### ANNUAL REPORT 2024

# DRIVING INNOVATION, SHAPING A SUSTAINABLE FUTURE.

FOR GROWTH THAT MATTERS





# TABLE OF CONTENTS

#### LETTER FROM THE CEO

6 Overcoming challenges

#### **SUCCESS STORIES**

- **10** A giant in green: Suzano's groundbreaking pulp mill in Brazil
- **13** The story behind the landmark Yusufeli hydropower project
- **16** How ArcelorMittal and ANDRITZ reinvented automative manufacturing
- **19** Veolia: the liquid that fuels Texas's industrial boom

#### **THE GROUP**

- 23 Company boards
- **25** This is ANDRITZ
- **28** Green transition
- **30** Research & Development
- 32 Sustainable solutions
- **40** Digitalization
- **42** Business areas
- 55 Strategy
- **57** Acquisitions
- **58** Sustainability
- 72 Compliance
- 74 2024 in figures
- 75 Order intake by region
- **76** The ANDRITZ share
- **79** Key figures share
- 80 Financial calendar 2025
- 81 ANDRITZ reports 2024

55

### SUSTAINABILITY

At ANDRITZ we pioneer sustainable solutions to guide our customers through the green transition, delivering technology that transforms challenges into opportunities.

#### **SUCCESS STORIES**

These projects demonstrate ANDRITZ's strength in realizing innovative and sustainable large-scale projects.

#### STRATEGY

We create growth that matters through decarbonization, digitalization, and exceptional customer service – for our customers and ourselves.



# **KEY FIGURES**

### **STABLE** PROFITABILITY

**BASED ON A RESILIENT COST MANAGEMENT** 

### ROBUST **BUSINESS MODEL**

**TACKLING CHALLENGING MARKETS** 

### **FOCUS ON SUSTAINABILITY**

**TECHNOLOGIES THAT SERVE OUR CUSTOMERS – ECOLOGICALLY AND ECONOMICALLY** 

Order intake Order backlog (as of end Revenue **EBITDA**<sup>1</sup> EBITDA margin EBITA<sup>2</sup> EBITA margin Comparable EBITA Comparable EBITA marg Earnings Before Interest EBIT margin Earnings Before Taxes (E Net income (including no Net income margin Earnings per share Non-current assets Current assets Total equity<sup>3</sup> Total assets Equity ratio<sup>4</sup> Liquid funds<sup>5</sup> Net liquidity<sup>6</sup> Cash flow from operatin Capital expenditure<sup>7</sup> Employees (as of end of

<sup>1</sup> Earnings Before Interest, Taxes, Depreciation and Amortization

- <sup>3</sup> Total equity including non-controlling interests

	Unit	2024	2023	2022	2021	2020
	MEUR	8,276.9	8,551.9	9,263.4	7,879.7	6,108.0
nd of period)	MEUR	9,749.9	9,872.6	9,976.5	8,165.8	6,774.0
	MEUR	8,313.7	8,660.0	7,542.9	6,463.0	6,699.6
	MEUR	887.9	910.2	825.5	718.3	571.1
	%	10.7	10.5	10.9	11.1	8.5
	MEUR	713.0	741.9	648.5	546.5	391.7
	%	8.6	8.6	8.6	8.5	5.8
	MEUR	742.8	757.1	644.3	549.9	471.1
rgin	%	8.9	8.7	8.5	8.5	7.0
t and Taxes (EBIT)	MEUR	661.9	685.2	572.7	479.6	315.0
	%	8.0	7.9	7.6	7.4	4.7
(EBT)	MEUR	646.5	688.2	540.9	439.6	280.9
non-controlling interests)	MEUR	496.5	504.3	402.6	321.7	203.7
	%	6.0	5.8	5.3	5.0	3.0
	EUR	5.0	5.2	4.1	3.3	2.1
	MEUR	2,674.3	2,615.1	2,571.2	2,585.2	2,497.5
	MEUR	5,488.7	5,882.2	5,920.6	5,087.6	4,559.2
	MEUR	2,280.0	2,157.5	1,834.7	1,567.3	1,255.7
	MEUR	8,163.0	8,497.3	8,491.8	7,672.8	7,056.7
	%	27.9	25.4	21.6	20.4	17.8
	MEUR	1,434.4	1,787.2	2,051.1	1,837.9	1,719.3
	MEUR	904.9	920.5	983.0	703.3	420.9
ing activities	MEUR	636.5	375.0	710.8	529.6	461.5
	MEUR	237.5	226.2	184.4	160.1	131.8
of period; without apprentices)	_	30,003	29,717	29,094	26,804	27,232
of period; without apprentices)		30,003	29,717	29,094	26,804	2

<sup>2</sup> Earnings Before Interest, Taxes, Amortization as well as impairment of assets acquired in a business

combination and recognized separately from goodwill amounting to 51.1 MEUR (2023: 56.7 MEUR)

<sup>4</sup> Total shareholders' equity/total assets

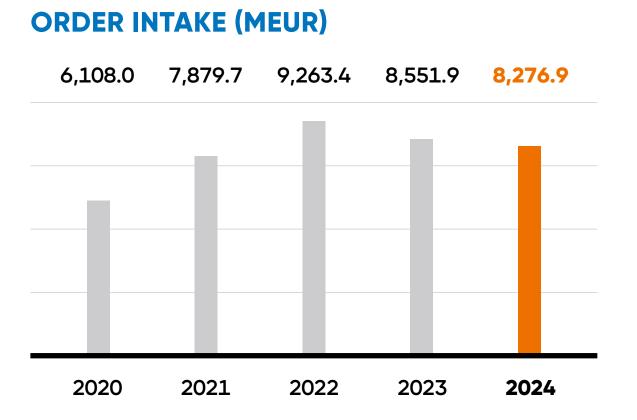
<sup>5</sup> Cash and cash equivalents plus investments

<sup>6</sup> Liquid funds minus financial liabilities

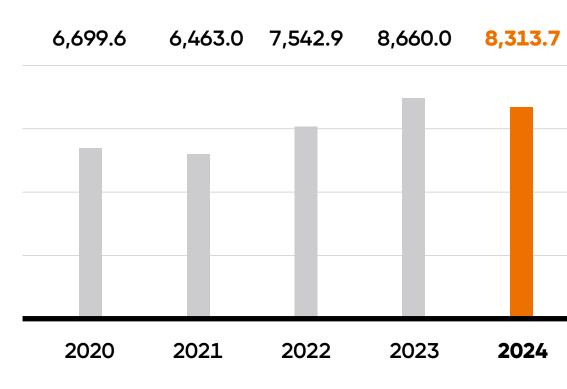
<sup>7</sup> Additions to intangible assets and property, plant and equipment



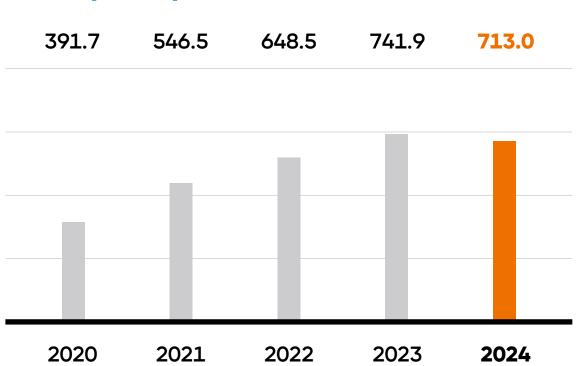




#### **REVENUE (MEUR)**

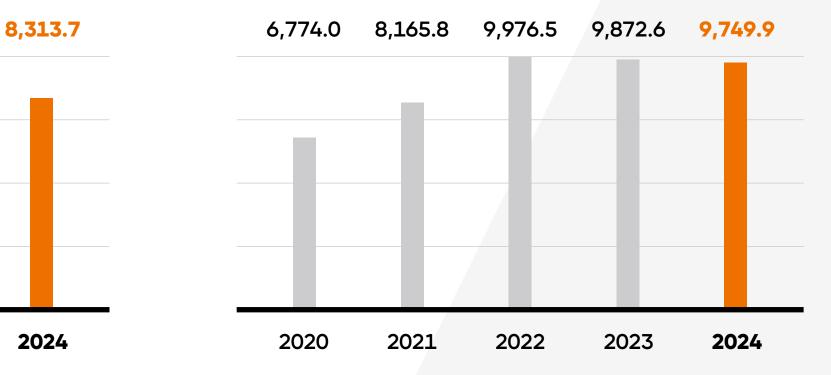


#### EBITA (MEUR)



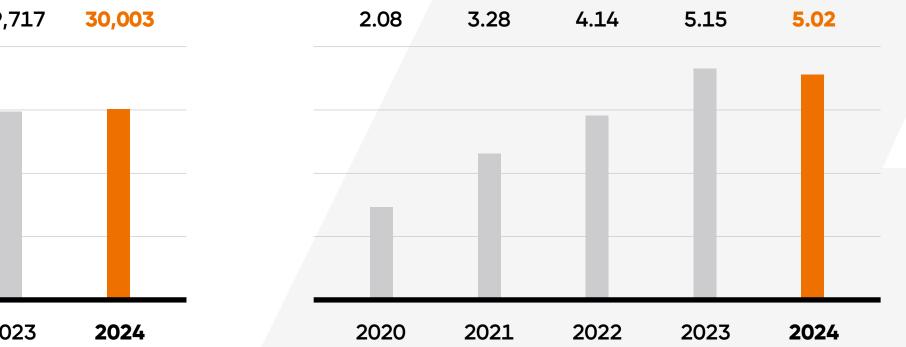
#### **EMPLOYEES**

, -
0



#### **ORDER BACKLOG (MEUR)**

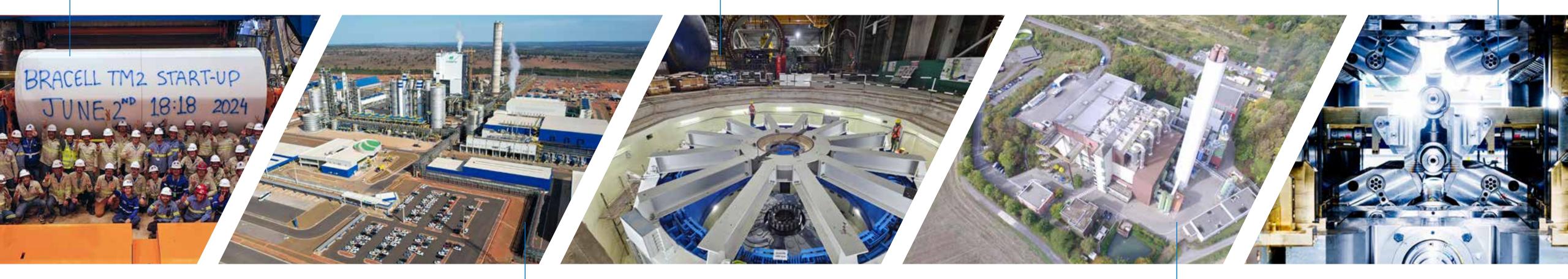
#### EARNINGS PER SHARE (EUR)





# HIGHLIGHTS 2024

Bracell: Start-up of four tissue lines with a low carbon footprint due to use of excess steam and electricity for drying



Suzano: Start-up of the world's largest single-line pulp mill in July; by January 2025, it produced one million tons of pulp

Commissioning of a 1,680 MW pumped storage plant in Pinnapuram, India – ensuring grid stability and supporting fluctuating solar and wind power supplies

ArcelorMittal: Order for a cold rolling mill and an annealing and coating line for the production of non-grain oriented silicon steel – an essential material for electric vehicles

### 4

MVA Hamm: Order for modernizing the flue gas cleaning system at a waste incineration plant, significantly reducing emissions and ensuring compliance with new legal requirements



# **A OVERCOMING CHALLENGES**

#### **Letter from the CEO**

#### Dear Stakeholders, Team Members, and Partners,

2024 was a year that tested all of us – industries, businesses, and individuals alike. Economic turbulence, from rising interest rates to shifting trade policies, presented challenges that demanded new ingenious approaches and solutions. Yet, as I look back on the past year, I am struck by how ANDRITZ has continued to adapt, innovate, and thrive, prov-ing once again the strength of our team, our vision, and our values.

None of this would have been possible without the incredible commitment of our over 30,000 employees around the globe. They faced the past year's uncertainties with creativity and dedication, finding new ways to meet customer needs and deliver results. I am deeply grateful to everyone at ANDRITZ for making 2024 another year to be proud of.

While we did not achieve the record revenues of 2023, we maintained solid profitability – a reflection of our careful cost management



#### LETTER FROM THE CEO

and our growing focus on services. Our achievements give me confidence that we are on the right track, even as we prepare for continued uncertainty in the year ahead.

#### **HIGHLIGHTS OF 2024**

Some moments of the past year stand out as milestones that underscore what makes ANDRITZ unique. The start-up of the world's largest pulp mill with a single eucalyptus pulp production line for Suzano in Brazil showcased extraordinary coordination and expertise. Our Metris X DCS industrial system launched with four tissue machines for Bracell, setting a new milestone for industrial automation. And the commissioning of India's Pinnapuram pumped storage plant - a landmark in renewable energy storage - highlighted the vital role that hydropower continues to play in balancing the other renewable energies. These achievements go beyond technology; they demonstrate how ANDRITZ is driving the future of sustainable industry through innovations.

Sustainability is a core focus in everything we do. While some industries slowed investments this year due to geopolitical and economic challenges, the interest in greener, more sustainable solutions has been growing. What truly heartened me last year was the remarkable progress made by our engineers and researchers, whose technological advances in areas like green hydrogen and carbon capture through

engineering studies reaffirmed our position at the forefront of innovation for a greener future. Seeing our teams tackle these challenges head-on has been inspiring.

#### **ADAPTING TO CHALLENGES**

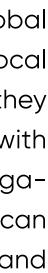
The past year also brought its fair share of difficulties. Europe's markets, in particular, faced significant headwinds, and the Metals and Pulp & Paper business areas required tough decisions, including capacity adjustments and restructuring. These steps are never easy, but they are necessary to secure our long-term success. On the other hand, we saw exciting opportunities emerge in the Americas and parts of Asia, where growth is higher.

