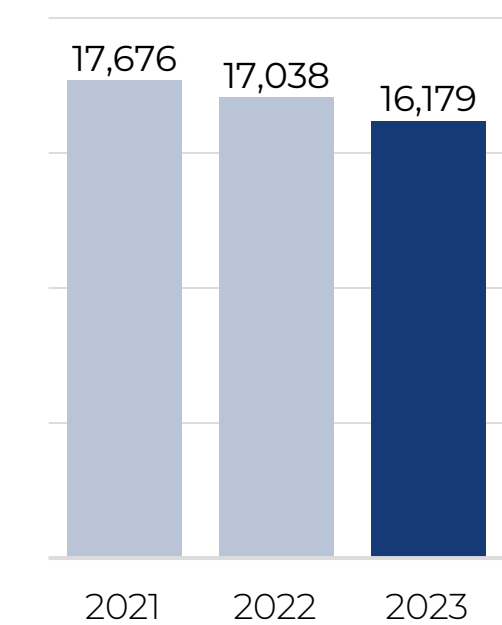
- New filtration system to improve recovery of water in S. Giustina (Italy) in 2023
- Improvements to the tertiary treatment based on a Dissolved Air Flotation (DAF) system in Barcelona (Spain) in 2023
- The new cogeneration plant in Ovaro (Italy) allowed for a significant reduction in water withdrawals in 2022

WATER WITHDRAWALS COME FROM:

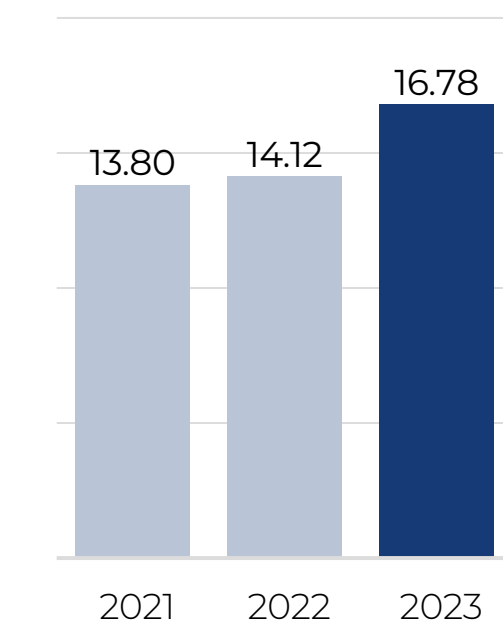


WATER WITHDRAWALS AND DISCHARGES

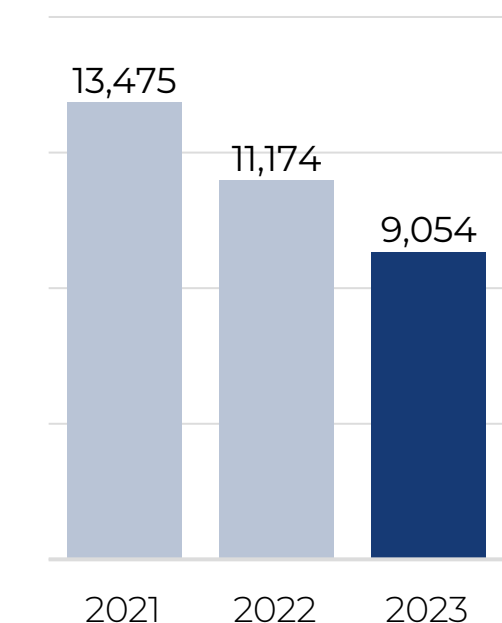
Total water withdrawal (megaliters)



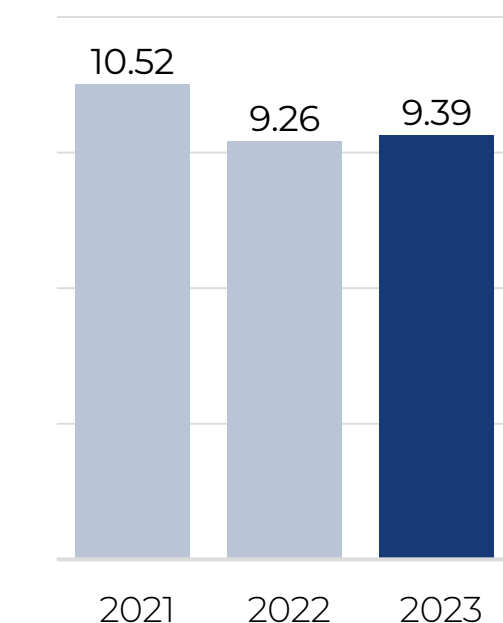
Water withdrawal intensity (m³/ton)



