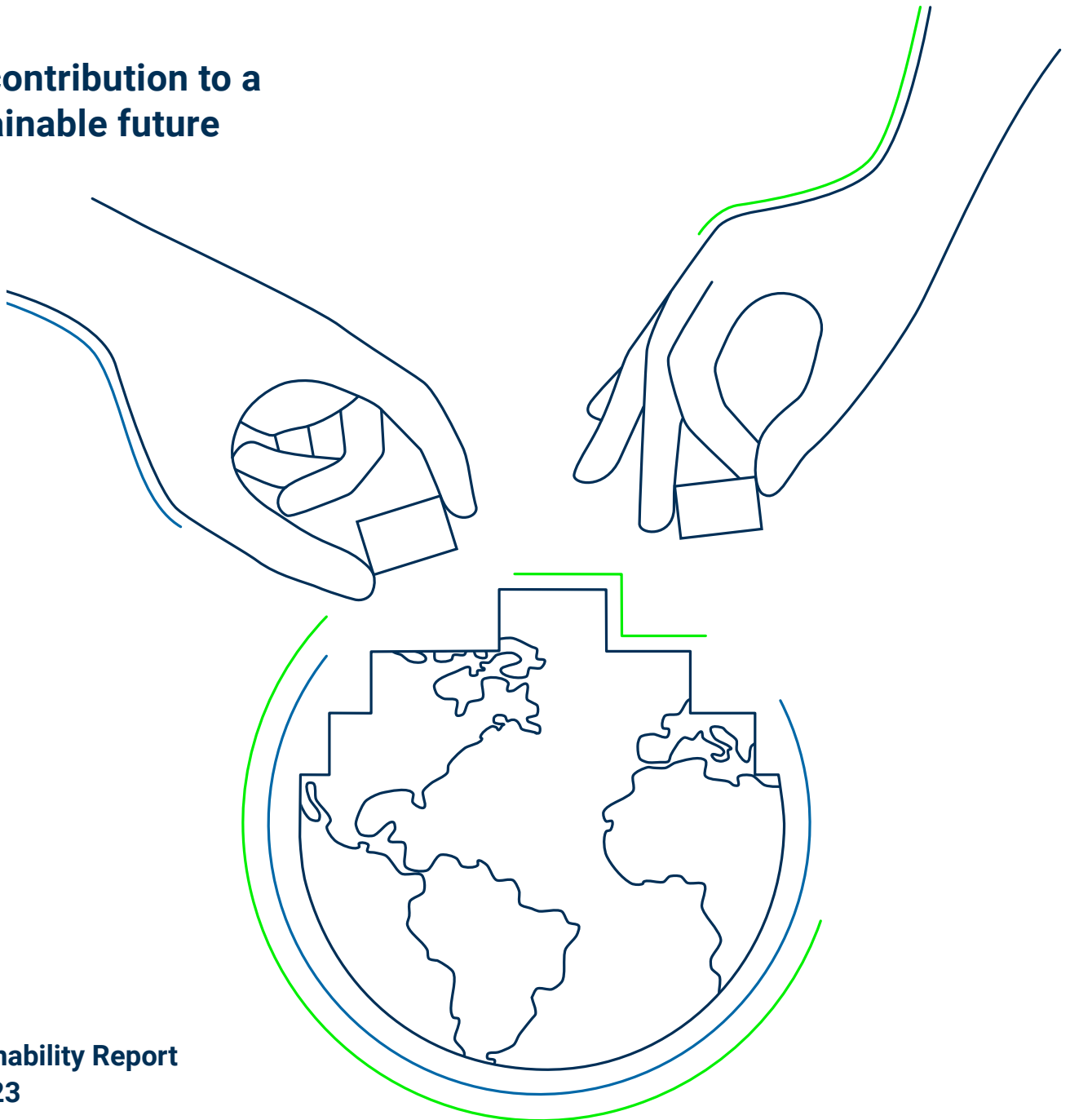


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# TAKING RESPONSIBILITY TOGETHER

Our contribution to a  
sustainable future



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## Sustainability at RONAL GROUP

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**“Taking responsibility allows us to tackle challenges head on and find solutions.”**




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**Oliver Brauner**  
CEO RONAL GROUP

Being a sustainable company means taking responsibility and acting accordingly. Together with our employees, this is something we wholeheartedly embrace to make a positive impact on the world – for ourselves, for our children and for our valued business partners. This commitment is at the core of RONAL GROUP’s PLANBLUE Program, which we have upheld since 2016 in a bid to achieve our ultimate aim of complete carbon neutrality by 2050.

But sustainability is about so much more than a simple eco pledge. This is why we choose to focus on three key fields of action – Our People, Our Business and Our World – to uphold our responsibilities in relation to the economy, society and the environment. I am pleased to report that we continued to make considerable strides in these areas in the 2022/23 financial year.

Ensuring the safety and well-being of our employees remains our number-one priority, and we have dedicated ourselves to developing their skills through various training programs, including occupational safety and leadership courses.

On our journey toward a more circular economy, we successfully delivered the first light alloy wheels, manufactured entirely from secondary aluminum, for a special model requested by one of our customers.

We are especially proud of the groupwide certification according to the ASI\* Performance Standard, which RONAL GROUP obtained in September 2022. This initial certification marks a significant milestone toward more responsible production, procurement and more careful use of resources and raw materials.

These are just a few examples that demonstrate our commitment to taking responsibility, tackling challenges and developing solutions. Our decision to become a more sustainable company began some years ago, driven by an unwavering conviction, so we are fully aware that sustainable actions and lifestyles are an ever-evolving process. This is exactly why we pledge to continue our efforts today, tomorrow and for the years to come.

Oliver Brauner  
CEO RONAL GROUP

\* Aluminium Stewardship Initiative

# SUSTAINABILITY IN FIGURES

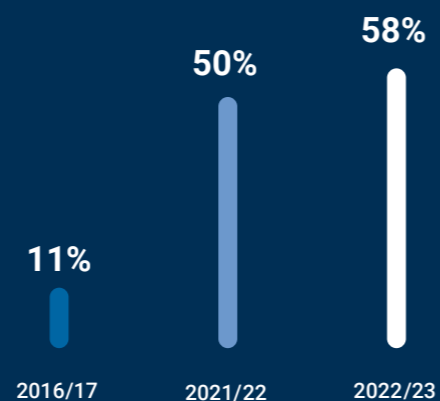


  
**47 300**

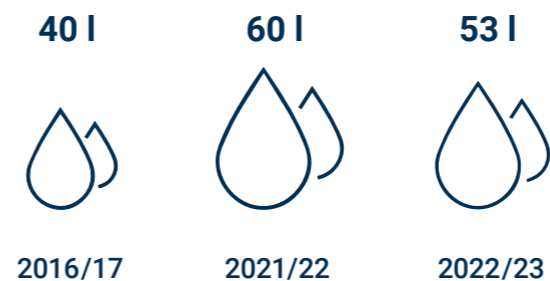
MWh of electricity generated thanks to four photovoltaic systems and a combined heat and power plant. This is as much electricity as 9 500 households in Switzerland consume on average every year.<sup>1</sup>

<sup>1</sup> Energie Schweiz; Swiss Federal Office of Energy (SFOE)

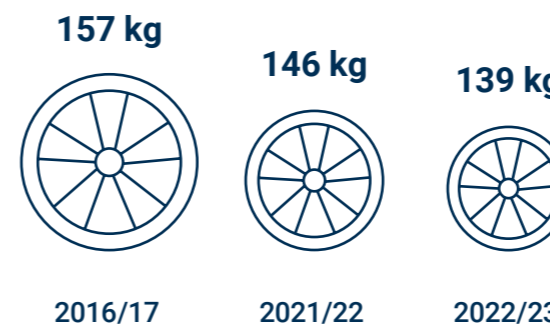
## INCREASED PROPORTION OF GREEN ELECTRICITY



## LESS WATER CONSUMPTION PER WHEEL



## CARBON FOOTPRINT OF OUR WHEELS



## ALUMINUM PRODUCTION

65% of our primary aluminum is produced using renewable energy sources.

**10**

ASI certification: all of our cast wheel plants are certified according to Performance Standard V2 (Material Stewardship).