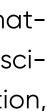
What has kept us strong through all of this is our global approach. Our decentralized structure and local-for-local philosophy give our teams the autonomy and speed they need to respond to challenges on the ground. Coupled with our resilient structures – whether in supply chains or in organizational flexibility – we have built a foundation that can withstand the unexpected and keeps ANDRITZ strong and nimble, 172 years after the company's founding.

#### **LOOKING AHEAD TO 2025**

As we look to 2025, our focus will be on staying ready for whatever comes next. That means doubling down on cost discipline and continuing to work in the areas of decarbonization,

### "Our 30,000 employees managed uncertainties with creativity and dedication. I'm deeply grateful for their commitment in making 2024 a year to be proud of."







#### LETTER FROM THE CEO

digitalization, and customer service. Internally we will be fostering collaboration, openness, and empowerment of our staff and leaders. These pillars are the backbone of how we deliver meaningful value to our customers.

Artificial intelligence is one area from which we expect a significant boost. It is already transforming how we work, improving our internal processes and making our Metris digitalization solutions smarter. It also shows the way forward in business, as recognized by the Microsoft Intelligent Manufacturing Award (MIMA) we received for our pioneering digital solutions enabling autonomous pulp mills. Al will play a growing role in helping us respond faster, work smarter, and deliver even greater value.

#### **A SHARED VISION FOR THE FUTURE**

We must remain ready for both challenges and opportunities. Even though the economic situation remains uncertain, we are following a proven plan: maintain cost discipline to navigate potential downturns while staying agile to act quickly if markets recover. This balance will allow us to adapt effectively and grow wherever opportunities arise.

Adaptability will remain a cornerstone of our success. The strategies we developed during recent crises – building flexibility into operations and strengthening supply chains - ensure we can navigate unpredictability while continuing to meet the needs of our customers.

Our mission is clear: support our customers in mastering and managing their green transition. Everything we do is for them, whether through pioneering technologies or excellent lifecycle services. At ANDRITZ, growth is not just about financial results; it's about creating growth in many dimensions.

And that is what our people do, that is what enables them to deliver extraordinary results. Their dedication, ingenuity, and passion give me great confidence in our ability to thrive in the year ahead.

Thank you for your trust in ANDRITZ. Together, let's make 2025 a year defined by resilience, innovation, and growth that matters.

Sincerely,

Joachim Schönbeck President and CEO

**"Our mission** is clear: support our customers in mastering and managing their green transition."





# **AGIANT IN GREEN: SUZANO'S GROUNDBREAKING PULP MILL IN BRAZIL**

The world's largest single-line pulp mill transforms wood into renewable power and pulp, pushing new limits in sustainable production.

In midwest Brazil, Suzano Papel e Celulose – the largest pulp and paper company in Latin America – has brought a new and record-breaking mill to life, fueled by 100% planted eucalyptus trees. The mill transforms wood into pulp and generates surplus electricity for Brazil's grid. At the heart of this operation is ANDRITZ's advanced processing technology.

Suzano's new mill was built from the ground up to maximize efficiency. "A new greenfield project like this lets us apply the best in technology, with a strong focus on sustainability," says Mauricio Miranda, Suzano's Director of Engineering, who was responsible for the implementation of the entire project.

Centered around a single fiberline with an annual capacity of 2.55 million tons, the mill is the largest of its kind globally, running on entirely on renewable energy, and producing 180 megawatts of surplus electricity for the national grid.

"This could supply a city of two million inhabitants with around 1.5 terawatt hours of electricity," notes Tommi Voutilainen, ANDRITZ Executive Vice President for Pulp & Power.

Just as remarkable is the speed with which the mill has established itself as a reliable high-quality production site. It reached its designed daily production capacity within only 87 days of beginning operations in July 2024, with an excellent 95.3% of final pulp already meeting market-ready quality standards.

Another milestone was met in the beginning of 2025 when the mill's production reached its first 1 million tons of pulp.

Key to this setup is ANDRITZ's knowhow and expertise. ANDRITZ supplied the highly resource-efficient pulp mill

ANDRITZ ANNUAL REPORT 2024 /

the the



#### **SUZANO'S PULP MILL**

with leading technologies for fiber production and chemical recovery. The scope included a complete wood processing plant, the world's largest single fiberline, a complete pulp drying system, an energy-efficient black liquor evaporation plant, a recovery boiler, a biomass power boiler, and a complete white liquor plant. To further enhance environmental performance, ANDRITZ also supplied gasification plants for fossil-free operation of the lime kilns and a SulfoLoop sulfuric acid plant to recycle sulfur from waste streams and make the mill completely self-sufficient in sulfuric acid.

### **IMPRESSIVE START-UP CURVE:**

- In late December 2024, Suzano consistently produced bleached kraft pulp at an average daily rate exceeding the planned 7,203 t/d for 30 days.
- ANDRITZ also supplied a SulfoLoop sulfuric acid plant, which reached full capacity in January 2025. It enables the mill to recycle sulfur from side streams and become completely self-sufficient in sulfuric acid.

The new mill is also equipped with one of the most comprehensive automation and digitalization packages in the industry, enabling it to achieve an unprecedented level of autonomy and set a new global benchmark.

#### **UNCONVENTIONAL APPROACH**

Building Suzano's mill was a feat of coordination. Global supply chains were disrupted by the war in Ukraine, delaying shipments. To stay on track, Suzano and ANDRITZ took an unusual step. "We repurposed Suzano's dedicated pulp ships to transport essential equipment from Asia, keeping the project on schedule," tells Suzano's Miranda. "It was an unconventional approach, but it underscored our team's and ANDRITZ's adaptability and commitment to meeting timelines, no matter what external challenges came up."

The bigger challenge still was getting the right people to the right spot at the right time. Located far from major cities, the mill required a large, qualified workforce – and an even bigger one to construct the plant in the first place. At the peak time of the assembly period, around 11,000 people comprising the combined workforce of Suzano, ANDRITZ and external personnel from subcontractors – worked on the site. Yet, attracting people to the area proved difficult at the beginning.



Mauricio Miranda, Suzano's Director of Engineering, emphasizes sustainable technology integration in the company's new greenfield mill project featuring ANDRITZ processing technology.

"That's why we've invested 75 million reais (approx. 12 million euros) in community infrastructure, including expanding local healthcare and social services," says Miranda. The funds paid for new medical facilities, a hospital wing, and social services, addressing local needs. "It truly created a positive impact by bringing jobs and skills training to the area. That's why the local community has been so supportive, seeing this project as a force for regional development," adds Miranda.



#### **SUZANO'S PULP MILL**

For Suzano, these investments are as integral to the project's success as the mill itself, strengthening local infrastructure and supporting the workforce that powers the mill. "These additions weren't just a regulatory requirement; they were essential for creating a sustainable environment for thousands of workers and residents," says Miranda.

#### **EQUIPPING THE WORKFORCE**

To equip the workforce, Suzano invested in intensive training programs to bring employees up to speed with the mill's advanced systems. "We used a process simulator for each part of the operation," explains Miranda. "This process simulator is a crucial factor because it improves the quality of learning.



Our team spent nearly a year in these simulations, learning to optimize performance and anticipate maintenance needs."

ANDRITZ experts trained Suzano's operators hands-on, reinforcing critical skills. "It's one thing to learn in a classroom, but entirely different when you're simulating real conditions," Miranda notes. This preparation has enabled Suzano's team to reach full production efficiency from day one.

#### **RAISING THE BAR ON SUSTAINABILITY**

ANDRITZ's technology is enabling Suzano to achieve an unprecedented level of efficiency. "We're using proven technologies, but with higher standards and tighter controls," says Miranda. This positions Suzano's mill as a leader in sustainable pulp production, setting a new benchmark for the industry. "By generating all of our own power, we're self-sufficient and can even send surplus energy to Brazil's grid," he adds.

For Miranda, the project represents more than just a single facility. "In my opinion, this is the best way to build a mill like this," he says. Efficient. Low-emission. Designed to minimize waste. "Our goal is to replicate this model in other regions, especially where sustainable infrastructure is in early stages," he emphasizes. "It's growth, but not at the expense of the environment. This project points to a new way forward, for Suzano and the entire industry."



Suzano's state-of-the-art pulp mill in Brazil, featuring ANDRITZ's comprehensive fiber production and chemical recovery technologies, including the world's largest single fiberline

**"The local community** has been so supportive, seeing this project as a force for regional development."

# **POWERING TÜRKIYE'S FUTURE:** THE STORY BEHIND THE LANDMARK YUSUFELI HYDROPOWER PROJECT

For centuries, the Çoruh River in eastern Türkiye was known as an untamable force of nature. Ancient historians wrote of its relentless flow, describing how it surged into the Black Sea with such power that it disrupted coastal waters, making navigation impossible. Harnessing this river's energy seemed an insurmountable challenge – until now.

The Yusufeli dam and hydropower plant represent a monumental achievement in Türkiye's efforts to utilize the river's energy for a sustainable future. Standing at 275 meters, Türkiye's highest double-curvature dam – and the third tallest of its kind globally – plays a crucial role in controlling the Çoruh River. Downstream, at the Yusufeli hydropower plant, the river's energy is transformed into electricity through stateof-the-art equipment provided by ANDRITZ.

The contract was signed in 2016, and the hydropower plant was officially put into operation in 2023 after a long-term collaboration led by the Turkish state company Devlet Su Isleri (DSI) and various contractors. ANDRITZ played a key role, delivering and integrating a full "from water-to-wire" package consisting of electromechanical systems such as three vertical Francis turbines (each with a capacity of 186 MW), generators, transformers, and balance of plant systems (representing a market share of approx. 60% in turbines).

The plant now provides over 1,888 gigawatt hours (GWh) of renewable energy annually – enough to power the equivalent of 600,000 homes across Türkiye. This project embodies the vision of transforming the Çoruh River's untamable energy into a sustainable and reliable power source for generations to come.



#### YUSUFELI HYDROPOWER PROJECT



ANDRITZ Francis turbines power the Yusufeli hydropower plant in Türkiye, generating clean energy for 600,000 households through integrated water-to-wire technology.

#### HARNESSING THE POWER OF THE UNTAMABLE ÇORUH

The extensive experience of ANDRITZ in Türkiye's hydropower sector made us an ideal partner for the Yusufeli project. The first projects ANDRITZ realized in Türkiye's hydropower sector go way back – as early as 1920. Today, ANDRITZ is proud to be the market leader, with 16,000 MW of installed or rehabilitated turbines and 8,700 MVA of generators.

#### THE TECHNOLOGY BEHIND YUSUFELI

Yusufeli is a showcase of advanced hydropower technology, with ANDRITZ's contributions central to its success. The scope consisted of a full suite of electromechanical solutions, including turbines, generators, transformers, and a Supervisory Control and Data Acquisition (SCADA) system. ANDRITZ also supplied all necessary hydromechanical components, including gates, penstocks, steel liners, trash racks, and cranes, ensuring smooth operational performance from water inflow to electrical output.

The SCADA system allows real-time monitoring and remote control of the plant's operations, optimizing efficiency and minimizing downtime. Additionally, a 380/154 kV GIS switchyard was installed to manage the plant's electrical output and transmission efficiently.

# "ANDRITZ's innovations ensure that the hydropower plant will operate efficiently for years to come."

"The SCADA system and other technologies deployed at Yusufeli have set a new benchmark in hydropower. ANDRITZ's innovations ensure that the plant will operate efficiently for years to come," said a representative of our partner from DSI.

Custom features were also introduced to meet Yusufeli's unique operational needs, including advanced flow and pressure monitoring systems, durable shaft seals, and stain-



#### YUSUFELI HYDROPOWER PROJECT

less-steel components for turbine cooling. These innovations enhance the plant's reliability in Türkiye's demanding environmental conditions.

#### **TURNING CHALLENGES INTO INNOVATION**

The construction of Yusufeli presented significant logistical challenges as well. The narrow valleys of Artvin Province and the dam's towering height made the transportation and installation of large equipment particularly difficult.

Key components, such as the Francis turbines and generators, had to be transported through rugged terrain and installed with precision in confined spaces. "Innovative ideas were required to install heavy equipment like generators and butterfly valves. We achieved this together, even during the pandemic, without disruption," said the DSI representative. ANDRITZ's collaboration with DSI ensured that installation timelines were met despite global supply chain interruptions.

Drawing on experience from other projects, ANDRITZ introduced new approaches to equipment installation, ensuring the plant was operational in only seven years.

#### **POWERING TÜRKIYE'S RENEWABLE FUTURE**

Beyond technological achievement, the Yusufeli hydropower plant is critical to advancing Türkiye's sustainability goals. By generating 1,888 GWh of renewable electricity per year, it reduces the country's reliance on fossil fuels and covers more than three times the electricity needs of Artvin Province, where it is located.

Additionally, the plant plays a vital role in managing the flow of the Çoruh River, mitigating the risk of seasonal flooding that has historically threatened the region. This dual function of energy generation and flood control makes Yusufeli a crucial element of Türkiye's broader environmental and energy strategy.

ANDRITZ's advanced monitoring and control systems ensure that the plant operates with maximum efficiency, sustainably managing water resources while safeguarding the surrounding ecosystem.

#### DRIVING TÜRKIYE'S PATH TO ENERGY INDEPENDENCE

Yusufeli is a key element of Türkiye's efforts to achieve greater energy independence. The plant's annual electricity output replaces the need for over 1.1 million barrels of oil, significantly reducing the country's dependence on imported fossil fuels.



Testing of the Yusufeli dam spillways with representatives of the Turkish state company Devlet Su Isleri (DSI)

With ANDRITZ's cutting-edge technology at its core, the Yusufeli project has transformed the once wild Çoruh River into a reliable source of renewable energy.

Projects such as Yusufeli will be of key importance on Türkiye's path to sustainability and energy independence. Through innovation, resilience, and a commitment to clean energy, we are helping Türkiye to shape a future powered by renewable resources.