Total wastewater discharge (megaliters)



Wastewater discharge intensity (m³/ton)



SUSTAINABILITY MEASURES AT OUR SPANISH MILLS ARE CREATING RESILIENCE TO CLIMATE SHOCKS

Investing in water conservation and energy efficiency has made our mills in Catalonia resilient against the harsh impacts of climate change. Despite the severe drought emergency declared in early 2024, our strategic efforts enabled us to continue operating seamlessly, even during stringent water rationing.

Dive deeper into our story and learn how our mills are making a difference in the face of environmental challenges in our Sustainability Report.

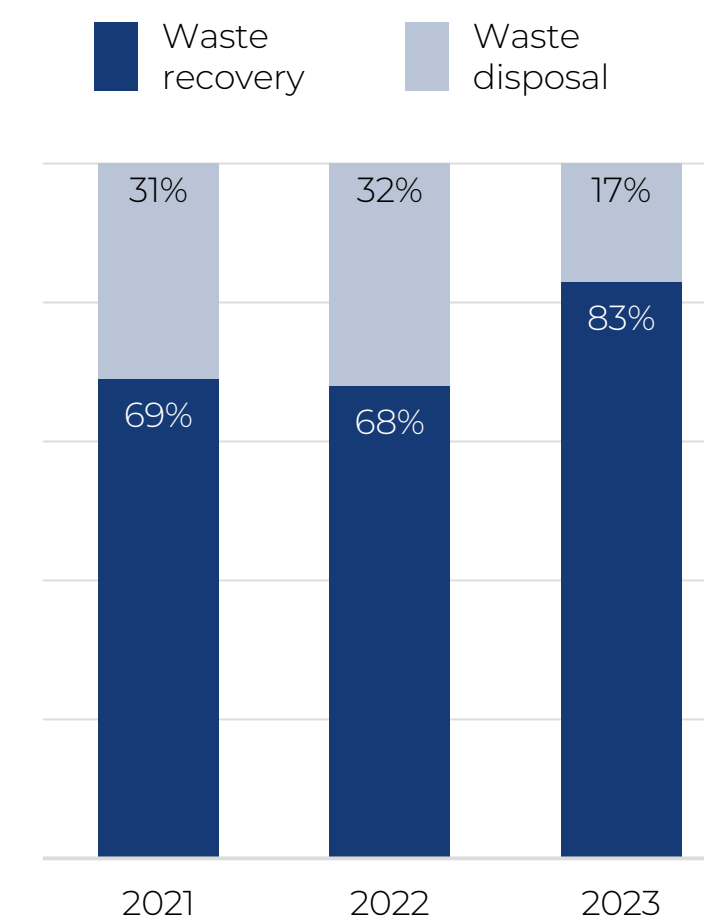
**Click here to see the full story
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WASTE MANAGEMENT

RDM Group places great importance on responsible waste management, minimizing waste generation and maximizing waste recovery. The Company is engaged in efforts to establish new partnerships to promote recycling as the preferred method of management for our waste.