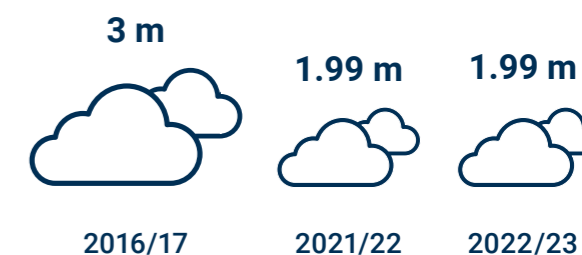
## ALUMINUM CERTIFICATION



of our aluminum suppliers are ASI certified – 46% in line with the Performance Standard and Chain of Custody.

## CARBON EMISSIONS

RONAL GROUP carbon emissions including the upstream supply chain (Scope 1, 2, and 3) in metric tons:



# TOP PRIORITIES AT RONAL GROUP

In our first materiality analysis back in 2016, we defined three strategic fields of action with the involvement of the key stakeholder groups: “Our Business” (for sustainable and innovative products), “Our World” (for climate and energy) and “Our People” (for employee development and safety and health protection).

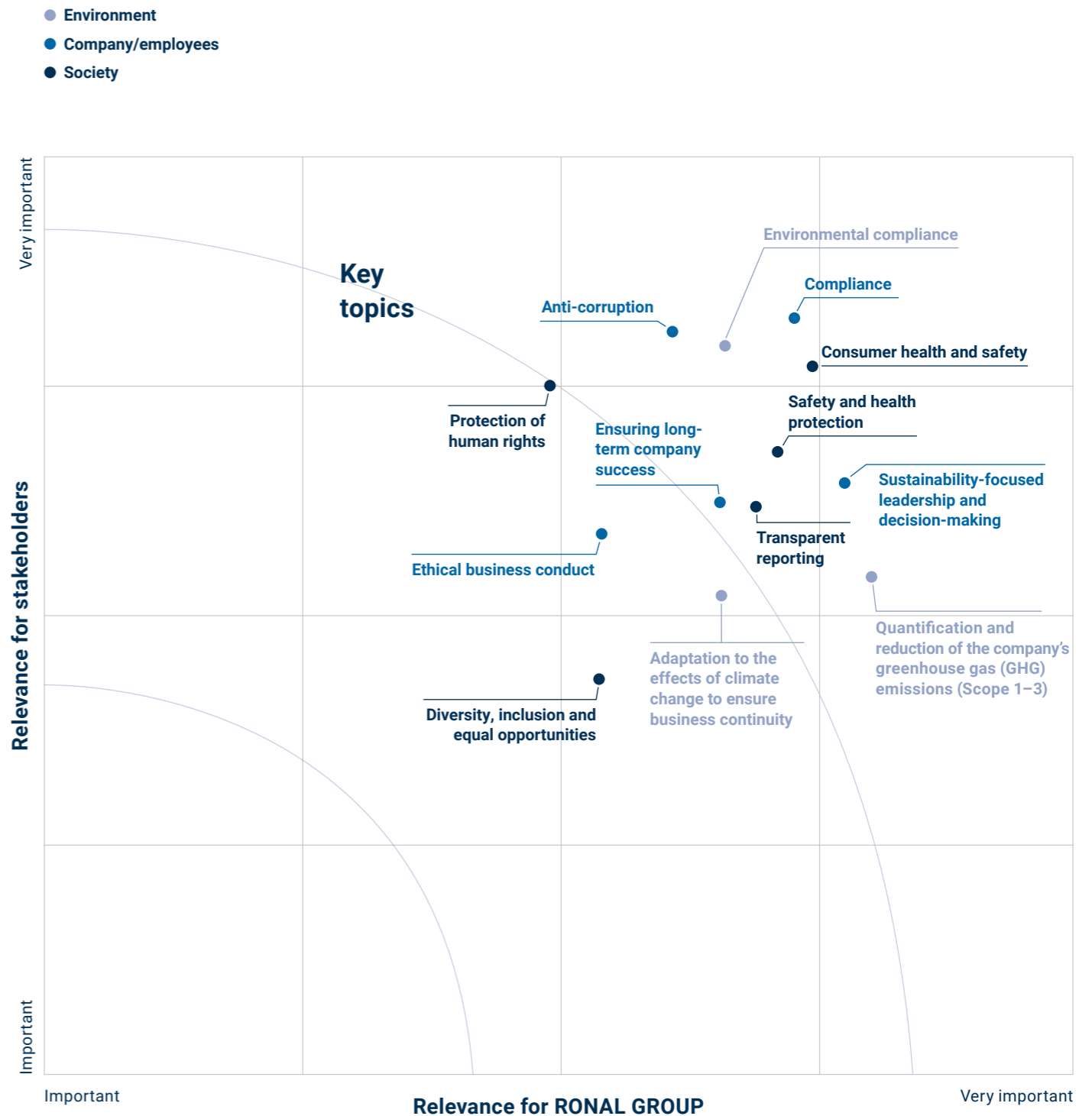
In 2022, we conducted a fresh round of surveys with our key stakeholders. We started with a list of 39 topics and grouped them into nine categories.

**THE NINE KEY CATEGORIES:**

- Environmental impact
- Waste and water
- Employees and workplace
- Climate
- Energy
- Community
- Finances
- Administration/leadership
- Market

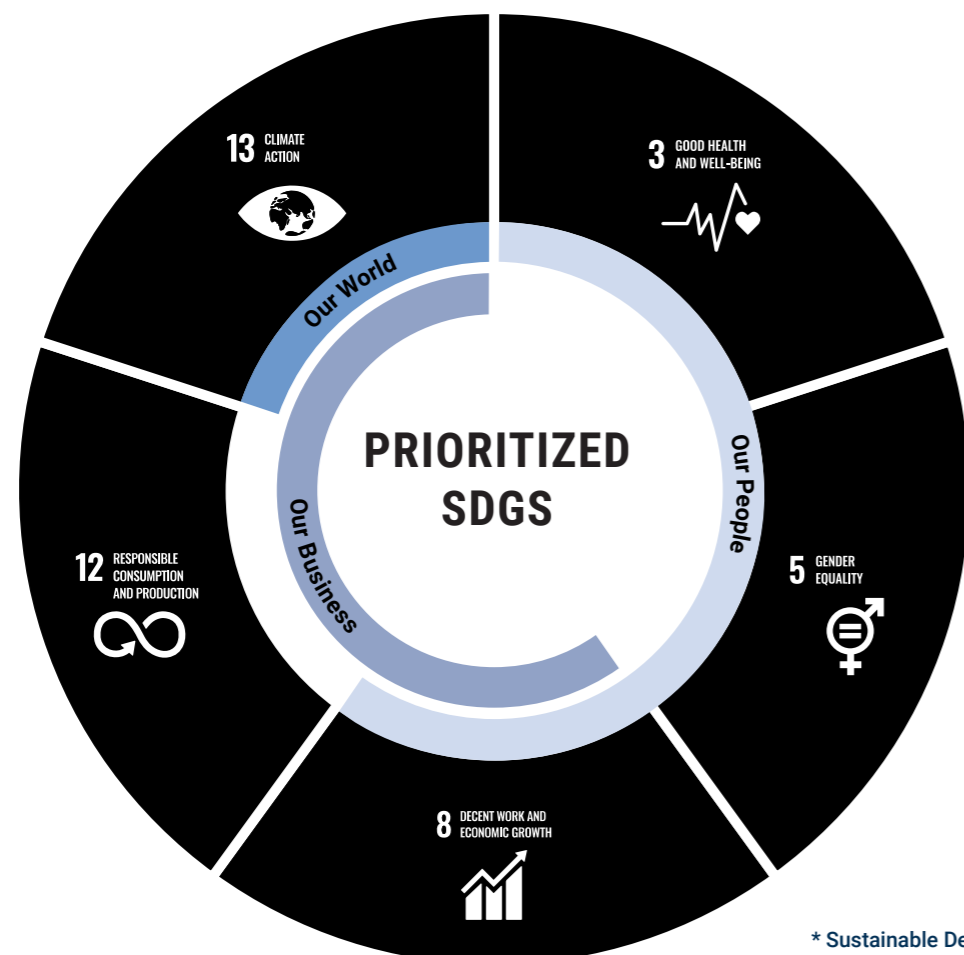
The categories were prioritized based on interviews with customers and suppliers, as well as on a survey conducted across our various facilities and departments. In total, seven interviews and 17 questionnaires were considered in the analysis.