# **FORGING THE FUTURE: HOW ArcelorMittal AND ANDRITZ REINVENTED AUTOMOTIVE MANUFACTURING**

A partnership between ArcelorMittal and ANDRITZ has revolutionized how vehicle components are made, combining innovation with precision to deliver lighter, safer, stronger, and more sustainable parts.

"This looked good on paper but was a technical Everest," recalls Gary Black, Vice-President of Advanced Manufacturing at ArcelorMittal Tailored Blanks North America. The challenge? Redefine automotive manufacturing by creating complex, multi-piece door rings. The solution came in the form of SOURING, a custom laser welding system developed through an intense, multi-year collaboration between ArcelorMittal and ANDRITZ.

#### **REINVENTING THE DOOR RING**

In the quest for cleaner, more efficient vehicles, weight reduction has become essential. The door ring – a structural component critical for vehicle crash safety – was traditionally stamped from single steel sheets, making it heavy and

wasteful. "Such designs were outdated and inefficient," says Black. The idea was to use laser welded blanks (LWBs), combining steel of varying thicknesses into a single optimized component. This would cut weight without compromising crash safety, especially crucial for electric vehicles where battery protection is key.

The welding process required unprecedented precision to join materials seamlessly along complex geometries. ANDRITZ Soutec, known for its expertise in laser welding, emerged as the ideal partner.

ANDRITZ ANNUAL REPORT 2024 / 16



#### **ARCELORMITTAL: AUTOMOTIVE MANUFACTURING**



#### THE START OF SOMETHING NEW

For over two years, teams from both companies developed the ANDRITZ SOURING system, incorporating beam-shaping technology for precise welds and a high-speed ablation module. "This wasn't about adapting something off the shelf," says Black. "We needed a solution built from scratch to address our unique challenges."

#### **A BENCHMARK FOR TACKLING FUTURE CHALLENGES**

The new system redefines vehicle component manufacturing through the precise production of tailor-welded blanks. Door rings now achieve up to 30% weight reduction, improving fuel efficiency and extending EV range.

ANDRITZ's SOURING laser welding system at ArcelorMittal produces lightweight automotive door rings, achieving 30% weight reduction through innovative tailor-welded blank technology.



# "It's not just about this one solution. It's a blueprint for tackling future challenges with the same precision and innovation."



#### **ARCELORMITTAL: AUTOMOTIVE MANUFACTURING**



Innovative laser-welded door rings combine enhanced crash protection through continuous energy transfer and weight reduction, advancing both passenger safety and vehicle sustainability.

Furthermore, the technology streamlined production significantly: parts for a typical double door ring decreased from 26 to 8, spot welds were reduced from 310 to 66, and floor space requirements dropped by up to 40%. The system welds at 10 meters per minute with scrap rates below 2%, delivering industrial-scale practicality alongside innovation.

The door ring design delivers exceptional crash performance by creating a continuous load path for energy transfer during collisions. The 2017 Chrysler Pacifica, using this design, became the first minivan to earn the IIHS Top Safety Pick Plus award. This underscores the critical role laser-welded structures play in protecting passengers while also making vehicles more sustainable.

#### THE ROAD AHEAD

The technology extends beyond door rings to underbody structures and reinforcements. Currently, 36% of battery electric vehicles in North America use parts manufactured with this system. The technology's principles make it valuable for the aerospace and construction sectors as well. Future enhancements include automated controls and real-time monitoring to further improve efficiency and reduce waste.

The collaboration between ArcelorMittal and ANDRITZ has set new standards in automotive manufacturing, delivering



Gary Black, Vice-President of Advanced Manufacturing at ArcelorMittal

lighter, stronger, safer, and more sustainable vehicle components.

"It's not just about this one solution. It's a blueprint for tackling future challenges with the same precision and innovation," says Black. What started as an idea is now the basis for a sustainable transformation, demonstrating the power of strategic collaboration.



# **THE LIQUID THAT FUELS TEXAS'S** INDUSTRIAL BOOM

As Texas is building its first major semiconductor plant, the quiet work of water treatment plays a central role in sustaining progress. Veolia selected ANDRITZ to supply the sludge dewatering equipment.

Beneath the concrete and steel of Texas's latest industrial construction site, a hidden river flows. It's not the kind that carves canyons or floods valleys, but it's no less vital. In the heart of a massive semiconductor plant, water moves through pipes, filters, and treatment systems, carrying the future of an industry with it. Behind the scenes, the careful management of this invisible river will help determine the plant's success – and the sustainability of Texas's industrial future.

#### THE TECHNOLOGICAL BACKBONE **OF A MEGA-FACTORY**

In the world of high-tech manufacturing, water is indispensable. Few industries rely as heavily on high-quality water as semiconductor production. In the first major chip factory to be built in the United States, cutting-edge technology meets vast production demands. Even the smallest impurities can disrupt operations, potentially costing millions in downtime, while vast quantities of water are needed daily to maintain the delicate manufacturing processes. Add the broader implications for water management in one of the world's driest yet most industrialized places to the equation and efficient water use and reuse becomes not only an operational necessity but an environmental imperative.

Enter Veolia, a global leader in water and environmental services. The task: designing a water treatment system that handles the plant's enormous water requirements sustainably. Veolia's process design ensures that a significant



#### **VEOLIA: SLUDGE DEWATERING EQUIPMENT**

portion of the treated wastewater is recycled back into the plant. That reduces the strain on local water resources and minimizes the environmental footprint. What water isn't reused is discharged, carefully treated to meet or even exceed environmental regulations.

A key element of this system is the treatment of sludge – byproducts of the filtration and clarification processes used to purify the water. Deep expertise is needed to get this right.

**ANDRITZ SLUDGE TREATMENT TECHNOLOGY** 

- Reduces sludge volume by a factor of 13, every hour from more than 20 m<sup>2</sup> to less than 1.5 m<sup>2</sup>
- Captures more than 95% of suspended solids to allow the filtrate to be recycled
- By using ANDRITZ C-Press technology, electricity consumption can be reduced by 97% versus other standard technology (from 22kW to 0.75kW)

Expertise that ANDRITZ has, based on decades of experience in sludge treatment technologies.

"The flexibility and precision of ANDRITZ's equipment were essential to meeting the project's strict requirements," says John Singleton, Sourcing Project Leader at Veolia. By reducing the water content of the sludge, the technology cuts down on transportation costs and landfill usage, supporting the plant's sustainability efforts.

#### **CHALLENGES OF SCALE AND COMPLEXITY**

One of the biggest hurdles was the unpredictable composition of wastewater. Industrial wastewater, particularly from a semiconductor plant, contains a mix of chemicals, solvents, and other byproducts, making the composition of the sludge variable and hard to predict. Designing a system that could handle such variability required foresight and flexibility. Veolia's process needed to be robust enough to handle these fluctuations without compromising performance.

That's where ANDRITZ's sludge dewatering technology proved crucial. ANDRITZ state-of-the-art filter presses and screw presses were selected for their ability to adapt to a range of sludge compositions, ensuring that the system could operate efficiently regardless of the waste stream's makeup. Flexibility was key.



A key element of wastewater treatment is the treatment of sludge – a byproduct of the filtration and clarification processes used to purify the water.

"The flexibility and precision of ANDRITZ's equipment were essential to meeting the project's strict requirements."





#### **VEOLIA: SLUDGE DEWATERING EQUIPMENT**

Beyond the technical challenges, the project was also under significant time pressure. The semiconductor industry moves at a rapid pace, and delays in construction or equipment delivery can have far-reaching effects.

"Schedule was always a concern. Together with ANDRITZ, we managed to minimize the impact of delays, which makes a big difference further downstream," notes Singleton.

#### THE SUSTAINABILITY PAYOFF

While the technical challenges were substantial, the project's environmental impact may ultimately be its most lasting legacy. The semiconductor industry is known for its high water consumption, and reducing this footprint was a central goal for both Veolia and its partners. Through innovative water treatment and reuse, the project is expected to significantly reduce the plant's reliance on fresh water, helping to ease pressure on local resources.

"This project is a crucial step toward minimizing water usage while ensuring that our discharge meets environmental standards," adds Alessandro Artesani, Senior Sourcing Manager at Veolia. The partnership has allowed both companies to innovate in ways that benefit not only the semiconductor plant but the environment as a whole.

**A BLUEPRINT FOR THE FUTURE** As the plant moves closer to full operation, the success of this collaboration is already drawing attention. The system

Veolia's versatile sludge dewatering facility contains ANDRITZ filter presses and screw presses, designed to efficiently process varying sludge compositions.



# **"This project is** a crucial step toward minimizing water usage."

developed for the Texas plant could serve as a blueprint for similar projects in other water-intensive industries, offering a scalable solution to the twin challenges of industrial growth and environmental responsibility.

Veolia's and ANDRITZ's approach to water treatment in this project reflects a broader trend in the industry: finding ways to support economic development while reducing environmental impact. As water resources come under increasing pressure, particularly in drought-prone regions such as Texas, sustainable water management is becoming ever more important. This is where ANDRITZ comes in and makes an important contribution thanks to its sustainable solutions.





#### **COMPANY BOARDS**

# EXECUTIVE BOARD

#### **JOACHIM SCHÖNBECK** (President and CEO)

Born 1964, German citizen Doctor of engineering Joined ANDRITZ in 2014 President and CEO since 2022

Areas of responsibility: Metals business area as well as Group Human Resources Management, Group Communications & Marketing, Group Sustainability, Group Internal Auditing, Group Quality & Safety Management, Group Site Installation, Group Business Development, Group Information Technology, and Group Automation & Digitalization

Professional career: President and CEO at SMS Holding and SMS Meer; Management positions at Siemens and Mannesmann

#### **DIETMAR HEINISSER**

Born 1971, Austrian citizen Master of Science in Business Economics Joined ANDRITZ in 1997 Member of the Executive Board since 2023

**Areas of responsibility:** Environment & Energy business area and Group Manufacturing Management

Professional career: various management positions at ANDRITZ Group globally

#### **NORBERT NETTESHEIM**

Born 1962, German citizen Master of Science in Business Administration Joined ANDRITZ in 2019 as CFO Retires in March 2025 and will be succeeded by Vanessa Hellwing

**Areas of responsibility:** Group Controlling, Accounting & Taxes, Group Finance, Group Legal, Group Compliance, Group Supply Chain Management, and Investor Relations

Professional career: various management positions at Voith Group Germany

#### **JARNO NYMARK**

Born 1974, Finnish citizen Master of Science in Engineering Joined ANDRITZ in 1999 Member of the Executive Board since 2023

**Areas of responsibility:** Pulp & Paper business area

Professional career: various management positions at ANDRITZ Group globally

#### **FRÉDÉRIC SAUZE**

Born 1967, French citizen MBA, Bachelor of Engineering Joined ANDRITZ in 2013 Member of the Executive Board since 2023

Areas of responsibility: Hydropower business area and Group Corporate Security

Professional career: various management positions at ANDRITZ Group globally and ALSTOM



From left to right: Frédéric Sauze, Dietmar Heinisser, Joachim Schönbeck, Jarno Nymark, Norbert Nettesheim





#### **COMPANY BOARDS**

# **SUPERVISORY BOARD**

The Supervisory Board consists of six members elected by the **Annual General Meeting and three members delegated by** the Works Council.

#### **WOLFGANG LEITNER**

Born 1953, Austrian citizen Member of the Supervisory Board since 2022 and Chairman since 2024 Elected until the Annual General Meeting in 2026 Chairman of the Nomination and Remuneration Committee and member of the Audit Committee

#### **ELISABETH STADLER**

Born 1961, Austrian citizen Deputy Chairwoman of the Supervisory Board since 2024 Elected until the Annual General Meeting in 2028 Deputy Chairwoman of the Nomination and Remuneration Committee

#### **WOLFGANG BERNHARD**

Born 1960, German citizen Member of the Supervisory Board since 2020 Elected until the Annual General Meeting in 2025 Member of the Nomination and **Remuneration Committee** 

#### **JÜRGEN HERMANN FECHTER**

Born 1964, German citizen Member of the Supervisory Board since 2016 Elected until the Annual General Meeting in 2026 Deputy Chairman of the Audit Committee

#### **ALEXANDER ISOLA\***

Born 1957, Austrian citizen Member of the Supervisory Board since 2016 Elected until the Annual General Meeting in 2026 Member of the Nomination and **Remuneration Committee** 

#### **REGINA PREHOFER**

Born 1956, Austrian Citizen Member of the Supervisory Board since 2024 Elected until the Annual General Meeting in 2028 Chairwoman of the Audit Committee

#### Delegated members:

#### **GEORG AUER**

Born 1974, Austrian citizen Member of the Supervisory Board since 2011

#### **ANDREAS MARTINER**

Born 1964, Austrian citizen Member of the Supervisory Board since 2001 Member of the Audit Committee

#### **TANIA SANDTNER**

Born 1975, Austrian citizen Member of the Supervisory Board since 2024 Member of the Audit Committee

\*Alexander Isola has announced his intention to step down from the Supervisory Board after the Annual General Meeting in March 2025. The Supervisory Board will propose the election of Barbara Steger.