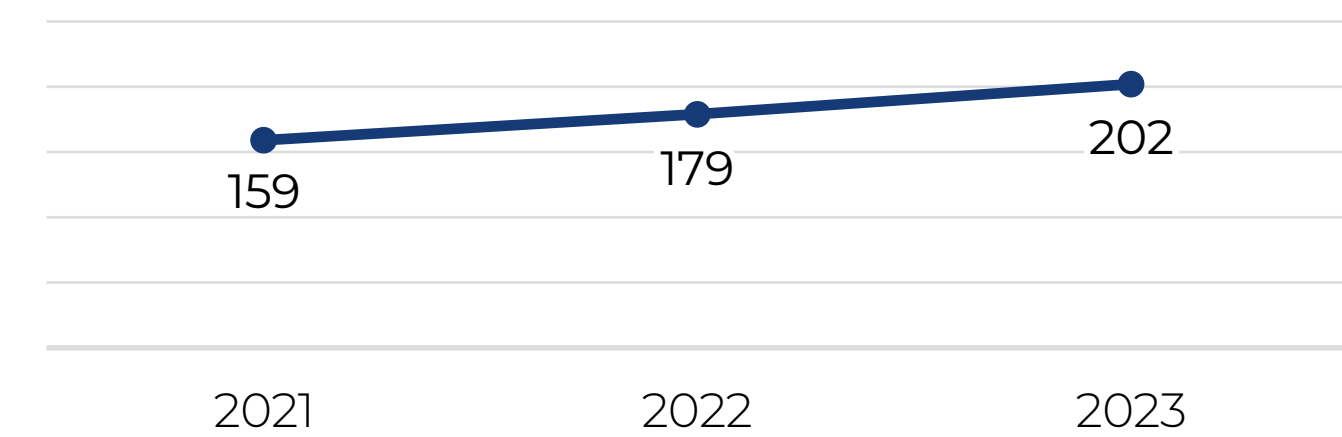
In 2023, although the Group generated more waste per ton of board produced, **83% of waste was sent to recovery.**

WASTE PER DESTINATION



WASTE GENERATED

Waste intensity (kg/t)



MAIN WASTE MANAGEMENT ACTIONS

- Higher quality of waste generated thanks to washing machine systems.
- Stronger collaboration with waste management partners.
- Exploration of alternative uses for waste promoting recycling.

99% of RDM Group waste is non-hazardous

AS A LEADER IN RECYCLED CARTONBOARD PRODUCTION, RDM GROUP FACES UNEXPECTED CHALLENGES WITH PLASTIC WASTE.

Despite our focus on paper recycling, impurities like plastic films, labels, and laminated paper often accompany our raw materials. Currently, a certain portion of this plastic ends up in landfills or is incinerated for energy recovery.

But we're changing that.

Leveraging our expertise and industry connections, we are bridging the gap between the paper and plastic industries.

Click the link below to discover more about our initiative.

[Click here to see the full story in our Sustainability Report](#)