The project resulted in a materiality analysis that identifies the 13 most significant topics that are important to RONAL GROUP and its stakeholders. Having prioritized these points based on our three fields of action, our sustainability committee is now working on measures to achieve our goals.



# RONAL GROUP'S CONTRIBUTION TO THE UNITED NATIONS' SDGS

The SDGs\* represent a global framework for promoting sustainable peace and prosperity, as well as for protecting our planet, and RONAL GROUP is making its own contribution to these efforts. In 2022, we surveyed our stakeholders to update and add to our key topics, aligning them with the United Nations' goals to contribute to a better future for all. The focus here lies on SDGs 3, 5, 8, 12, and 13.



\* Sustainable Development Goals of the United Nations (SDGs).

	SDG	Key Topics
Our World		<ul style="list-style-type: none"> <li>• Environmental compliance</li> <li>• Adaptation to the effects of climate change to ensure business continuity</li> <li>• Quantification and reduction of the company's greenhouse gas (GHG) emissions (Scope 1-3)</li> </ul>
		<ul style="list-style-type: none"> <li>• Ethical business conduct</li> <li>• Compliance</li> <li>• Transparent reporting</li> <li>• Anti-corruption</li> </ul>
Our Business		<ul style="list-style-type: none"> <li>• Ensuring long-term company success</li> </ul>
		<ul style="list-style-type: none"> <li>• Sustainability-focused leadership and decision-making</li> </ul>
Our People		<ul style="list-style-type: none"> <li>• Safety and health protection</li> <li>• Consumer health and safety</li> </ul>
		<ul style="list-style-type: none"> <li>• Diversity, inclusion and equal opportunities</li> </ul>
		<ul style="list-style-type: none"> <li>• Protection of human rights</li> </ul>

# OUR GOALS

## 2025

The carbon footprint of all RONAL GROUP wheels is clearly defined and traceable.

## 2050

RONAL GROUP is carbon neutral.

## 2030

Carbon emissions in production (Scope 1 and 2\*) have been reduced by 50% (compared to 2016/17).

Disclaimer:  
Wherever CO<sub>2</sub> values are provided in this report, they are to be understood as CO<sub>2</sub> equivalents (CO<sub>2</sub>e) – a comparative value for measuring the warming effect of different greenhouse gases on the climate.

\* For further details on Scope 1–3, see the online report.

# OUR FIELDS OF ACTION

## OUR PEOPLE

By 2025, occupational accidents and related absences are expected to fall by 40% compared to 2016/17 (baseline year). In the last financial year, lost hours fell by 19% and occupational accidents by 67%.

All employees are aware of their career prospects and development opportunities.

## OUR BUSINESS

By 2025, the carbon footprint of our processes and wheels is to be reduced by 25% compared to the baseline year.

In the last financial year, the carbon footprint of the wheels fell by 11%.

## OUR WORLD

By 2025, carbon emissions are to be reduced by 25% compared to the baseline year and halved by 2030. In the last financial year, Scope 1 and 2 emissions fell by 25%.

We reduced Scope 3 carbon emissions by 16% compared to the baseline year.

Target achievements by the end of 2022/23

85%

40%

50%

# OUR PEOPLE: SAFETY AND PERSPECTIVES

Employee development is a crucial focus for RONAL GROUP, as we recognize that committed and well-trained people are essential to achieving our objectives. This is why we aim for all employees to be well-informed about their professional prospects. By 2025, our target is to decrease occupational accidents and associated downtime in our production plants by 40% compared to the 2016/17 financial year.

## GUIDELINES AND RESPONSIBILITY

Across the globe, RONAL GROUP and SanSwiss employ around 6 900 team members from over 60 nations, working across 30 locations on three continents. This makes for a real melting pot of cultures, which have to be acknowledged just as attentively as the varying regulations from authorities or customers. For us, taking these considerations into account also involves integrating them within our policies.

## DEVELOPMENT OPPORTUNITIES

Our employees are at the heart of everything we do. We aim to empower them with responsibility and equip them with the skills and experience they need to thrive. The Employee Development Center is RONAL GROUP's dedicated learning platform, which is available across all of our sites. With over 700 online training courses and digital learning materials, our employees have access to an extensive array of professional development opportunities right at their fingertips.

## PREVENTION STRATEGY

Safeguarding the well-being and security of our staff and customers is our top priority. With a strong emphasis on workplace safety, our goal is to prevent occupational accidents and avoid health risks. This is why we implement a variety of preventive measures and offer comprehensive training

## MEASURES FOR 2022/23

As part of the extensive compliance training we provide for all of our employees, we place a special focus on our code of conduct, in addition to training sessions on anti-corruption and antitrust law. We have also facilitated various other training modules, covering subjects such as workplace safety, plant operation and process-specific safety protocols. Overall, our employees participated in over 1 500 diverse training sessions over the past financial year.

## GLOBAL COMMITMENT

Within the framework of Leadership & Management competencies, by the end of 2022 all local management teams worldwide had completed the SLII® training, with the exception of the SanSwiss companies and the US site. Some of our plants use their own systems and platforms to track their employees' skills and development in the form of a competence matrix. In Poland, for example, we look at various parameters such as length of service, education, employee evaluations, information on completed internal training, and acquired qualifications or licenses. Soft skills also play a significant role, with shift leaders and line managers receiving training on communication, teamwork, problem-solving, conflict resolution and taking responsibility. Nurturing young talent is also pivotal, so internships and partnerships for study and thesis projects are available to provide school pupils and students from technical schools and universities with profound insight and hands-on experience within a production setting.

## MICROTRAINING IN THE CZECH REPUBLIC

At our Czech facilities, we are dedicated to providing additional training for our managers, experts and specialists. To this end, we partnered with an external supplier to develop a specialized program known as the Employee Development Center. This initiative is centered around concise micro-learning video modules that target our core competencies and content. These resources are accessible 24/7, ensuring absolute learning flexibility for our employees. The program is structured into three tiers: mandatory training closely linked to our competencies, recommended training for competency expansion and a whole host of different courses on various topics. For the 2023/24 financial year, we will be introducing a new course on the topic of work-life balance as part of this program.

## ACCIDENTS

	2016/17	2021/22	2022/23
Fatal accidents	0	1	0
Very serious occupational accidents	2	3	3
Serious occupational accidents (241 to 720 hours lost)	29	13	31
Moderately serious occupational accidents (121 to 240 hours lost)	46	32	85
Minor occupational accidents (1 to 120 hours lost)	398	128	39
Total	475	177	158

## SAFETY AND PROTECTION

In the domain of safety and health protection, our focus has been centered on further reducing the number and severity of workplace accidents. This goal was achieved in the 2022/23 financial year, with accidents decreasing by 69% compared to the baseline year of 2016/17 and by 11% compared to the preceding financial year. We were also successful in significantly lowering the number of lost hours compared to the baseline year; however, we still recorded an approximate 10% increase compared to the last financial year. Across all our facilities, we are steadfast in our pursuit of a zero-accident strategy, which we aim to realize through targeted preventive measures such as training, professional development and hands-on training for our employees.

## OUTLOOK

- Vision zero accidents
- Continued development of group standards in safety and health protection, environment and sustainability
- Further reduction of accidents, lost hours and accident severity
- Additional awareness and sensitization campaigns on health and safety
- Training on sustainability topics
- Continuation of the leadership program with an emphasis on education and training in the production sector



# OUR BUSINESS: SUSTAINABILITY AND INNOVATIVE PRODUCTS

As resources grow scarcer and the call for transparent supply chains and ethical production intensifies, we have made it our mission to step up to these challenges and take responsibility. By 2025, our goal is to reduce the ecological impact of our processes and wheels by 25% in comparison to the 2016/17 financial year.

## TRANSPARENT SUPPLY CHAINS

In the past financial year, supply chain responsibility and legal regulations regarding transparent non-monetary reporting took center stage at RONAL GROUP. We delved into enhancing the transparency of risks within our supply chains and establishing more dependable monitoring methods. A major step in this direction involved obtaining certification in accordance with the ASI Performance Standard V2 for material stewardship, encompassing RONAL AG and the cast wheel plants.