Wolfgang Leitner



Jürgen Hermann Fechter



**Elisabeth Stadler** 



Wolfgang Bernhard



Alexander Isola



**Regina Prehofer** 



Georg Auer



**Andreas Martiner** 

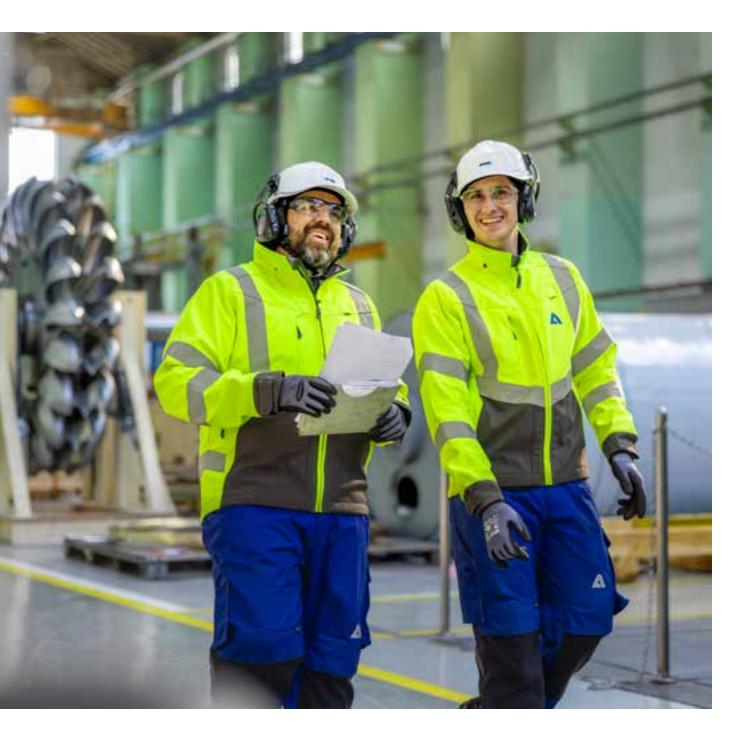


Tania Sandtner





# ENGINEERING THE CHANGE – CREATING **LASTING IMPACT THROUGH SUSTAINABLE INNOVATION**



ANDRITZ is a pioneering engineering company offering a broad portfolio of innovative plants, equipment, systems, services, and digital solutions across diverse sectors and markets. Our purpose is to create growth that matters – for the business, the people, and our planet. With our comprehensive portfolio of innovative and economically viable solutions, we aim to support our customers in mastering and managing the green transition. Our business areas – Pulp & Paper, Metals, Hydropower, and Environment & Energy – are among the global leaders in their respective industries.

We are headquartered in Graz, Austria, and listed on the Vienna Stock Exchange.

### FROM CAPITAL GOODS TO LIFE CYCLE SERVICES **LEADER IN LARGE-SCALE TECHNOLOGY** SOLUTIONS

### WHAT WE DO

• We provide state-of-the-art engineering and life cycle services solutions to various industries.

### WHAT WE OFFER

- Empower customers to lead in the green transition
- Enable customers to reach their sustainability goals
- Optimize customers' operations with advanced technologies
- Support customers with comprehensive life cycle services

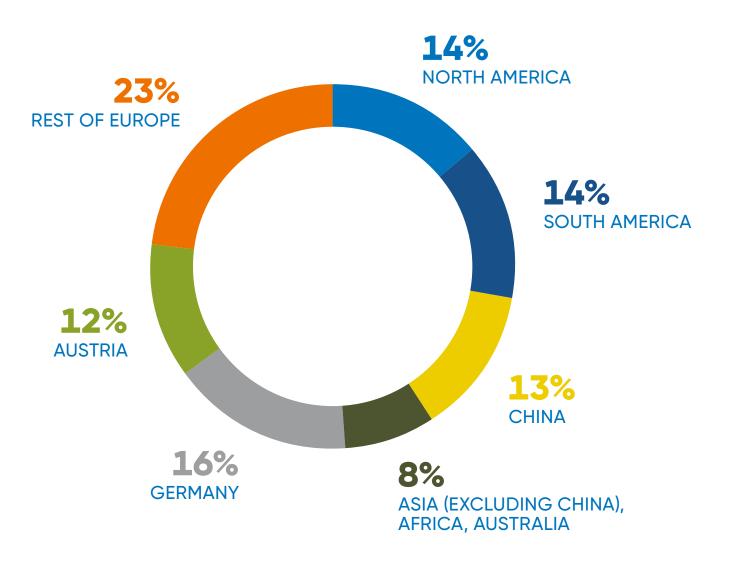




#### **THIS IS ANDRITZ**



**EMPLOYEES 2024** 



#### SUPPORTING CUSTOMER EXCELLENCE

The foundation of our success is our diverse workforce of 30,000 dedicated employees in more than 80 countries. This global reach ensures that we are close to our customers, provide customized support, and build strong partnerships. Our commitment to engineering excellence enables us to deliver solutions that create lasting value for customers and partners alike.

Our four core values – Passion, Partnership, Perspective, and Versatility – drive our dynamic approach to continuous improvement and growth. Our multicultural environment fosters a vibrant exchange of expertise and ideas, fostering innovation and creativity.

With a strong focus on engineering, technology, and project management, we are equipped to address complex challenges and lead technological advancements.

ANDRITZ fosters a global community united by excellence, innovation, and inclusion. Guided by shared values and leveraging our collective strengths, we are shaping a sustainable future.







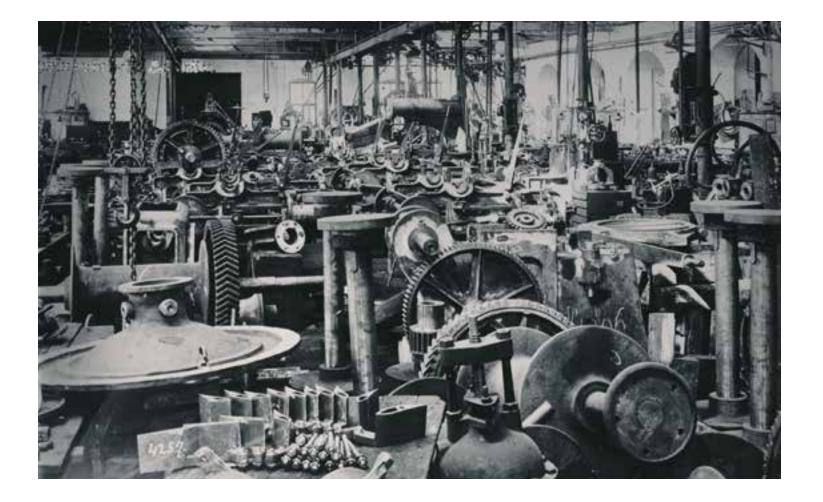


#### **THIS IS ANDRITZ**

#### FROM A SMALL IRON FOUNDRY IN AUSTRIA TO A GLOBAL TECHNOLOGY PIONEER

The journey of our company began in 1852, when Hungarian entrepreneur Josef Körösi established an iron foundry in Andritz, then a suburb of Graz, Austria. The enterprise focused on manufacturing large capital goods such as cranes, pumps, and water turbines, later also bridges, steam boilers, and engines as well as mining equipment. By 1900, ANDRITZ turned into a stock corporation, demonstrating remarkable resilience as it navigated through two world wars and the Great Depression in the first decades of the new century.

The mid-1900s marked a strategic pivot for ANDRITZ: a long-lasting cooperation with the Escher Wyss Group, Switzerland, began, and the focus of ANDRITZ shifted to-



wards water turbines, centrifugal pumps, cranes, and steel structures. In 1951, ANDRITZ ventured into the production of complete paper machines alongside Escher Wyss.

Following two decades of consistent growth in the 1960s and 1970s, ANDRITZ faced economic headwinds in the 1980s. The acquisition of a majority stake by the German investment firm AGIV AG catalyzed a strategic transformation. ANDRITZ shifted from licensing technology from other machine manufacturers to developing proprietary high-tech production systems, establishing itself as a leading international supplier.

A significant ownership change occurred in 1999, when an investment consortium, including the Custos Private Foundation founded by Wolfgang Leitner, at that time President and CEO of ANDRITZ, acquired the company.

ANDRITZ's 2001 listing on the Vienna Stock Exchange heralded an era of global expansion, fueled by strategic acquisitions and robust R&D investments. Today, still headquartered in Graz, Austria, ANDRITZ's 170+ years of legacy stand as a testament to resilience, corporate adaptability, and strategic evolution.



# ENABLING THE GREEN TRANSITION

On the journey towards sustainability, technology companies like ANDRITZ are leading the way in industrial transformation. The green transition – a movement that integrates environmental awareness with technological innovation – presents challenging but valuable opportunities for businesses prepared to pioneer sustainable solutions for tomorrow.

At the vanguard of this transformative era, ANDRITZ channels its deep technological know-how in various industries to make a significant contribution to a greener future. Our extensive range of technologies and services, specifically designed to support the green transition, reflects both our commitment to sustainability and our position as an industry leader in this crucial area.

"ANDRITZ pioneers the future of sustainable technology." Our strategic focus is to develop economically viable technologies that are essential for the future. Understanding the need for end-to-end solutions, our services encompass the complete project life cycle, from initial development to operation and maintenance. This comprehensive strategy ensures that our solutions not only prove effective at implementation, but continue to generate value throughout their operational lifespan.

We offer a diverse spectrum of groundbreaking solutions. They range from carbon capture technologies that reduce the environmental impact of industrial operations to systems for the pro-



#### **GREEN TRANSITION**



duction of green hydrogen and renewable fuels that support the transition away from fossil energy sources. We also provide renewable energy solutions, from our proven technologies for hydropower to biomass boilers and gasifiers that use innovative combustion technologies to convert biomass

# **"Valuable opportunities** for businesses pioneering

# sustainable solutions for tomorrow."

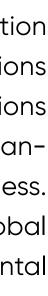
into energy. Furthermore, we bolster grid stability through pumped storage plants that function as large, long-term energy reservoirs, providing crucial backup for variable solar and wind power generation.

But our environmental initiatives reach far beyond the energy sector. We offer comprehensive production line solutions for battery giga-factories to support the transition to electric vehicles, including battery cell assembly, finishing and metal housing lines.

Our efforts also encompass textile recycling technologies, addressing the urgent need to reduce the environmental impact of the fast fashion sector. Through our innovative

CircleToZero program, we are enabling pulp and paper industry clients to eliminate production waste by converting unused side streams into valuable new products, like lignin, sulfuric acid and biomethanol.

Driven by innovative thinking and an unwavering dedication to sustainability, ANDRITZ envisions and delivers solutions that benefit both our planet and society for generations to come. As the green transition gains momentum, we anticipate substantial growth opportunities for our business. We take pride in the role as a key contributor to this global shift, where technological advancement and environmental stewardship are aligned.



# INNOVATION **AT THE CORE – ENABLING THE GREEN TRANSITION**

For a technology company like ANDRITZ, research and development play a pivotal role in driving growth and ensuring long-term competitiveness in the market. Our global R&D workforce, comprising several hundred professionals, is spread across multiple locations worldwide. Innovation activities are supported by comprehensive research and development test centers positioned throughout Europe and the US.

We demonstrate our commitment to progress by consistently investing 3% of our annual revenue into research and development. This dedication is reflected in the rise of new patent applications from 370 to 400, showcasing our ongoing innovation efforts. Our goal is to achieve or maintain technology leadership in all of our business areas.

Our patent portfolio, with 6,230 rights in 2024, further highlights our R&D strength.

#### WE SEEK TO DEVELOP NEW AND **INNOVATIVE TECHNOLOGIES IN THE FOLLOWING FIELDS:**

- Decarbonization:
- **Digitalization:** Using advanced technologies to cut costs and boost productivity
- Energy and material efficiency: Improving resource use



Supporting customers' sustainability goals

ANDRITZ ANNUAL REPORT **2024** / 30



#### **RESEARCH AND DEVELOPMENT**

#### **FOSTERING INNOVATION**

Deeply embedded in our corporate culture, innovation drives creativity and progress at all levels. A prime example is the annual ANDRITZ Ventures Startup Contest, which in 2024 inspired over 150 submissions of new ideas for products, services, and business models. Six of the most promising ideas are now being developed into new products, some of which are already integrated into active customer projects. To further emphasize the importance of innovation, we launched the Innovation Award to recognize the outstanding achievements of employees in creating and marketing advanced solutions. Another highlight in 2024: the business magazine trend ranked ANDRITZ as the second most innovative listed company in Austria.

#### **STRATEGIC ACADEMIC PARTNERSHIPS**

Our commitment to cutting-edge research extends through a strong international network of academic collaborations. We proactively engage with universities conducting research projects in strategic technological domains. These partnerships offer a dual advantage: access to innovative research and early engagement with top talent. Many highly qualified graduates are subsequently attracted to our organization, choosing to start their professional careers at ANDRITZ.

# **"Our patent portfolio further highlights** our R&D strength."

# HIGHLIGHTS

400 PATENT APPLICATIONS IN 2024 an 8% increase

139 MEUR FOR R&D IN 2024

6,230 PATENT PROTECTION RIGHTS\*

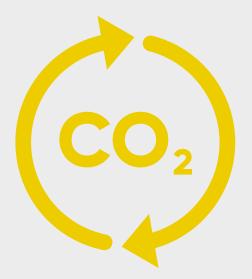
\* The decline from 6,500 patents in 2023 reflects the introduction of the Unitary Patent in Europe and cost optimization efforts.



# FUELING **PROGRESS** WITH SUSTAINABLE AND INNOVATIVE SOLUTIONS

We offer a wide range of innovative, economically viable solutions that enable the green transition and help our customers to reach their sustainability goals.

These solutions empower customers to safeguard the environment, drive decarbonization, minimize the consumption of critical resources like water, and promote a circular economy through the innovative reuse of side streams – the byproducts or waste generated during production processes.



### **CO<sub>2</sub> ABATEMENT AND RENEWABLES**

Reducing carbon emissions from industry and transport to mitigate climate change

#### WE PROVIDE TECHNOLOGY FOR:

- Carbon capture
- Green hydrogen and P2X
- E-fuels for road transportation and shipping
- Battery production for e-mobility
- Hydropower
- Biomass boilers and gasifiers



### CIRCULAR ECONOMY

Maximizing resource reuse and circulation for a sustainable economy

#### WE PROVIDE TECHNOLOGY FOR:

- Recycling textiles
- Turning waste or side streams into new value-added products
- Recycling electronic waste, paper, batteries, refrigerators, cable scrap, aluminum scrap, automotive parts, tires, bio and plastic waste

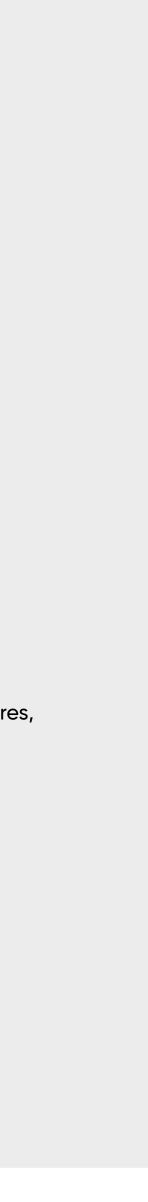


### **ENVIRONMENTAL TECHNOLOGIES**

Protecting our environment, keeping it as free from emissions as possible

#### WE PROVIDE TECHNOLOGY FOR:

• Flue gas cleaning



#### **POWER-TO-X**

ANDRITZ is at the forefront of renewable energy conversion with holistic Power-to-X (P2X) solutions that transform renewable energy concepts into operational reality. By integrating advanced technologies, including proprietary carbon capture, green hydrogen electrolysis, and renewable fuel synthesis, we are enabling the production of e-methanol, and e-ammonia.