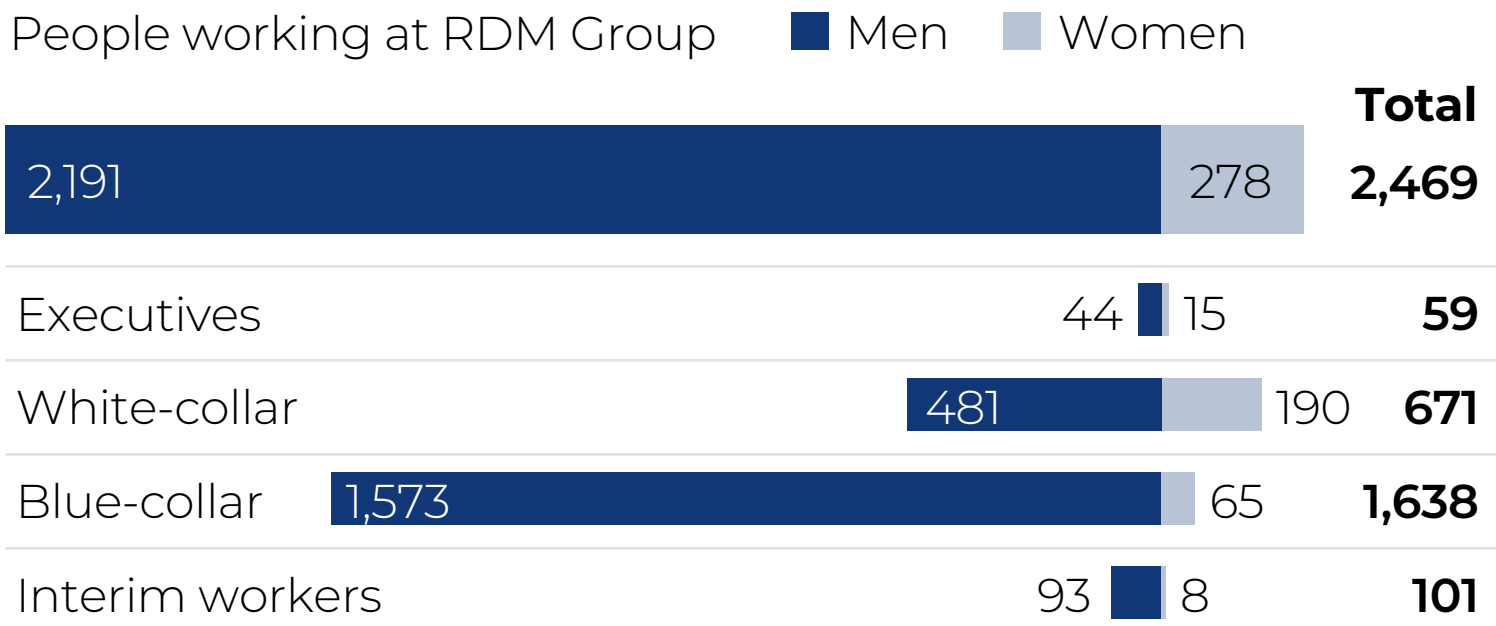
WORKFORCE

At RDM Group we value the diverse skills and qualities of our employees. We cultivate an inclusive and supportive workplace in which every individual can thrive and contribute to the collective success of our organization.

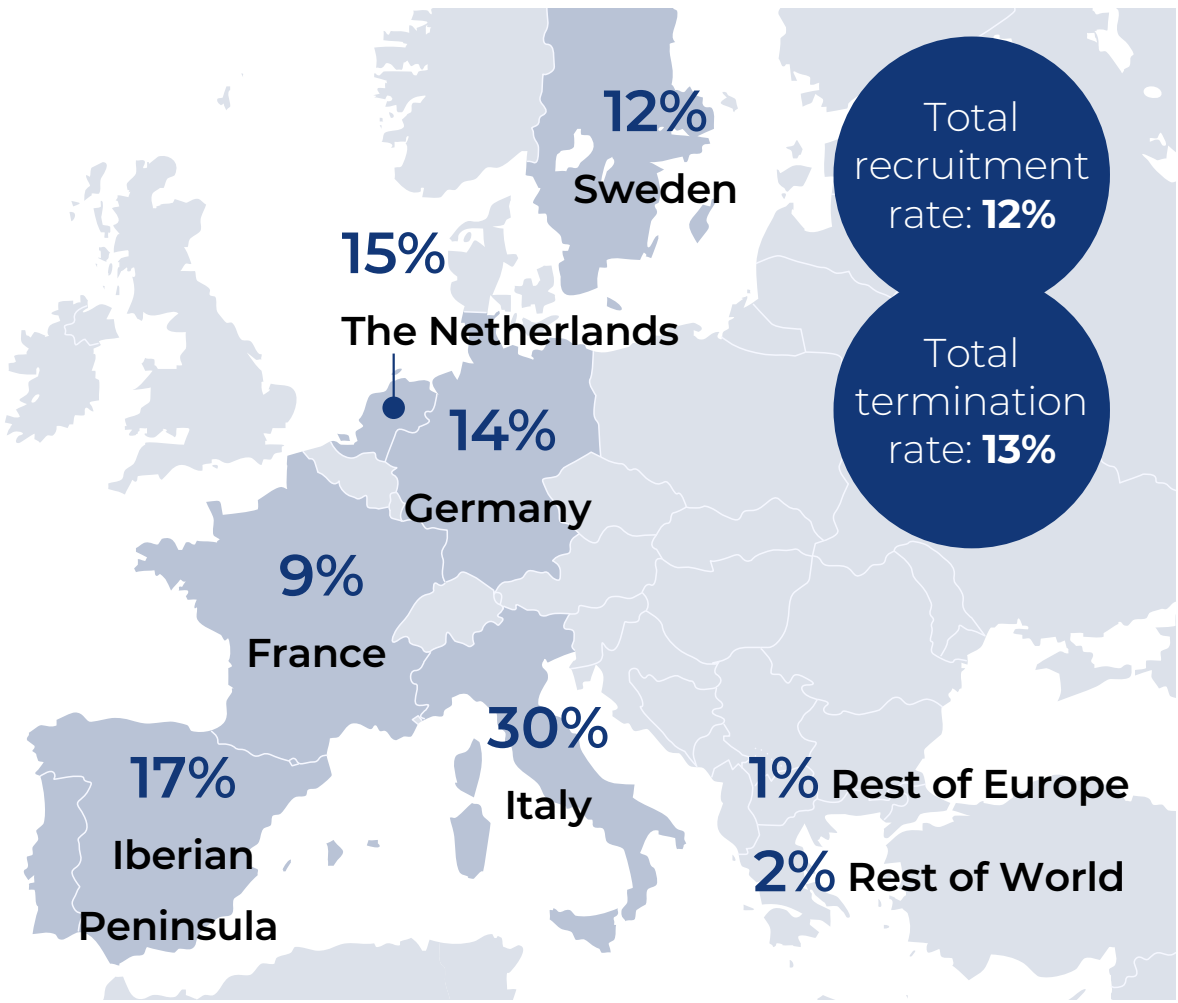
The Company has measures in place that ensure the organization operates lawfully and ethically, and it is determined to promote a positive work environment in which employees feel safe and valued. We promote equal opportunities and non-discrimination in all our operations and locations.