## MEASURES FOR 2022/23

From product development and material procurement through to production and recycling, we have outlined a number of measures to create forward-thinking and sustainable products. Through close collaboration with our suppliers, we actively engage in sourcing sustainable and carbon-reduced or carbon-neutral products, such as coolants. This collaborative effort made it possible to save 900 metric tons of carbon emissions over the past year (for more details, refer to the comprehensive report on our [website](#)).

## ASI-CERTIFIED SUPPLIERS

65% of our aluminum is produced using

renewable energy, and an impressive 99% of the total quantity of aluminum purchased comes from ASI-certified suppliers. According to manufacturers, in 2022/23, 10% of the purchased aluminum featured a carbon footprint below 6.5 kg per kg of aluminum. And as for our footprint for purchased primary aluminum, this stood at 7.5 kg of carbon per kg of aluminum during the 2022/23 financial year. A RONAL GROUP wheel left a carbon footprint of 139 kg on average, marking an average reduction of 18 kg per wheel compared to our 2016/17 baseline.

## CONFIRMED VALUATIONS

In the last financial year, TÜV not only recertified our R70-blue wheel, but also validated the carbon-neutrality of our RONLOG logistics center for Scope 1 and 2. What's more, our consistent efforts were recognized by the Carbon Disclosure Project (CDP) with our fifth B rating for climate change, and our third B rating for water stewardship.

## LCA ANALYSIS

As part of the ASI certification process, we conducted a life cycle assessment (LCA) for our cast wheel plants, which was externally verified by TÜV Rheinland

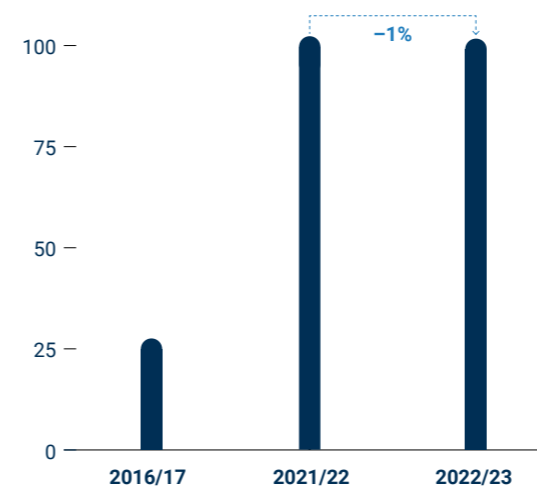
Energy GmbH. This assessment serves as the foundation for our carbon calculations in new and ongoing wheel projects. As a result, we are now well equipped to calculate the carbon footprint for customer projects and identify opportunities for reducing carbon emissions.

## OUTLOOK

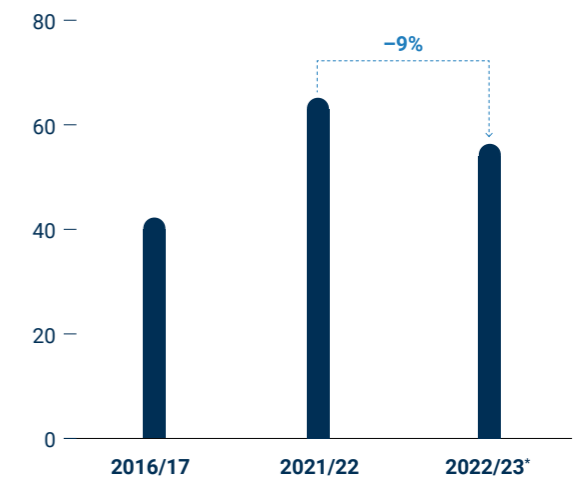
By 2025, the proportion of secondary material in our wheels is set to increase to 51%. In addition to this, our goal for the 2025/26 financial year is to ensure the proportion of post-consumer material used in our wheel composition reaches 20%. We work closely with all of our customers to enhance the incorporation of post-consumer material in the melting process, with the target of reaching 30%; however, this requires approval from each respective customer. As a result, the carbon footprint of our aluminum is expected to be as low as 4 kg of carbon per kg of aluminum by 2025.

For the upcoming financial year, we have planned an external assessment of RONAL GROUP in line with ASI Performance Standard V3, which will also cover additional areas including environment, compliance and social responsibility. We will also be calculating the ecological footprint for new wheel projects on an individual basis and ensuring this information is readily available.

## PROPORTION OF ALUMINUM PURCHASED FROM ASI MEMBERS (IN %)

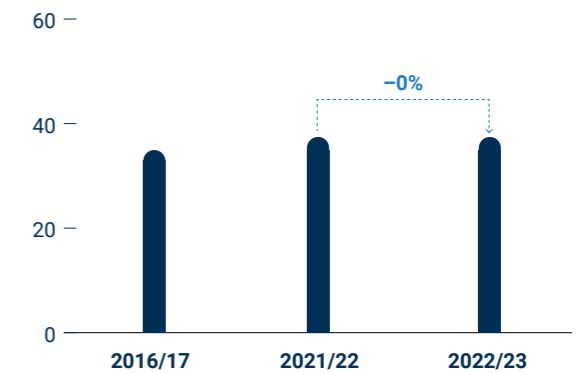


## PROPORTION OF ALUMINUM PURCHASED WITH ENERGY FROM RENEWABLE SOURCES (IN %)

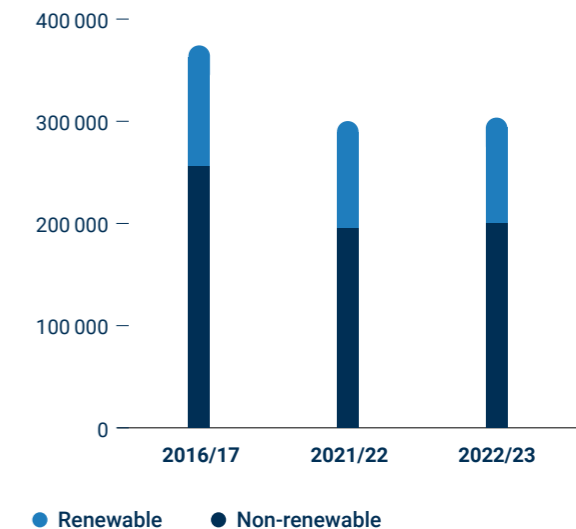


\*Externally verified and recognized proof

## PROPORTION OF SECONDARY RAW MATERIALS IN TOTAL MATERIAL INPUT (IN %)



## MATERIAL CONSUMPTION (IN t)



# OUR WORLD: ENERGY AND CLIMATE

**By 2025, our aim is to reduce our carbon emissions by 25% in comparison to the 2016/17 financial year, and by 50% by 2030.**

### NEW CHALLENGES

Volatile energy prices and an uncertain supply situation in some countries were among the greatest challenges we faced in the last financial year. This situation led to certain delays and meant we had to postpone projects that were not essential for maintaining production.

### TRANSPARENT COMPARISONS

Our energy platform was installed in the last financial year and is currently in the testing phase. Alongside the energy report, it enables the transparent assessment of efficiency at the plant and process levels by comparing energy and production figures. Even now, it is already possible to observe a difference of 20 to 30% in energy consumption between the most and least efficient units.

### NATURAL GAS WITH COMPENSATION

The switch to renewable energy sources for existing gas-fired facilities, such as our melting and curing ovens or for heat treatment, is not currently feasible or cost-effective. Biogas is limited in supply and significantly more expensive than natural gas; however, our German location sources natural gas that has its carbon emissions offset by the supplier, as confirmed by TÜV Süd. In a bid to address emissions stemming from extraction, transportation and combustion, we invest in certified climate projects. This approach has enabled us to offset emissions equivalent to 71 500 MWh of gas.