Our comprehensive approach spans the entire project lifecycle. From early engineering consulting, concept design, and feasibility studies to detailed engineering and complete EPC (engineering, procurement, construction) solutions, we deliver tailored solutions to meet customer needs. Additionally, we provide long-term service agreements (LTSA) for operation and maintenance, ensuring optimized plant performance.

Our commitment to innovation and sustainability positions us as a reliable partner in advancing the green energy ecosystem and accelerating the global energy transition.

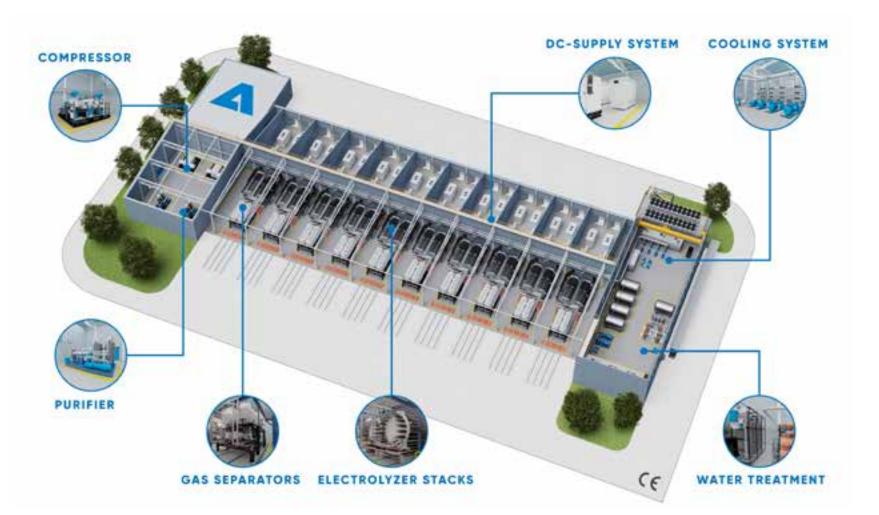
### "Green hydrogen plays a vital role in achieving climate goals."

#### **GREEN HYDROGEN PLANTS**

Green hydrogen is a key technology in shaping the future of the global energy sector and plays a vital role in achieving climate goals.

We aim to lead in this field by providing a full range of solutions for green hydrogen production. Our expertise covers everything from initial consulting and engineering to delivering complete turnkey plants on an EPC basis. We also offer comprehensive life cycle services, such as performance management and predictive maintenance, supported by advanced digital tools.

At the core of our green hydrogen system are electrolyzers, which use renewable electricity to split water into hydrogen



ANDRITZ provides holistic and integrated P2X solutions for producing green hydrogen. We deliver technology-focused, complete EPC (engineering, procurement, construction) solutions, including

early engineering consulting services.

and oxygen. If the electricity comes from renewable sources like wind, solar, or hydropower, the result is green hydrogen.

Our EPC expertise, combined with autonomous plant technology and advanced services, positions us as a leader in this industry.



#### **CARBON CAPTURE**

We offer solutions to capture carbon emissions from industrial processes, focusing particularly on the pulp and paper, cement and steel industries, as well as waste to energy and biomass combustion industries.

Our technologies separate and capture CO<sub>2</sub> from flue gas and make it available in highest quality. It can then be compressed and liquefied for further use, for example, as a carbon source for e-fuel, or to be safely stored underground for permanent removal from the atmosphere. In line with stricter environmental regulations, higher carbon prices and incentives for decarbonization, our carbon capture solutions have gained significant momentum.

Our solutions can also be retrofitted in existing power plants and industrial facilities. This means that they can be operated in a more sustainable or even  $CO_2$ -negative manner if biogenic  $CO_2$  is removed from the athmosphere. Reaching net-zero emissions means that an estimated 1.6 billion tons of  $CO_2$  will need to be captured annually by 2030.

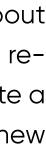
In 2024, Metsä Group partnered with ANDRITZ to conduct a study of the integration of carbon capture into one of their bioproduct mills. This integration would be the first of its kind worldwide. A carbon capture module with a capacity of 600,000 tons per year is being developed as a basis for



Planned completion: 2026

a modular concept that aims to eventually capture about 4.2 million tons per year. This would not only enable the removal of all the CO<sub>2</sub> from the mill's flue gas but also create a basis for future utilization of this side stream, setting a new standard for industrial decarbonization.

Preview of the carbon capture plant at Westenergy (left at the back of the picture)





#### **E-FUELS AND ADVANCED BIO-FUELS**

We specialize in advanced technology for the production of highly sustainable renewable fuels, with e-methanol at the forefront. As an alternative to fossil fuels, e-methanol represents a significant step towards reducing greenhouse gas emissions and decreasing dependence on conventional fossil fuels, especially in maritime transportation.

ANDRITZ offers comprehensive and integrated solutions for the e-methanol production by converting carbon dioxide and green hydrogen. We deliver technology-focused, complete EPC (engineering, procurement, construction) solutions, including early engineering consulting services. Our technologies provide the lowest levelized cost of e-methanol at a high product output and a minimized environmental footprint.

Biogenic CO<sub>2</sub>, today often unused feedstock, is widely available. With our carbon capture technology and expertise in pulp mill installations, ANDRITZ helps make this feedstock available at competitive prices. A single pulp mill can supply 2 MTA of biogenic CO<sub>2</sub> which enables the production of around 1.2 MTA of e-methanol.

Our expertise also extends to advanced biofuels, produced from biomass feedstocks:

for customers.

# **PULP MILLS**/ CO<sub>2</sub> SOURCE

 $O_2$ 

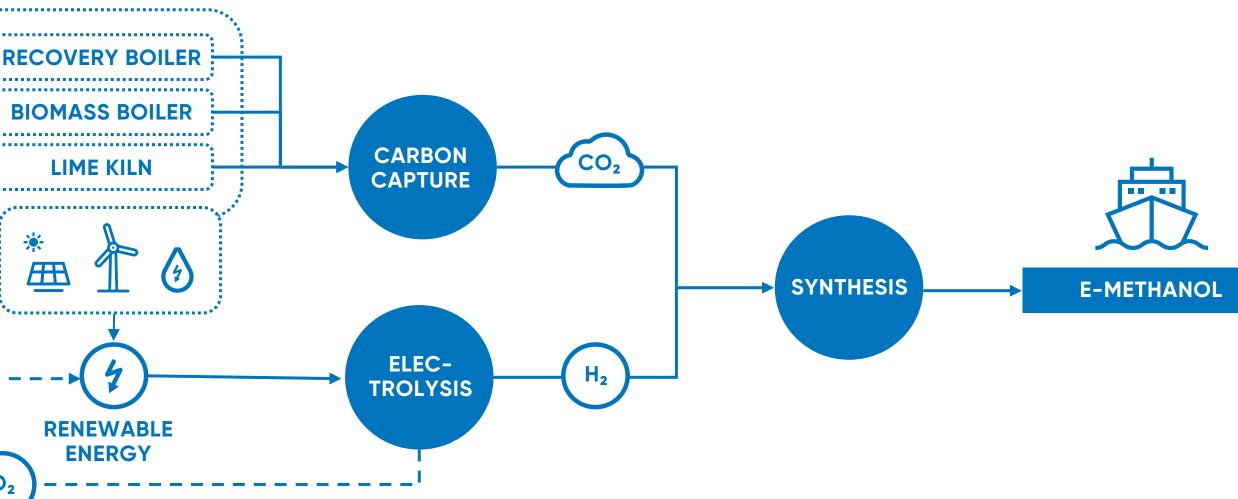
ANDRITZ offers a fully integrated concept for the production of CO<sub>2</sub>-based renewable fuels.

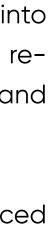
• The methanol purification process extracts and purifies raw methanol from the pulp mill process, creating commercial-grade biomethanol. This practice reduces greenhouse gas emissions and introduces new revenue streams

• Pressurized biomass gasification converts biomass into clean syngas, which can be synthesized into various renewable fuels, primarily for maritime but also for road and aviation industries.

At ANDRITZ, we are committed to introducing advanced technologies to the market that will bring us closer to a green economy.

### **Renewable Fuel Production Process**









#### **LIGNIN PRODUCTION**

Kraft lignin is a byproduct of pulp production for paper. Today it is used in pulp mills to generate energy. However, it can also be used as a renewable resource to replace fossil-based materials in the chemical industry or as the basis for new biofuels. Lignin and sulfur recovery solutions are part of our CircleToZero initiative, which aims to maximize the use

**"Our CircleToZero** initiative aims to maximize the use of side streams in pulp mills."

of side streams in pulp mills, laying the foundation for zero emissions and zero waste production.

The Swedish forest industry group Södra selected ANDRITZ to supply a complete kraft lignin production solution based on the innovative ANDRITZ LignaRec<sup>™</sup> lignin recovery process for its Mönsterås pulp mill in Sweden. This plant, which will be the largest of its kind in the world, will recover the lignin contained in the black liquor from the pulping process, making it available to Södra as a saleable bioproduct – an important contribution to the green transition and a driver for new business opportunities. Another project concerns the construction of a demonstration plant for lignin refining at the site of a Metsä Group bioproduct mill.

#### **E-MOBILITY**

ANDRITZ is pioneering the battery manufacturing sector for e-mobility, focusing on the efficient production of lithium-ion and all-solid-state (ASSB) batteries. With the global electric car fleet growing, ANDRITZ responds by offering the most advanced manufacturing lines for battery cell assembly, finishing and metal housings for batteries.

Significant milestones in the past include our successful market entry with cell finishing equipment for giga-factories and securing key strategic contracts, such as a pilot assem-



ANDRITZ is offering the most advanced manufacturing lines for battery cell assembly, finishing and metal housing for batteries.

bly line for large lithium-ion pouch cells for the Fraunhofer Research Institute for Battery Cell Production FFB.

In 2024, we supplied a pilot line for ASSB battery manufacturing to a German OEM, highlighting our contribution to safer, more energy-dense, and faster-charging battery technologies for e-mobility.

#### SUSTAINABLE SOLUTIONS

#### **TEXTILE RECYCLING**

Textile recycling is a vital step in tackling the global challenge of textile waste, offering both environmental and economic benefits. Addressing this pressing issue, we offer comprehensive solutions including automated textile sorting as well as mechanical and chemical recycling, designed for efficiency and gentle fiber treatment.

With over 2,000 tearing lines in operation worldwide, a stateof-the-art automated sorting line, backed by an expansive R&D network with several testing and pilot facilities, ANDRITZ is well-positioned to lead the growth market in textile recycling.

We are committed to developing customized solutions in collaboration with our customers: in late 2024, we secured an engineering contract from American textile recycling innovator Circ for their first commercial-scale textile recycling facility. This pioneering plant, with a daily capacity of 200 tons, will enable the first-time recovery of cotton and polyester from mixed textile waste for lyocell and polyester production, expanding the possibilities for recycling post-consumer textiles.

With only 12% of the 92 million tons of textile waste currently being recycled<sup>1</sup> and waste projected to reach 134 million tons by 2030<sup>2</sup>, the industry faces significant sustainability challenges. Therefore, the upcoming regulatory restrictions on landfilling and incineration signal promising growth for textile recycling solutions.



ANDRITZ technologies meet the growing demand for textile recycling solutions and ensure that companies remain at the forefront of innovation in this field.





<sup>&</sup>lt;sup>1</sup> Source: MC Kinsey & Company, market study July 2022

<sup>&</sup>lt;sup>2</sup> Source: https://goodonyou.eco/fast-fashions-environmental-impact/, April 2024; https://ekodoki.com/de/blogs/blog/warum-ist-upcycling-von-textilien-notwendig-und-wertvoll, November 15, 2023

#### **SUSTAINABLE SOLUTIONS**

## FINLAND'S FORESTS, REIMAGINED: ANDRITZ AND METSÄ GROUP LEAD A SUSTAINABLE TRANSFORMATION

From capturing carbon to innovating textile fibers, here's how both companies are reshaping the forestry industry

Finland's forests, covering three-quarters of the country, have long fueled its economy, with forest industry products accounting for nearly a fifth of exports. Metsä Group and ANDRITZ are spearheading efforts to cut emissions, create renewable textile fibers, and capture carbon – moves that could set new global standards.

"We see this partnership as an important step in developing the forest industry," says Jari Voutilainen, SVP, Sourcing and Logistics at Metsä Group.

#### **REDUCING EMISSIONS ALONG THE VALUE CHAIN**

Metsä Group and ANDRITZ are tackling Scope-3 greenhouse gas emissions – those generated across the value chain, from procurement to product use. Recognizing the scale and complexity of these emissions, the two companies have launched a multi-year initiative to identify and implement impactful reduction strategies.

A joint task force is crafting reduction strategies with a focus on measurable, scalable results. "Together, we will find solutions that wouldn't have been possible alone," Voutilainen explains.



#### SUSTAINABLE SOLUTIONS

#### **PIONEERING WOOD-BASED TEXTILES**

The same ambition powers the Kuura fiber project, which aims to make textile production sustainable by producing man-made cellulosic fibers (MMCF) from Finnish softwood. Thanks to ANDRITZ's advanced automation technology, Metsä Group is exploring the feasibility of scaling production of the new type of fiber.