RDM Group employs over 2,300 direct employees and 100 additional interim workers in Europe, North America, and Asia.

WORKFORCE IN NUMBERS



EMPLOYEES BY COUNTRY



SAFETY

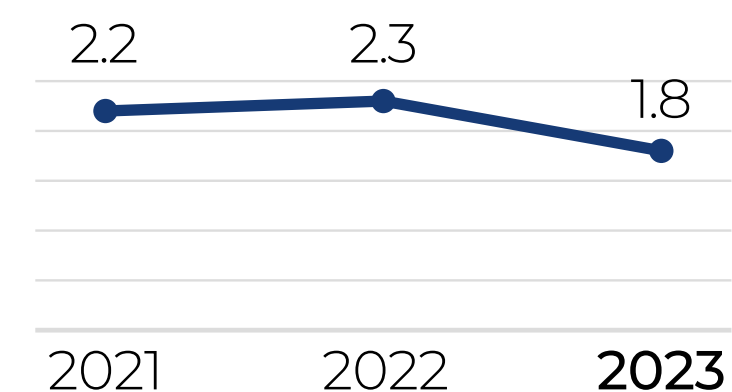
Health, safety and well-being are of the highest priority at RDM Group. Valuing people, promoting their personal growth, and setting a zero-accident target are fundamental to pursue a safer and therefore happier workplace.

The Group promotes an accident prevention culture at all levels. This encourages collaboration between workers and management to safeguard the safety and well-being of all.

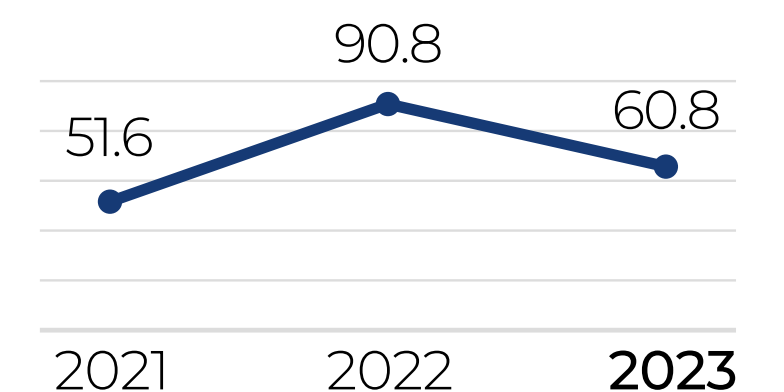
In 2023, The Group reduced the injury frequency rate by more than 20%, and the severity rate by 33%, compared to the previous year.

FREQUENCY AND SEVERITY OF INJURIES (OSHA)

Frequency rate



Severity rate



We have already implemented a Behavior-Based Safety (BBS) System in 5 mills and intend to deploy this system in all mills by 2025.

CREDITS

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Tax Code and Vat Number 00883670150

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