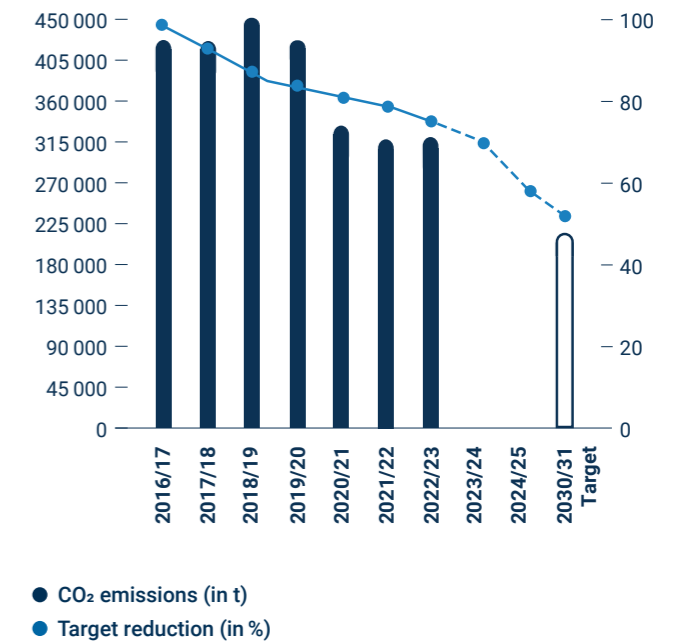
### MEASURES FOR 2022/23

In the past financial year, we successfully achieved the targets we had set on our emissions reduction trajectory. The carbon reduction in Scope 1 and 2 for the 2022/23 financial year amounted to 25% compared to our 2016/17 baseline year, equivalent to 126 000 metric tons of CO<sub>2</sub>.

### SUSTAINABLE POWER

In total, we have been able to generate 47 300 MWh of electricity through our on-site combined heat and power plant and photovoltaic installations. We also procured 222 600 MWh of renewable electricity, of which 84 000 MWh came with proof of origin, for our locations in Germany, Spain and Switzerland.

**CO<sub>2</sub> EMISSIONS (IN t) AND CO<sub>2</sub> REDUCTION TARGET (IN %) FOR SCOPE 1 AND 2<sup>1</sup>**



We successfully achieved our targeted reductions in Scope 1 and 2, surpassing our goal with a notable 25% reduction in 2022/23. These reductions were driven by various factors, including challenges in the supply chain that led to decreased customer demand, as well as the ripple effects of the conflict in Ukraine, which resulted in a production downturn. The baseline year encompasses the reduction achieved through the adoption of green energy in both Germany and Spain.

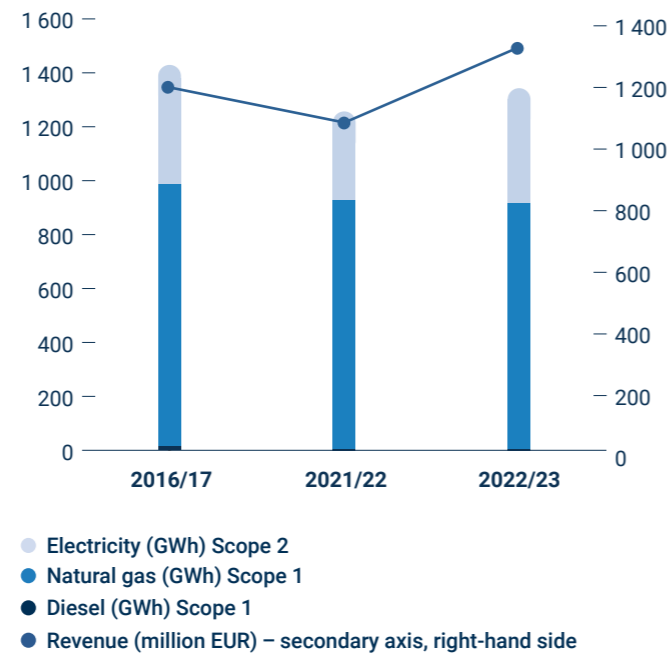
<sup>1</sup> For absolute values, see key data on page 33.

**NEW MELTING OVENS**

Our Spanish facility is now home to a new, energy-efficient melting furnace, which has the capacity to melt not only primary materials, but also our aluminum chips and post-consumer materials such as shredded or painted wheels. This plays a pivotal role in advancing our recycling initiative, RONAL-Re.

We plan to further enhance the recuperation systems in the melting furnace area. Newly acquired furnaces are already equipped with these systems from the outset, and we are also exploring the possibility of retrofitting older furnaces on a case-by-case basis. Depending on production levels and capacity, this retrofitting can result in a reduction of around 10 to 15% in natural gas consumption per metric ton of melt.

**ENERGY CONSUMPTION<sup>2</sup> (IN GWH)**



Energy consumption decreased by 226 GWh in the 2022/23 financial year compared to our baseline year.

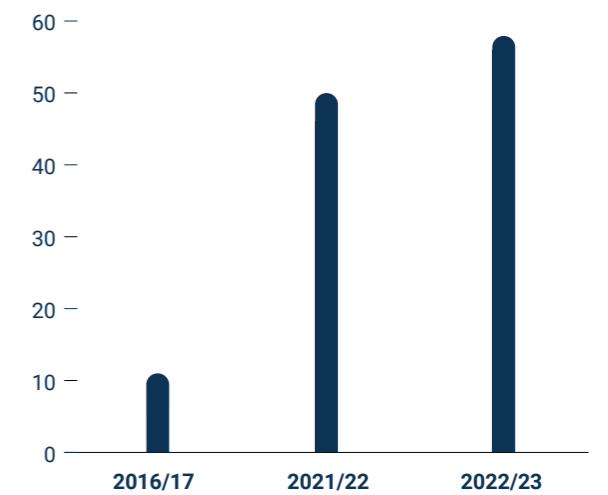
<sup>2</sup> For absolute values, see key data on page 33.

**OUTLOOK**

Our goal is to source or generate electricity entirely from renewable sources complete with the corresponding certificates. Although the installation of PV systems in Spain and Poland has been postponed, it is planned to be carried out in the upcoming financial year, with a further two PV systems planned for the Czech Republic. In total, systems with a combined capacity of 11.5 MWh are set to be installed.

We continue to work on enhancing operational planning and process management to save energy through optimized utilization. This includes the planned introduction of a new heat treatment in Spain, complete with reduced energy consumption (60% per unit) and water usage, along with automated measurement of air emissions. This system will go into operation in the fall of 2023. We have also recently acquired a new centrifugal compressor that boasts up to 15% lower power consumption per cubic meter of compressed air produced.

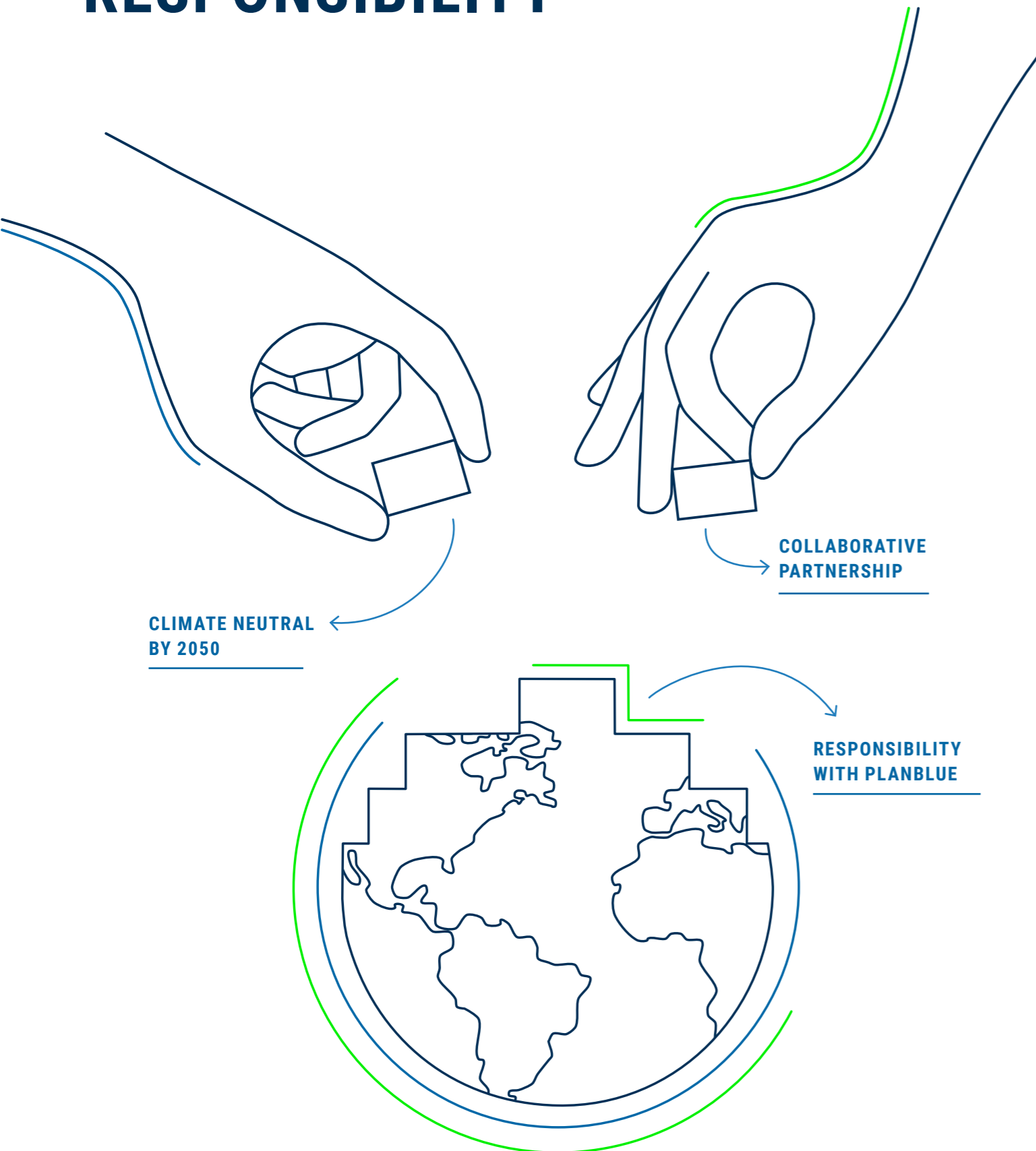
**PROPORTION OF RENEWABLE POWER<sup>3</sup> (IN %)**