The envisioned mill would utilize renewable energy and maximize resource efficiency through closed-loop systems. "Our concept ensures that all wood needed to make the softwood pulp comes from certified Finnish forests nearby," explains Niklas von Weymarn, CEO of the Metsä Group's innovation company Metsä Spring. If realized, the mill could annually produce 100,000 tons of Kuura fibers, offering a renewable alternative to fossil-based materials and advancing the circular economy.

"By advancing industrial processes, we can actively address the challenges posed by climate change."

#### **ADVANCING CARBON CAPTURE**

The most ambitious initiative is carbon dioxide recovery at bioproduct mills – a world-first if achieved. Metsä Group and ANDRITZ recently completed a study exploring the recovery of four million tons of CO<sub>2</sub> annually at a Kemi-sized facility. Findings confirm the technical feasibility of recovery but underline the need for substantial investment and innovation in energy efficiency.

"20% of the required heat energy can come from existing mill operations, but new technical solutions are needed for the rest," explains Kaija Pehu-Lehtonen, Project Director of Metsä Group's carbon capture project. A pilot program launching at Rauma aims to refine the technology, serving as a stepping stone toward a larger-scale implementation.

Metsä Group generates around 12 million tons of wood-derived CO<sub>2</sub> annually – a largely untapped byproduct that could transform into sustainable fuels and chemicals when combined with green hydrogen. Successful recovery would yield a wood-based raw material with significant climate and economic benefits, including new investments and job creation. "This is a great opportunity for Finland to develop a new industry while reducing fossil material use," Pehu-Lehtonen adds.

#### **SETTING A NEW STANDARD**

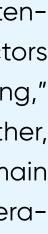
Metsä Group and ANDRITZ's joint projects show how innovative companies can work together for a better future. By cutting emissions, developing new types of fibers from wood byproducts, and advancing carbon capture, they demonstrate how industrial processes can be advanced to tackle the most important challenges of climate change.

"The technologies we're implementing here have the potential to influence not only the forest industry but other sectors as well, setting a precedent for sustainable manufacturing," says Kari Tuominen, CEO of ANDRITZ Oy in Finland. Together, Metsä Group and ANDRITZ ensure Finland's forests will remain a source of economic and environmental value for generations to come.



Metsä Group has entered into a broad partnership with ANDRITZ to conduct a preliminary study for a possible first commercial plant for the production of the Kuura textile fiber.









# **ANDRITZ'S DIGITAL VISION IN ACTION**

Focused on solving real problems, our digital tools are transforming industries – combining AI, automation, and expertise to optimize efficiency, reduce emissions, and drive smarter decisions.

At ANDRITZ, digitalization starts with a simple question: What does the customer actually need? "AI is a tool, not a solution in itself," says Rohitashwa Pant, Group Chief Automation Officer. "We focus on making it concrete – on turning it into something useful." This philosophy is part of a broader vision that places digitalization at the heart of our strategy. By transforming both customer-facing solutions and internal operations, we embrace digitalization as a driver of efficiency and sustainability.

#### **DIGITAL EVOLUTION: FROM INTERNAL EXCELLENCE TO CUSTOMER VALUE**

By prioritizing internal digitalization with tools like Microsoft Copilot, we're streamlining operations and automating routine tasks such as data entry and reporting. This empowers our employees to focus on innovation and strategic initiatives.

"It's about creating an environment where people can think creatively and make a bigger impact," says Jaakko Virevesi, Group Chief Information Officer. This internal transformation not only enhances our operational efficiency but also enables us to deliver better digital solutions to our customers while maintaining agility in rapidly evolving industries.

#### **METRIS: DIGITAL MONITORING DRIVES REAL-WORLD SUSTAINABILITY**

Central to this approach is the Metris All-in-One platform – a modular, open suite of applications designed to address complex manufacturing challenges. With 50+ plug-and-play apps, it improves production quality, tracks performance,



#### DIGITALIZATION

and simplifies processes. "Our goal is to integrate seamlessly into customers' ecosystems, not create closed systems," Pant explains.

The platform delivers real-world results. In Brazil, it reduced pulp mill downtime, enhanced reliability, and cut emissions. In mining, Metris Digital Twins – virtual replicas that simulate real-time operations and enable predictive optimization boosted output by 40% while lowering environmental impact by 50%.

#### **SCALING FOR THE FUTURE**

"One of the biggest challenges industries face, explains Rohitashwa Pant, is knowing where to start." Metris offers them transparency: the monitoring of critical parameters like

energy use and production bottlenecks, helps them to make more informed decisions in less time – reducing waste, optimizing the use of energy, and shrinking their environmental footprint in the process. The platform also drives scalability: by offering AI-driven modular features that can adapt to a variety of customer needs, Metris allows industries to access cutting-edge solutions as easily as they would download an app.

#### **THE NEXT FRONTIER: AUTONOMOUS FACTORIES**

ANDRITZ's approach to autonomy adapts to customer preferences – whether maintaining human oversight or enabling fully automated processes. Solutions like Metris act as virtual assistants, providing insights to make factories more efficient and address workforce challenges, as successfully show-

## Pioneering autonomous pulp mills

ANDRITZ earned the 2024 Microsoft Intelligent Manufacturing Award in the "Disrupt!" category for redefining pulp mill operations with its cutting-edge autonomous solution. Achieving an impressive 97% autonomous operation – far exceeding the industry norm of 60–65% – one mill has boosted productivity by 18% while driving significant gains in sustainability and process stability.





The ANDRITZ team and the other winners of the MIMA Award 2024 at the awards ceremony

cased at the Suzano pulp mill in Brazil and with the industry's first autonomously operated logyard cranes at Metsä Fibre in Finland. Over the next few years, we aim to scale autonomous systems across pulp and paper, mining, and battery production, paving the way for more adaptable and sustainable industries.

#### **SOLUTIONS THAT LAST**

By treating AI and automation as tools to solve real problems, we've created a digital ecosystem that delivers measurable results. "We focus on what matters – helping our customers achieve their goals in smarter, more sustainable ways," says Pant.



# BUSINESS AREAS



# **APULP & PAPER**

ANDRITZ ANNUAL REPORT 2024 / 43



# PULP & PAPER

## WE TURN SIDE STREAMS **INTO VALUE.**

ANDRITZ delivers sustainable technology, automation and service solutions for manufacturing a wide array of products, including pulp, paper, board, tissue, nonwovens and textiles. These solutions not only enhance production efficiency and reduce operating costs but also align with innovative decarbonization strategies.

We are dedicated to helping our customers exceed their environmental objectives. Drawing from our deep-rooted experience in forest-based industries, we enable increased productivity while reducing energy consumption as well as chemical and water usage. With our CircleToZero initiative, we emphasize circular economy principles by recycling and converting side streams into high value products and renewable energy. Our portfolio includes technologies for the decarbonization of the pulp and paper production process, biomass-powered boilers, as well as solutions for textile recycling and dry-molded fiber packaging production, opening up new possibilities for the industry.

#### **PULP & POWER: LEADING THE WAY IN PULP AND POWER SOLUTIONS**

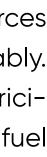
As global market leader in the pulp sector, ANDRITZ is one of the few companies worldwide that are capable of delivering complete pulp mills and state-of-the-art equipment for all kraft and dissolving pulp process islands – from wood processing and the fiberline to pulp drying and chemical recovery. With our solutions for the use of side streams we help customers to repurpose side streams into sustainable high value products, such as lignin, biomethanol, and sulfuric acid, reinforcing our commitment to zero-emission pulp mills.

Our power solutions – like gasification units and power boilers including biomass boilers, multifuel boilers and grate fired boilers – address the major challenges facing energy



Start-up of China's largest single-line kraft pulp mill for Liansheng Pulp&Paper

producers today: effectively utilizing renewable fuel sources and meeting stringent environmental regulations profitably. We provide technologies for producing steam and electricity, as well as syngas for advanced biofuels from diverse fuel sources.





#### **PULP & PAPER**

#### **PULP & PAPER SERVICE: MAXIMIZING LIFECYCLE** PERFORMANCE

Comprehensive lifecycle support is at the core of maximizing operational success. With a global network of skilled professionals, we provide everything from engineering expertise to start-up assistance and ongoing operational support. All of our operations are carried out in compliance with environmental and quality requirements, with safety being of prime importance. Through tailored service contracts and engineered wear products, we ensure optimal equipment reliability and enhanced production efficiency. Our integrated approach combines technical expertise, on-site support, and innovative solutions to maintain peak performance across the entire production chain.

Whether for rebuilds, upgrades, modernization, or new installations, our experienced project teams provide comprehensive support throughout the entire lifecycle.

"We supply complete pulp mills and state-of-the-art equipment for all process islands in the pulp sector."

#### **PAPER & TEXTILE: ADVANCING SUSTAINABLE MANUFACTURING EXCELLENCE**

We supply paper mills, recycling companies, and manufacturers of nonwoven and textiles with technologies, services and process know-how that help to pave the way towards sustainable production. Our deliveries enable our customers to process cellulosic and alternative raw materials as well as waste streams while recovering heat, saving energy, producing 100% compostable insulation materials, even recycling textiles. Together with our customers we develop tomorrow's breakthrough technologies in our R&D centers and pilot plants around the globe.

### **Key figures**

#### Pulp & Paper

Order intake
Order backlog (as end of pe
Revenue
EBITDA
EBITDA margin
EBITA
EBITA margin
Capital expenditure
Employees (as of end of peri

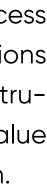
#### **AUTOMATION & DIGITALIZATION: PIONEERING AUTONOMOUS OPERATIONS**

Our vision of advancing autonomous operations is becoming an integral part of industrial processes. ANDRITZ is at the forefront of this transformation, leveraging digital innovations along with deep operational and technical expertise to improve process efficiency, quality management, and production reliability and availability.

We focus on developing autonomous pulp mills and process optimization, to support efficient and sustainable operations by combining automation, electrification, intelligent instrumentation, and digitalization to create measurable value throughout the full life cycle and the entire value-stream.

	Unit	2024	2023	2022	2021	20
	MEUR	2,779.8	3,036.0	4,181.9	3,664.8	2,780
eriod)	MEUR	2,459.1	3,135.8	4,083.1	3,247.9	2,45
	MEUR	3,461.1	3,987.4	3,431.3	2,953.1	3,238
	MEUR	457.8	494.7	456.5	411.9	388
	%	13.2	12.4	13.3	13.9	12
	MEUR	373.7	412.5	374.1	335.4	31
	%	10.8	10.3	10.9	11.4	(
	MEUR	77.0	118.0	103.3	88.5	6
iod; without apprentices)	-	13,150	13,306	12,841	11,036	10,6









ANDRITZ ANNUAL REPORT 2024 / 46

 $\bigcirc$ 

.(.)

 $( \bullet )$ 

0



# METALS

## WE ADDRESS OUR CUSTOMERS' DEMANDS FOR **CARBON REDUCTION, EFFICIENCY** AND CIRCULAR ECONOMY.

ANDRITZ supplies sophisticated technology, complete plant solutions and progressive digital systems in the metals industry. Our extensive product range is complemented by tailored automation and software solutions, deep process knowledge and a comprehensive service offering.

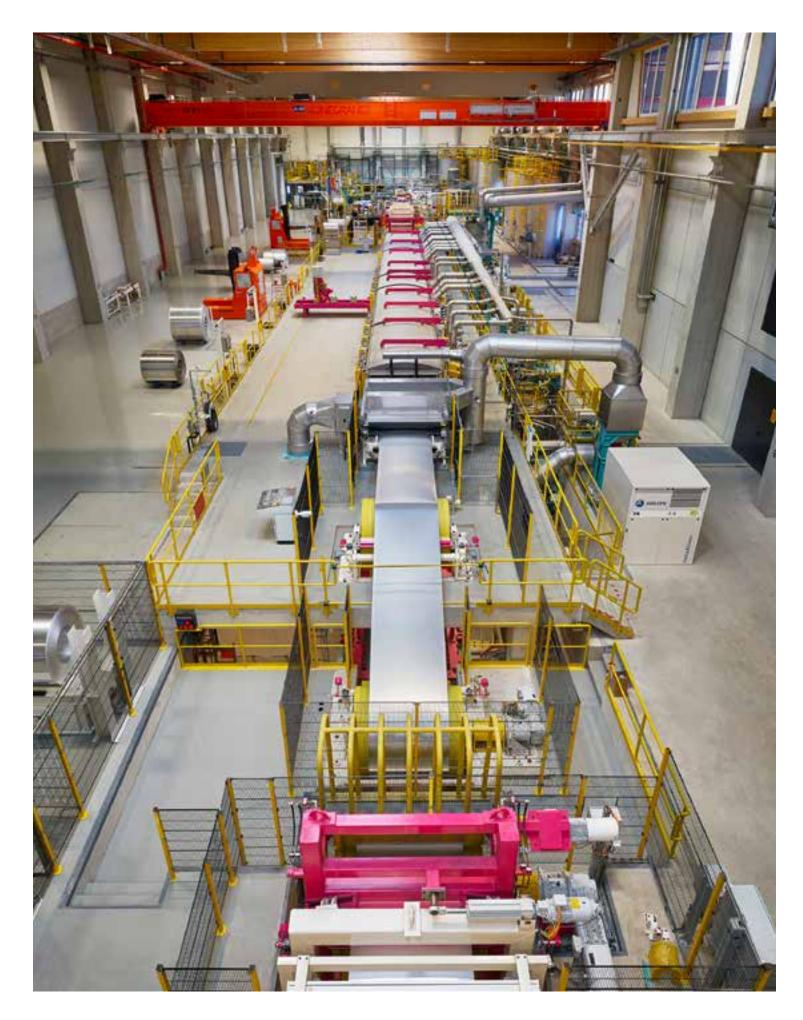
#### **REDUCING ENVIRONMENTAL IMPACT**

We focus on delivering innovative solutions to our customers that maximize operational efficiency while minimizing ecological impact. Our environmentally conscious technologies in metals processing and forming, including "Zero Effluent" systems and low-carbon heating processes, enable our customers to substantially reduce their ecological footprint in steel manufacturing and beyond.

Our expertise covers both metal processing and forming, and we specialize in technologies to process and shape a range of flat metal materials using advanced rolling, finishing and forming techniques. This makes ANDRITZ a leading innovator in the global industry, dedicated to advancing technology and providing solutions that exceed our customers' high standards.