By 2022/23, we were able to increase our power supply from renewable sources by nearly 50%. We source green electricity from hydro, solar and wind energy.

<sup>3</sup> For absolute values, see key data on page 33.

# RONAL GROUP TAKES RESPONSIBILITY



Companies that want to remain successful in the long run have to take responsibility. It is no longer just their financial performance that matters, but also their impact on the environment and social landscape.

Corporate social responsibility is not a novel concept, but it is certainly a formidable task. Inextricably linked with a company's operational endeavors and interactions with the community, it is also a commitment that should not be taken for granted. It stands as an integral facet of the company's mission, necessitating the assessment of not only the economic outcome but also the influence on the environment and social context in every business undertaking.

#### MORE RESPONSIBILITY WITH PLANBLUE

Companies today are increasingly being held accountable – whether through legal regulations such as the Corporate Responsibility Initiative, the Supply Chain Due Diligence Act (LkSG), or European Union regulations concerning the supply chain; however, it is not just legal requirements that matter. We at RONAL GROUP embrace our responsibility. With our PLANBLUE initiative, we take responsibility toward people and the environment to ensure our economic success and long-term competitiveness.

#### FAIR PAY AND TRANSPARENT PARTNERS

Our commitment to social responsibility also extends to our employees and supply chain. Here, our focus lies on establishing secure job opportunities with equal pay for equal work, irrespective of gender or background. In terms of our relationships with our suppliers, we expect an atmosphere of openness, transparency and cooperative engagement. This is built on the condition that they adhere to our sustainability guidelines for business partners.

#### CLEAR CLIMATE OBJECTIVES

We have established clear objectives when it comes to the climate and the environment: our commitment extends to achieving carbon neutrality by 2050. In the years ahead, our focus remains on reducing carbon emissions in Scope 1, 2 and 3, while also promoting circular economy principles by progressively increasing the share of secondary aluminum in our products. Although we have not yet reached our goal, we are steadily progressing toward embracing our active social responsibility in every sense.

# RONAL GROUP IN FIGURES 2022/23\*

\*Excluding SanSwiss



Around

# 6 400

Employees as of March 31, 2023

# 1969

Year founded



# ~20

Capacity in million wheels



# 1.3

Revenue in billion EUR



# ~61%

Equity ratio



# 14

Production sites on three continents

# SANSWISS IN FIGURES 2022/23



Around

# 270

Employees as of March 31, 2023

# 1981

Year founded



# 255

Shower enclosures sold in thousand units



# 55.2

Revenue in million EUR



# 2

Production sites



# ~36%

Equity ratio

More information on SanSwiss available at [susreport.ronalgroup.com](https://susreport.ronalgroup.com)

# RONAL GROUP'S CARBON FOOTPRINT REPORT FOR 2022/23

For the past six years, RONAL GROUP has been producing a carbon footprint report, which currently covers all wheel factories, the logistics center, tool manufacturing in Härkingen and Portugal, the RONAL TECHNOLOGIE innovation center and administrative offices in Germany and Switzerland.

## LOWER CO<sub>2</sub> EMISSIONS

Carbon emissions have decreased by 0.1% compared to the previous year. In comparison to the 2016/17 baseline year, these emissions have been reduced by 36%, amounting to nearly 1.1 million metric tons of CO<sub>2</sub>.

## CLIMATE-FRIENDLY ALUMINUM CONSUMPTION

74% of the carbon emissions are caused as a byproduct of processing aluminum. Compared to the baseline year, these emissions have decreased by 40%, equivalent to 974 000 metric tons of CO<sub>2</sub>.

## ELECTRICITY WITH A SMALLER FOOTPRINT

The second-largest share of the carbon footprint is attributed to electricity. These emissions have decreased by 49% compared to the baseline year (101 000 metric tons of CO<sub>2</sub>), and by nearly 14% compared to the previous year. This is partly due to the higher proportion of green electricity in the energy supplier's fuel mix.

## LESS CO<sub>2</sub> DUE TO NATURAL GAS CONSUMPTION

The consumption of natural gas, which accounts for 10% of the total emissions, has also decreased by 17% compared to the baseline year; this amounts to a CO<sub>2</sub> reduction of 46 000 metric tons. That said, consumption has increased by 12% compared to the previous year.

## REDUCTION IN WASTE

The remaining emissions constitute around 5% of RONAL GROUP's ecological footprint, with chemicals newly included in Scope 3. There has been a notable increase in carbon emissions from travel, commuting and consumables, while an encouragingly significant reduction has been observed in waste and refrigerants.

## LESS CO<sub>2</sub> PER WHEEL

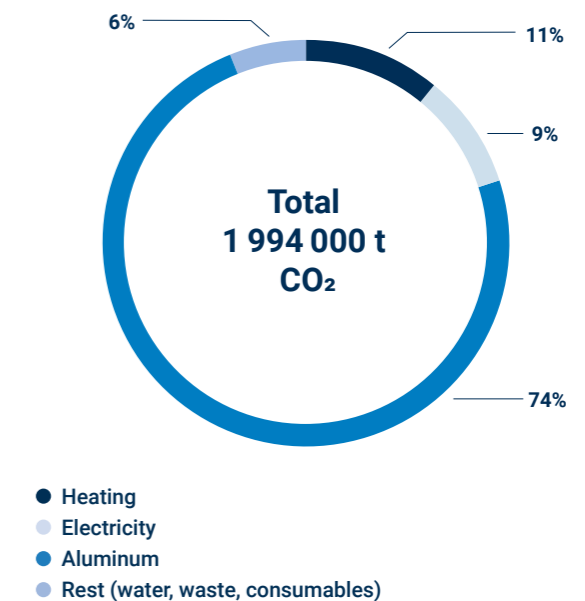
Carbon emissions per wheel sold have been reduced by 4.6% compared to the previous year and by 11% compared to the baseline year, now standing at 139 kg of CO<sub>2</sub> per wheel sold (7 kg less than the previous year).

Using the number of sold wheels as the reference for the key performance indicator (KPI), RONAL GROUP's CO<sub>2</sub> performance can be monitored and evaluated over time. This KPI allows for meaningful comparisons even when total emissions change due to growth.

## REPORTING FRAMEWORK

The international ISO 14064-1 (2018-12) standard serves as the foundation for capturing, calculating and reporting the carbon footprint report: "Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals."

## CO<sub>2</sub> REPORT BY SWISS CLIMATE<sup>1</sup> 2022/23<sup>2</sup>



<sup>1</sup> Swiss Climate is a consulting company specializing in CO<sub>2</sub> management, sustainability, carbon offsetting and energy.

<sup>2</sup> For absolute values, see key data on page 33.