#### **METALS PROCESSING**

We lead innovations in downstream metals processing, offering sustainable solutions for steel and non-ferrous metals, coupled with state-of-the-art welding systems and furnace technologies. Our market-leading offerings are supported by comprehensive services and decades of industry experi-



ANDRITZ has successfully delivered, installed, and started up the new continuous strip processing and wastewater treatment plant at AMAG rolling in Ranshofen, Austria. The all-electric, digitally controlled plant strengthens AMAG's position as a specialist for aluminum surfaces and furthers the company's sustainability goals.





#### **METALS**

ence. Our installed base of more than 1,030 processing lines, 330 rolling mills and 330 furnaces illustrates our vast capabilities and proven track record in the industry.

#### **METALS FORMING**

Through our subsidiary Schuler, we set global standards in metal forming technology. Schuler's comprehensive portfolio encompasses automated mechanical and hydraulic pressing systems, enhanced by sophisticated automation solutions and precision tooling. With a particular focus on automotive applications, Schuler provides unmatched expertise and technologies enabling versatile, efficient, and premium-quality component production.

Responding to the shift towards electric vehicles, ANDRITZ offers specialized production solutions for battery gigafactories and lightweight car bodies. These innovations reflect our commitment to meeting automotive industry demands with sustainable and efficient manufacturing technologies.

**"Our installed base** demonstrates our proven track record in the industry."

### **Key figures**

#### Metals

Order intake
Order backlog (as end of pe
Revenue
EBITDA
EBITDA margin
EBITA
EBITA margin
Capital expenditure
Employees (as of end of peri

## THE POWER OF ANDRITZ METALS

### 200,000,000

Tailor Welded Blanks produced on ANDRITZ welding equipment per year

### 330

furnaces in the carbon steel, stainless steel and aluminum industries, installed

### 130,000,000,000

parts stamped on ANDRITZ Kaiser presses per year

> 150,000 Schuler presses installed

	Unit	2024	2023	2022	2021	20
	MEUR	1,707.2	1,997.7	2,008.6	1,778.8	1,14
eriod)	MEUR	1,965.3	2,057.1	1,938.1	1,541.7	1,18
	MEUR	1,811.2	1,839.6	1,621.2	1,366.1	1,42
	MEUR	110.0	127.4	101.2	81.7	
	%	6.1	6.9	6.2	6.0	
	MEUR	73.0	91.4	62.6	38.4	-4
	%	4.0	5.0	3.8	2.8	
	MEUR	60.0	34.7	31.8	25.5	2
iod; without apprentices)	_	6,109	6,160	6,085	5,930	6,5

2020 43.6 L81.6 +20.5 5.5 0.4 -46.7 -3.3 26.5 ,513

# **NANDROPOWER**

ANDRITZ ANNUAL REPORT 2024 / 49



# **HYDROPOWER**

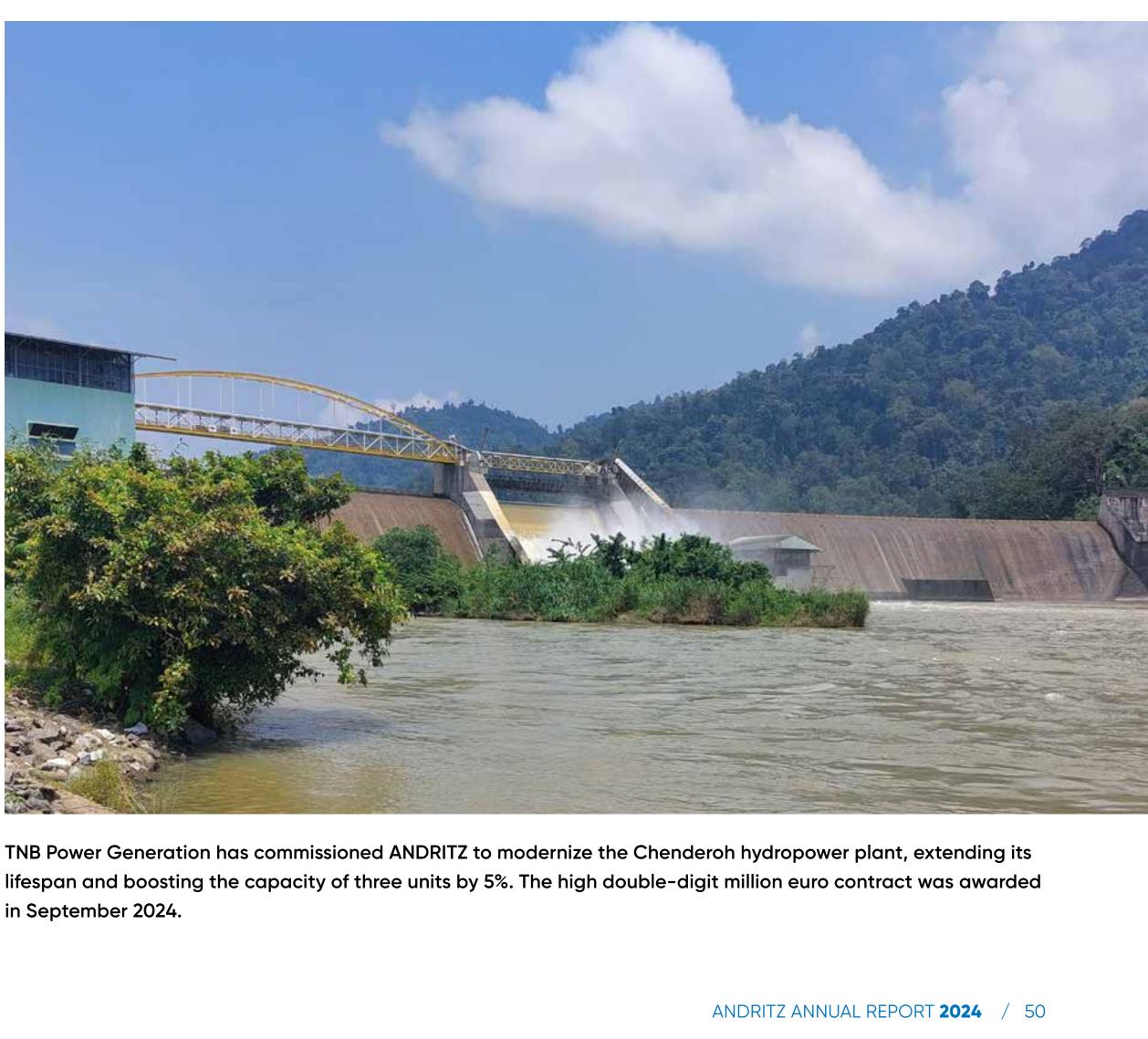
ANDRITZ is a global leader in supplying electromechanical equipment and services for hydropower plants in the global renewable energy market. With over 185 years of experience and an installed capacity of about 490 GW, we provide complete solutions for hydropower plants of every scale, both new and existing. Our services range from plant diagnostics and rehabilitation to modernization, upgrades, digital solutions and complete operational management. Our portfolio is completed by our specialized turbo generators and synchronous condensers.

#### **HYDROPOWER SCORES**

As the dominant renewable electricity source, saving approximately 3 billion tons of  $CO_2$  annually, hydropower is perfectly positioned to address major global challenges – particularly the energy transition and climate change mitigation.

Our solutions focus on maximizing hydropower plant efficiency, delivering reduced energy losses and minimal environmental impact. The reliability, flexibility, and unmatched long-term storage capacity of reservoir and pumped storage hydropower make it the ideal backup for intermittent renewable sources like wind and solar. Pumped storage, accounting for nearly 85% of global installed storage capacity, far outperforms lithium-ion and other battery technologies.

Our commitment to innovation drives sustainable energy generation, a vital tool in combating climate change. Fish-



in September 2024.

#### **HYDROPOWER**

## THE AMAZING CAPACITY OF HYDROPOWER

### **HYDROPOWER IS**

#### the largest single source of renewable electricity

Around 47% of all renewable electricity is generated from hydropower.

friendly technologies such as oil-free turbine runners further reflect our dedication to biodiversity preservation and reinforce our role as environmental stewards.

#### **OPTIMAL SUPPORT FOR THE ENERGY TRANSITION**

As a proven technology, hydropower continues to evolve. To support the global energy transition, we continually enhance our solutions to meet changing market demands. Through dedicated R&D, ANDRITZ remains at the forefront of technological progress, delivering state-of-the-art equipment that ensures customer success.

### **Key figures**

#### **Hydropower**

Order intake
Order backlog (as end of pe
Revenue
EBITDA
EBITDA margin
EBITA
EBITA margin
Capital expenditure
Employees (as of end of perio

#### a grid stabilizer and complement to variable renewables

Hydropower provides an excellent balance for variable renewables like wind and solar. Thanks to its flexibility and energy storage capabilities, it helps to keep the grids stable and ensure security of supply.

#### pollution free

Using hydropower instead of fossil fuels to generate electricity helped to avoid more than 100 billion tons of carbon dioxide in the past 50 years.

	Unit	2024	2023	2022	2021	20
	MEUR	2,170.5	2,020.9	1,720.5	1,383.1	1,12
eriod)	MEUR	3,933.7	3,398.8	2,878.4	2,467.2	2,28
	MEUR	1,537.9	1,521.7	1,313.0	1,132.4	1,10
	MEUR	121.9	113.9	107.7	95.7	6
	%	7.9	7.5	8.2	8.4	
	MEUR	96.3	88.1	72.3	63.2	3
	%	6.3	5.8	5.5	5.6	
	MEUR	48.4	35.6	22.8	24.6	2
riod; without apprentices)	-	6,004	5,782	6,102	5,930	6,1

2020 .29.1 281.8 .00.1 65.4 5.9 36.9 3.4 22.7 ,199

# **ENVIRONMENT & ENERGY**

ANDRITZ ANNUAL REPORT 2024



# **ENVIRONMENT & ENERGY**

ANDRITZ is committed to creating a cleaner, more sustainable world for current and future generations. By building on our strengths and expertise, we drive advancements in sustainable process technologies, meeting the evolving needs of environmentally conscious industries and the green energy sector. Through these innovations, we enable our customers to achieve their goals while creating long-term value and sustainable growth for all stakeholders.

#### **UNIVERSAL SEPARATION SOLUTIONS**

ANDRITZ provides advanced mechanical and thermal solutions for solid/liquid separation across the chemical, environmental, food and beverage, as well as mining and minerals industries. These technologies boost product quality, reduce waste, conserve energy, and enable water savings for cities and industries alike. When it comes to separation technologies, services and cutting-edge automation and digitalization solutions that maximize the sustainable value of precious resources, no one has broader capabilities than ANDRITZ.

#### **LEADING FEED & BIOFUEL TECHNOLOGY**

As a leader in the industry, ANDRITZ provides superior technology and services for the animal feed, aqua feed, pet food, and biofuel industries. Our complete plant solutions and high-performance equipment increase efficiency and product consistency, whilst reducing energy consumption and minimizing downtime for our customers. Our expertise also extends to innovative automation and digital solutions, enabling precise process control and real-time optimization.

#### **HIGH-EFFICIENCY PUMPS**

For more than a century, ANDRITZ has been the preferred choice for demanding applications that require high operational durability, quality and efficiency. Our solutions are engineered to work in various industries: from water and wastewater management to offshore and subsea operations, and to the raw materials and chemical sectors. They reliably transport coolants, lubricants, acids, and oils, providing durable, efficient solutions for industries worldwide, such as pulp and paper, food and energy. Our pumps are made to perform in extreme environments with high temperatures, high pressures, and exposure to corrosive and abrasive materials.





ANDRITZ successfully started up the retrofitted flue gas cleaning system at the municipal waste incineration facility in Schwandorf, Germany. This upgrade will enhance the availability of the unit, ensuring reliable and affordable energy supply while meeting stringent environmental standards.

#### **ENVIRONMENT & ENERGY**

#### **SMART SYSTEMS FOR CLEAN AIR**

ANDRITZ focuses on reducing emissions and optimizing energy and reagents consumption while enabling our customers to meet their environmental obligations. Our advanced designs for dust collection, desulfurization, denitrification, and decarbonization are well suited for most industrial sectors, such as waste-to-energy and sludge-to-energy, biomass, pulp & paper, cement, iron & steel, power generation, and others. The smart integration of our carbon capture systems supports the decarbonization roadmap of our customers and minimizes the  $CO_2$  footprint of their operations.

#### **PIONEERING GREEN HYDROGEN**

ANDRITZ responds to the urgent need for decarbonization and the green transition by providing holistic Power-to-X solutions as well as industrial plants for the production of green hydrogen, e-methanol, and e-ammonia. As a responsive partner, we offer a full range of services – from early engineering consultation to technology-focused Engineering-Procurement-Construction (EPC) project delivery, as well as long-term operation and maintenance services. By leveraging the full capabilities of ANDRITZ, we are converting renewable energy – such as hydropower, green hydrogen, and

### WE PROVIDE **TECHNOLOGIES FOR...**

#### ... clean air, potable water, and renewable energy.

Our solutions help transform waste and wastewater into valuable resources and enable sustainable practices across multiple industries.

### **Key figures**

#### **Environment & Energy**

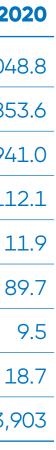
Order intake
Order backlog (as end of pe
Revenue
EBITDA
EBITDA margin
EBITA
EBITA margin
Capital expenditure
Employees (as of end of perio

biogenic CO, from pulp mills into e-methanol, customizing our offering to support the decarbonization of maritime fleet operations.