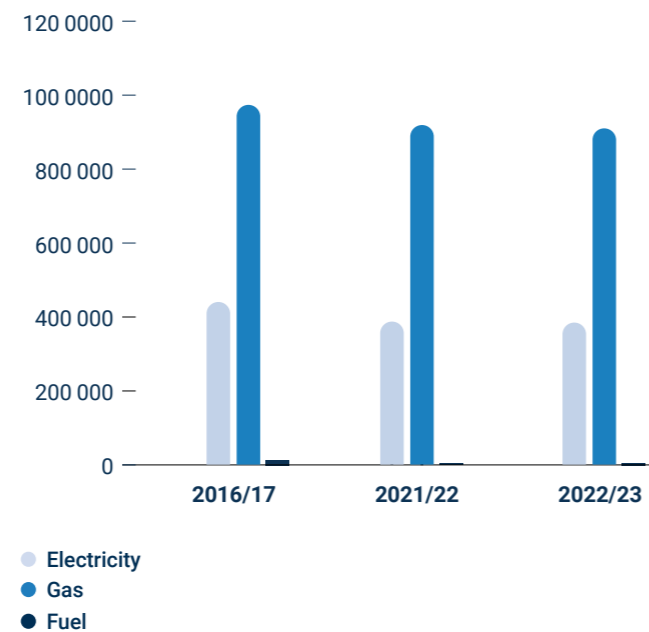
# ENVIRONMENTAL FIGURES FOR RONAL GROUP

**RONAL GROUP's environmental figures encompass energy consumption, water usage, waste water and waste.**

## ENERGY CONSUMPTION

Alongside aluminum, energy constitutes the largest resource pool in the production of aluminum wheels. Over 80% of the gas quantities we utilize are dedicated to melting aluminum ingots, heat treating raw cast wheels and curing (baking) paint. As for electricity, this is primarily used to generate compressed air and power machinery. In the 2022/23 financial year, we consumed a total of 1 079 200 MWh of gas and electricity and non-renewable energy sources, as well as 222 600 MWh of renewable energy.

**ENERGY CONSUMPTION OF ELECTRICITY, GAS AND FUELS (IN MWH)<sup>1</sup>**



<sup>1</sup> For absolute values, see key data on page 33

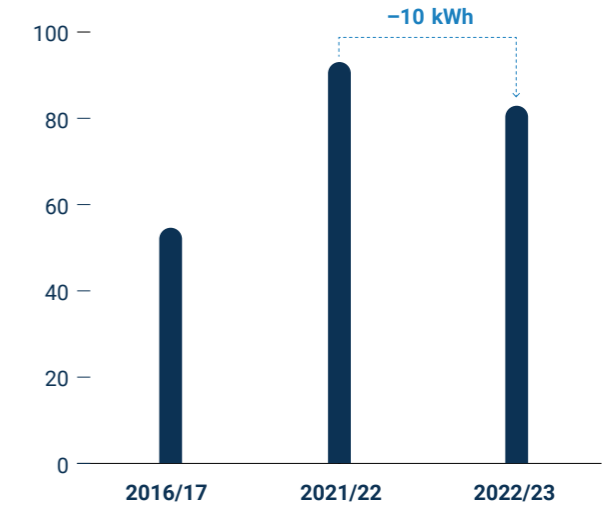
## WATER CONSUMPTION

In the environmental sphere, one of our objectives is to reduce water consumption by 15% compared to the baseline year of 2016/17. The major water consumers in the production process include heat treatment, pretreatment in the painting facility and cooling towers for heat reduction.

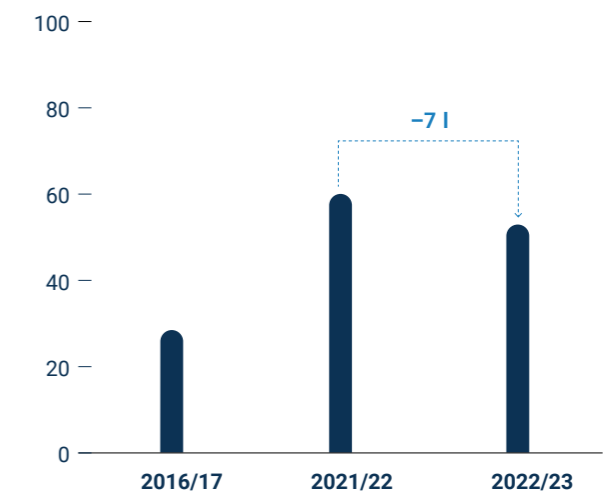
Significant volumes of water evaporate in the heat-treatment quenching tanks and in the cooling towers. Conversely, the waste water from pretreatment is fully directed to the waste water treatment facility and treated and purified in accordance with legal regulations before being discharged into the sewer system. Our aim is to recycle this water as part of the process.

While we were not able to achieve the targeted 15% reduction in water consumption in the production plants due to the fact that reductions in many facilities necessitated new investments, we did manage to reduce water consumption by 20% at our administrative locations.

**ENERGY CONSUMPTION (IN KWH/FINISHED WHEEL)<sup>2</sup>**



**WATER CONSUMPTION (IN L/FINISHED WHEEL)<sup>2</sup>**



<sup>2</sup> For absolute values, see key data on page 35.

**WASTE MANAGEMENT**

The guiding principle for RONAL GROUP is all about avoidance, reduction, reuse within the process or through external recycling, and disposal (landfill or incineration). We also distinguish between hazardous and non-hazardous waste. With regard to non-hazardous waste, we aim to reuse this within the process whenever customer requirements and quality standards allow.

100% of our aluminum chips that are free from paint adhesions are already being reused within our processes. Aluminum runners and scrap are prepared in-house or sent externally for processing. Once processed, this material returns and is once again utilized within the process. Similarly, alu chips from the gloss spin rotation process are processed externally, making them available for reuse. In the 2022/23 financial year, the quantity of non-hazardous waste was 22 900 metric tons, while hazardous waste totaled 5 400 metric tons.

**QUANTITY OF WATER (m³) AND QUANTITY OF TREATED WASTE WATER (m³)<sup>1</sup>**

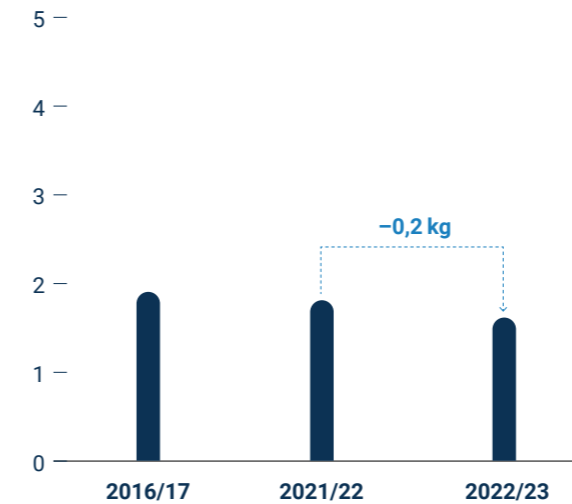


**WASTE (t)<sup>1</sup>**



<sup>1</sup> For absolute values, see key data on page 35.

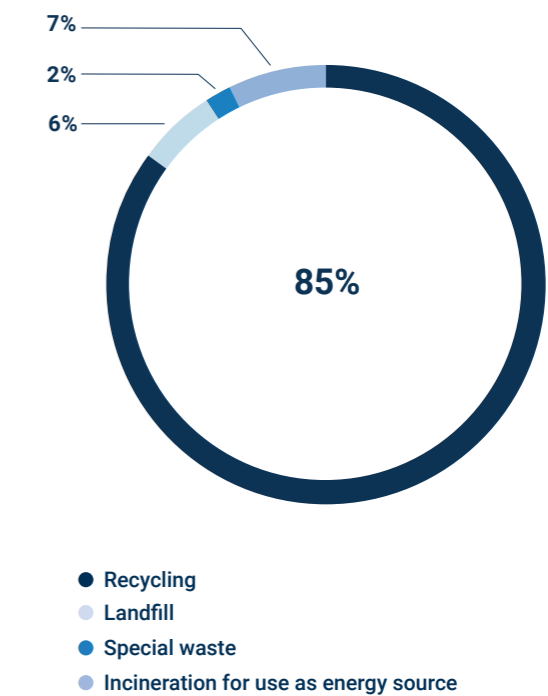
**WASTE (IN kg/FINISHED WHEEL)**



**HAZARDOUS WASTE IN WHEEL PRODUCTION**

- Cleaning solvents from the painting system
- Paints and paint sludge from the painting system and overspray separation
- Coolants from mechanical processing
- Chemicals and sludge from pre-treatment and waste water treatment

**WASTE ROUTES – AVERAGE FOR 2022/23 FINANCIAL YEAR**





# KEY DATA FOR 2022/23

RONAL GROUP		2016/17	2021/22	2022/23
Net sales	Million EUR	1 165	1 085	1 331
Equity ratio	%	65.8	65	61
Product quantity	Million wheels	19.5	13.8	14.3
Production sites	Number	14	14	14

## Sustainable and innovative products\*

Proportion of aluminum purchased from ASI members	%	25	100	100
Proportion of purchased aluminum produced with renewable energy	%	40	63	65**
Proportion of aluminum purchased from ASI-certified suppliers	%	0	90	99
Wheel recyclability	%	100	100	100
Material consumption, total	t	375 100	300 500	306 904
Material consumption, non-renewable	t	255 900	195 500	200 250
Material consumption, renewable	t	119 200	105 000	106 700
Proportion of secondary raw materials in total material input	%	32	34.9	35
Proportion of recycled aluminum chips	%	96.5	100	100
Proportion of post-consumer material	%	0	0.13	1.1

\* Excludes sales locations in the USA and France.  
SanSwiss figures are not included in the key data.

\*\* 55% with proof of origin and 10% without certificate.

Energy and climate*		2016/17	2021/22	2022/23
Energy consumption, total	MWh	1 411 083	1 312 267	1 301 800
Energy consumption, non-renewable	MWh	1 364 083	1 178 557	1 079 200
Fuel (diesel)	MWh	13 600	4 600	5 500
Natural gas	MWh	957 000	920 000	912 500
Power	MWh	393 483	253 957	161 200
Power consumption, renewable	MWh	47 000	133 710	222 600
Renewable power in Germany	MWh	36 200	45 000	36 600
Renewable power in Spain	MWh	10 800	47 200	46 000
Renewable power in Switzerland	MWh	0	1 510	1 086
Renewable power with proof of origin	MWh	47 000	133 710	83 800
Proportion of renewable power	%	11	50	58
Energy efficiency, total	MWh/million EUR	1 211	1 209	978
CO <sub>2</sub> equivalent emissions, total	t CO <sub>2</sub>	427 000	318 000	301 300
Scope 1	t CO <sub>2</sub>	222 000	197 000	196 900
Scope 2	t CO <sub>2</sub>	205 000	121 000	104 400
Self-generated electricity (photovoltaics and combined heat and power plant)	MWh	0	41 187	47 300
Photovoltaic systems	MWh	0	971	1 100
Combined heat and power plant – Mexico	MWh	0	40 216	46 200
Energy consumption – gas and electricity (production sites)	MWh	1 374 179	1 270 430	1 186 000
Number of goods OK (WAiO)	Number	19 632 068	13 781 859	14 248 500
Energy consumption per finished wheel	kWh/wheel	68	93	83

**Employee development**

		2016/17	2021/22	2022/23
Employees	Headcount	7 476	6 499	6 394
Employees	FTE	7 166	6 456	6 348
Women	%	7	8.7	9
Full-time	FTE	511	558	551
Europe	FTE	164	48	49
Central Europe	FTE	177	294	283
Central America/America	FTE	180	193	190
Asia	FTE	35	28	30
Men	%	93	91	91
Full-time	FTE	5 976	5 719	5 524
Europe	FTE	2 209	500	484
Central Europe	FTE	2 923	3 823	3 694
Central America/America	FTE	1 242	1 402	1 429
Asia	FTE	234	168	181
Fluctuation	%	13	20	18
< 30 years	%	6	6.7	6
Between 30 and 50 years	%	6	10	10
> 50 years	%	1	3.2	3
Women	%	1	2.2	2
Men	%	9	18	16
% of all employees by gender and employee category who have undergone regular assessments of their performance and professional development	%	N/A*	60.7	65
Women	%	N/A*	50	60
Men	%	N/A*	56	58.5

\* Data not compiled in 2016/17.

SanSwiss figures are not included in the key data.

**Safety and health**

		2016/17	2021/22	2022/23
Occupational accidents	Number	457	177	158
Accident frequency rate	Per 1000 employees	7	1.97	2.06
Absence rate	%	0.3	0.23	0.25
Lost hours	h	32 330	24 318	26 696
Lost days	d	4 041	3 040	3 337

**Sustainable and innovative product<sup>\*\*</sup>**

Aluminum total	t	228 004	177 000	182 600
Aluminum made with renewable energy (EU)	t	N/A*	112 000	118 690
Carbon emissions from AI production (non-renewable)	t CO <sub>2</sub>	N/A*	580 000	753 763
Carbon emissions from AI production (renewable)	t CO <sub>2</sub>	N/A*	447 000	604 480
Carbon savings from AI procurement (renewable)	t CO <sub>2</sub>	N/A*	214 587	349 048
Carbon savings from post-consumer material	t CO <sub>2</sub>	0	1 720	11 400
Carbon footprint per finished wheel	kg CO <sub>2</sub>	157	145	139
Reduction in carbon footprint	%	0	-8	-11
Scope 3	t CO <sub>2</sub>	1 880 000	1 641 000	1 586 000

**Environmental figures<sup>\*\*</sup>**

Water consumption (all plants)	m <sup>3</sup>	827 000	856 700	769 100
Water consumption (production sites)	m <sup>3</sup>	664 000	827 955	705 770
Treated waste water (production sites)	m <sup>3</sup>	189 000	172 000	190 800
Waste	t	31 700	30 400	28 300
Hazardous waste	t	6 100	5 700	5 400
Non-hazardous waste	t	25 600	24 700	22 900

\*\* Excludes sales locations in the USA and France.

# GRI CONTENT INDEX

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<b>GRI 102: General disclosures</b>		
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<b>GRI 103: Management approach</b>		
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<b>GRI 302: Energy</b>		
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Disclosure number	Disclosure title	Reference
<b>GRI 305: Emissions</b>		
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305-3	Other indirect (Scope 3) GHG emissions	Pages 26–27 and 33
305-4	GHG emissions intensity	Pages 26–27 and 33
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<b>GRI 403: Safety and health</b>		
403-5	Worker training on safety and health	Page 12–13
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403-9	Work-related injuries	Pages 12–13 and 35
<b>GRI 404: Training and education</b>		
404-2	Programs for upgrading employee skills and transition assistance programs	Page 12–13
404-3	Percentage of employees receiving regular performance and career development reviews	Page 34

# ABOUT THIS REPORT

The RONAL GROUP Sustainability Report aims to keep stakeholders up to date on key issues, objectives and achievement of those targets.

## REPORT STRUCTURE

This sustainability report is based on GRI standards and principles in relation to content and quality, and is rooted in the materiality analysis. The report also refers to GRI disclosures in the GRI content index table.

## REPORTING PERIOD AND CYCLE

The report covers the 2022/23 financial year (April 1, 2022 to March 31, 2023), with all key data correct as at March 31, 2023. Information from previous years has been included where necessary to provide readers with a complete picture of RONAL GROUP's sustainability approach and performance. Any information that does not originate from the financial years mentioned is clearly indicated as such. This is the fourth sustainability report published by RONAL GROUP, with the first report covering the 2016/17 financial year. Going forward, the aim is to publish one every year. The report is available in both German and English on the RONAL GROUP website.

## SURVEY METHODS

This report refers to RONAL GROUP and includes its wheel production plants, tool manufacturing facilities and sales locations. SanSwiss and the group's sales locations in the USA and France have not been included. If the report makes reference to a specific area of the company (by way of example or due to the data available), this is clearly indicated. Notes on the calculation methods are provided in footnotes to the respective graphs.

## OWNERSHIP AND LEGAL FORM

RONAL AG is majority-owned by the Ronal Foundation and is headquartered in Härkingen, Switzerland. One of the primary objectives of the Ronal Foundation is to safeguard and promote RONAL GROUP as an independent manufacturing company.

## EXTERNAL VERIFICATION

No external verification was sought for this report.

## DISCLAIMER

Wherever CO<sub>2</sub> values are provided in this report, these are to be understood as CO<sub>2</sub> equivalents (CO<sub>2</sub>e) – a comparative value for measuring the warming effect of different greenhouse gases on the climate. In line with our efforts to protect the climate, this report is only available in digital form.

# LEGAL NOTICE

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