## "Sustainable solutions for multiple industries"

	Unit	2024	2023	2022	2021	20
	MEUR	1,619.4	1,497.3	1,352.4	1,053.0	1,048
eriod)	MEUR	1,391.8	1,280.9	1,076.9	909.0	85
	MEUR	1,503.5	1,311.3	1,177.4	1,011.4	94.
	MEUR	198.2	174.2	160.1	129.0	11
	%	13.2	13.3	13.6	12.8	1
	MEUR	170.0	149.9	139.5	109.5	8
	%	11.3	11.4	11.8	10.8	
	MEUR	52.1	37.9	26.5	21.5	1
iod; without apprentices)	-	4,740	4,469	4,066	3,908	3,9





# CREATING GROWTH THAT MATTERS

At ANDRITZ, we embrace bold and innovative action together with our customers to accelerate the green transition and the adoption of economically viable green technologies. Our strategy sets ambitious targets and provides a clear direction for our entire organization, ensuring coherent and sustainable progress.

We aim to achieve sustainable growth across all our business areas. This growth will be driven by our commitment to decarbonization, digitalization and exceptional customer service. Our efforts include the development of innovative technologies, strategic mergers and acquisitions, and exceeding ambitious ESG targets. By helping our customers reduce their environmental impact, we are strengthening our position as a trusted partner in the green transition. At the same time, we are committed to creating long-term value for our investors by maintaining a stable and low-risk economic foundation for ANDRITZ.





#### **DECARBONIZATION: DRIVING A SUSTAINABLE FUTURE**

ANDRITZ plays a key role in enabling the green transition and addressing one of the most pressing challenges of our time. As a top player across all our sectors, we have significant growth potential and the expertise to contribute meaningfully to a more sustainable future.

Decarbonization is at the heart of our efforts. From green hydrogen production, carbon capture and P2X solutions to recycling technologies and battery production lines, we deliver innovative technologies that help industries transition to more sustainable operations. Together with our proven solutions for hydropower, we are uniquely positioned to support the transition to a cleaner, greener economy.

#### **DIGITALIZATION: POWERING EFFICIENCY AND AGILITY**

Digitalization drives efficiency and agility within our organization and for our customers. With tools like the Metris digital platform, we enable smarter automation and optimize industrial processes. Internally, solutions like AI streamline workflows, allowing employees to focus on strategic initiatives, innovation and customer success.

#### **CUSTOMER SERVICE:** STRENGTHENING LONG-TERM PARTNERSHIPS

Enhancing our customer service is yet another fundamental pillar in our strategy. By supporting our customers at every step, we ensure high product quality, output, and uptime through fast response times and cost-competitive lifecycle solutions. This approach builds customer loyalty and lays the foundation for long-term partnerships.

#### **#1ANDRITZWAY: SUCCEEDING TOGETHER**

The #1ANDRITZway defines how we work together as a unified team across the Group. Rooted in empowerment, openness and collaboration, it fosters a culture of continuous improvement, shared commitment and ownership for performance.

By fostering an environment where ideas can flourish, the #1ANDRITZway drives both business success and personal growth. Together, we create seamless experiences for our customers, a collaborative and inspiring workplace for our employees, and a strong foundation for the company's longterm financial performance.

**"Our growth** is driven by our strong commitment to decarbonization, digitalization and exceptional customer service."



## STRATEGIC **ACQUISITIONS AS A DRIVER OF VALUE CREATION**

### Focused acquisition strategy

- Complementary business in our industries
- Retain the management
- No acquisitions of competitors
- Focus on serviceexposure

#### **ACQUISITIONS STRENGTHEN OUR GLOBAL MARKET PRESENCE**

The acquisition of companies with complementary solutions is one of the main cornerstones of our business and growth strategy.

In 2024, we enhanced our competitiveness with strategic acquisitions that strengthen our portfolio:

#### Procemex, Finland

Market leader in paper machine vision systems

#### PulpEye, Sweden

Advanced pulp quality analyzers and measurement technology

#### • NAF, Sweden

Control valves and actuators for process control and safe operations in pulp & paper mills

#### ATN Engineering, **The Netherlands**

Considered an innovator in the recycling sector with its unique drill head system

## 82 SUCCESSFUL ACQUISITIONS SINCE 2002

## EUR 2.2 bn **INVESTED IN ACQUISITIONS**

#### Wuhan Arrows Creation, China

Comprehensive portfolio of services from the designing to the manufacturing of various furnaces

#### • INTEA, Croatia

Specialist for solutions for automation and energy management of industrial and energy plants





# OUR SUSTAINABILITY APPROACH

Our purpose "Creating Growth that Matters" sets sustainability at the core of ANDRITZ. It drives us to create lasting value for our employees, stakeholders, society, and the planet. Our vision is to become a recognized leader in delivering innovative and economically viable solutions for the green transition.

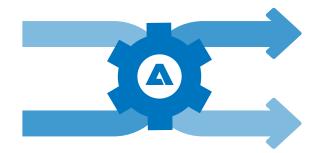
Our sustainable technologies in Pulp & Paper, Metals, Hydropower, and Environment & Energy help customers reduce their environmental impact and achieve their sustainability goals. At the same time, we are committed to minimizing our own environmental footprint by developing durable, innovative solutions that mitigate climate change, conserve natural resources, and protect the environment. Our sustainability approach is built on a foundation of responsible business conduct and human rights, ensuring a safe and sustainable future for our employees, local communities, and stakeholders. Sustainability is embedded in our daily operations, leadership principles, and business relationships – driving long-term success for ANDRITZ and beyond.

ANDRITZ ANNUAL REPORT 2024 / 58

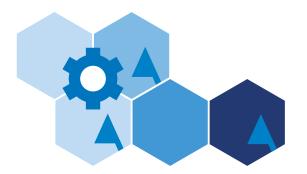


## **VALUE CREATION**

#### **INPUTS**



#### **BUSINESS MODEL**





#### **NATURAL RESOURCES**

- Purchased metals, plastics, electronics and components
- Energy consumption 621 GWh
- Renewable electricity 75%
- Water consumption 295,530 m<sup>3</sup>

#### PEOPLE

- Around 30,000 employees from more than 80 countries
- Over 32% are working in engineering,
- technology or project management
- Over 650 apprentices
- Over 480,000 hours of training
- Around 30,600 suppliers worldwide

#### **FINANCIAL**

- Total equity 2,280 MEUR
- Net liquidity 905 MEUR
- Cash and cash equivalents 1,165 MEUR

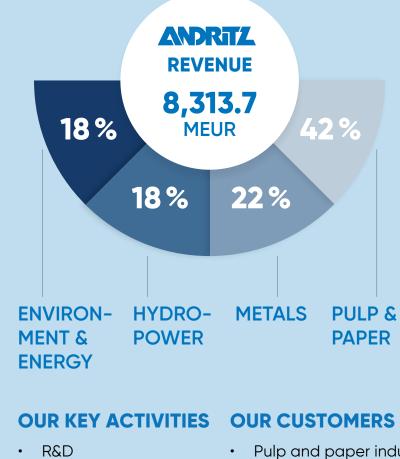
#### ASSETS

- More than 280 locations in over 80 countries
- Over 140 production sites

#### **FUELING GROWTH & EXPERTISE**

- Around 140 MEUR for R&D
- Around 400 new patent applications
- 6,230 patent protection rights
- ANDRITZ brand
- Metris ANDRITZ Digital Solutions
- Close collaboration with customers, suppliers and universities

We deliver advanced plants, equipment, services, and digital solutions across industries. As a global technology leader, we drive progress that benefits customers, society, and the environment. Our sustainable solutions support the green transition, advanced digitalization boosts performance, and our services maximize plant value throughout their lifecycle.



- Pulp and paper industry
- Metals industry
- Automotive industry
- Energy industry
- Other
- Logistics Site Installation

Marketing & Sales

Procurement

Manufacturing

Engineering & Design

Services

- Metal forming and processing
- Electromechanical equipment and services for small and large hydropower plants
- Clean air and carbon capture technologies
- Mechanical and thermal separation equipment

- Process optimization
- Asset optimization • Cyber security
- Training

#### **CUSTOMER SERVICE**

- efficient life cycle solutions:
- Capital systems • Field services
- Parts & consumables Retrofits & upgrades

#### **EMISSIONS AND WASTE**

- Scope 1: 54,214 tCO<sub>2</sub>e • Scope 2: 51,520 tCO<sub>2</sub>e • Scope 3: 140,125,000 tCO\_e • Waste: 51,865 t • Recycling rate: 72%

For detailed information on the data presented, please refer to ANDRITZ's externally audited Non-Financial Statement according to CSRD/ESRS.

#### **OUTPUTS**



#### **OUTCOMES**



## **ANDRITZ'S VALUE CHAIN**

#### SOLUTIONS

- Pulp, paper, tissue, panelboard (MDF),
- and nonwoven production
- Processing equipment and pellet mills for biofuel,
- animal, aqua and pet food production
- Pumps for various applications
- P2X, green hydrogen, e-fuels and advanced biofuels

#### DIGITALIZATION

- Plant management
- We service our customers at every step, ensuring high product quality, output and uptime through quick response time and cost-competitive,

#### **ENVIRONMENTAL**

- · Helping customers achieve sustainability goals with innovative technologies like carbon capture, green hydrogen, renewable fuels, and textile recycling.
- Efficient processes and services reduce energy, water, and resource use while cutting CO<sub>2</sub> emissions during operation.

#### SOCIAL

- Direct employment, but also the creation of indirect jobs through new plants
- Investment in education, training, and skills development for employees and society.
- Direct and indirect improvement on occupational health and safety
- Renewable energy, clean air technologies and more sustainable industrial processes contribute to a healthier environment and thus to a better quality of life

#### ECONOMIC

- Wages and benefits: 2,301 MEUR
- Taxes: 150 MEUR
- Payments to shareholders: 249 MEUR
- Commitment to international standards like the UN Global Compact, OECD Guidelines for Multinational Enterprises, UN Guiding Principles on Business and Human Rights etc.



#### ANDRITZ ANNUAL REPORT 2024 / 59



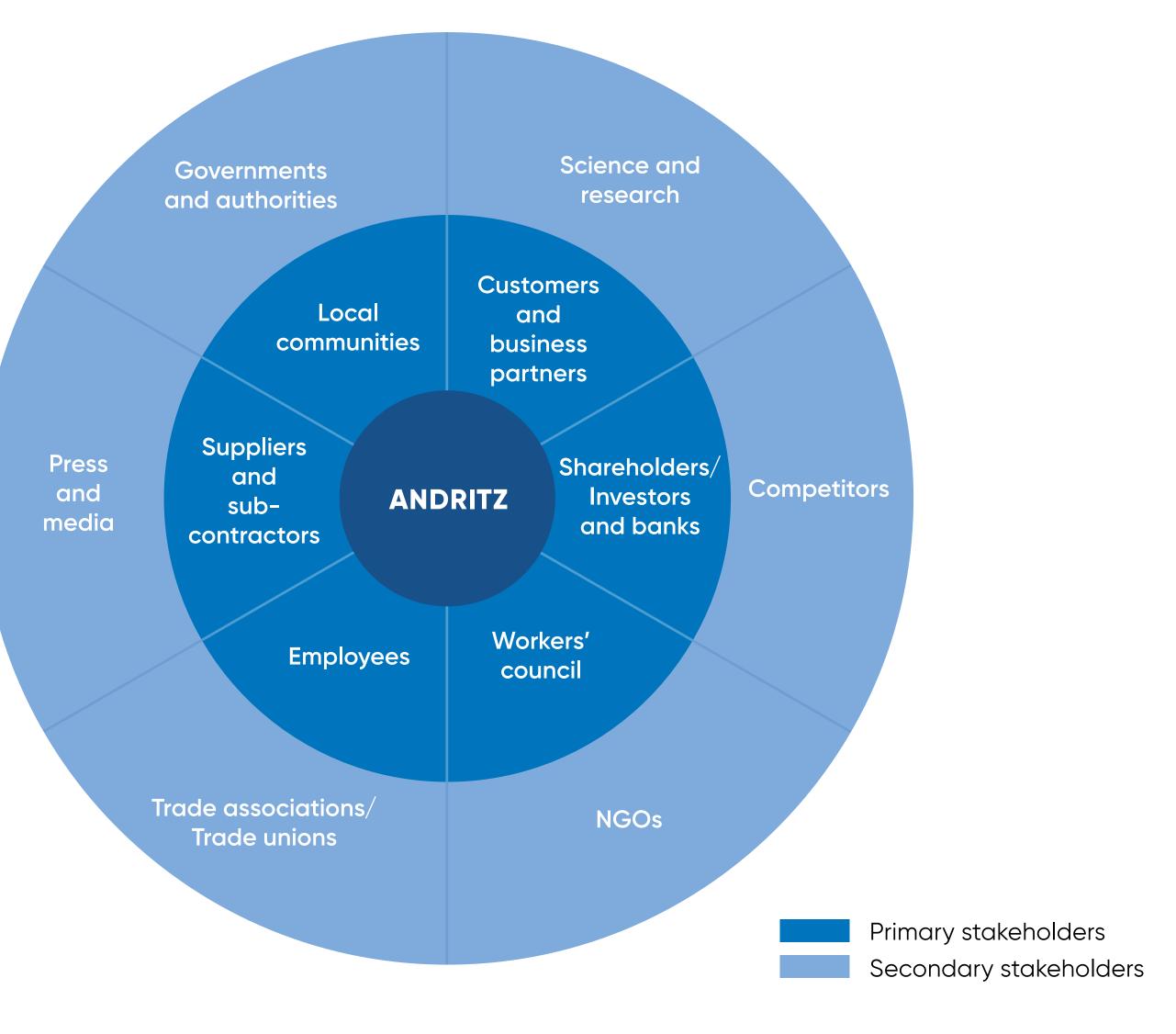


## **STAKEHOLDER AND DOUBLE MATERIALITY** ASSESSMENT

To better understand the most material sustainability topics for our business and stakeholders, we have gained insights by conducting a Double Materiality Assessment (DMA) together with our stakeholders. This enables us to focus on the most impactful matters and sets a framework for our sustainability reporting and development.

ANDRITZ carried out its first Double Materiality Assessment in line with the requirements of the new EU Corporate Sustainability Reporting Directive (CSRD) in 2024. The assessment builds on our strong foundation such as the previous materiality assessment according to GRI. The new assessment provides even wider lenses to sustainable business, including both impact materiality (company's impact on people and the environment) and financial materiality (risks and opportunities caused by sustainability-related developments and events).

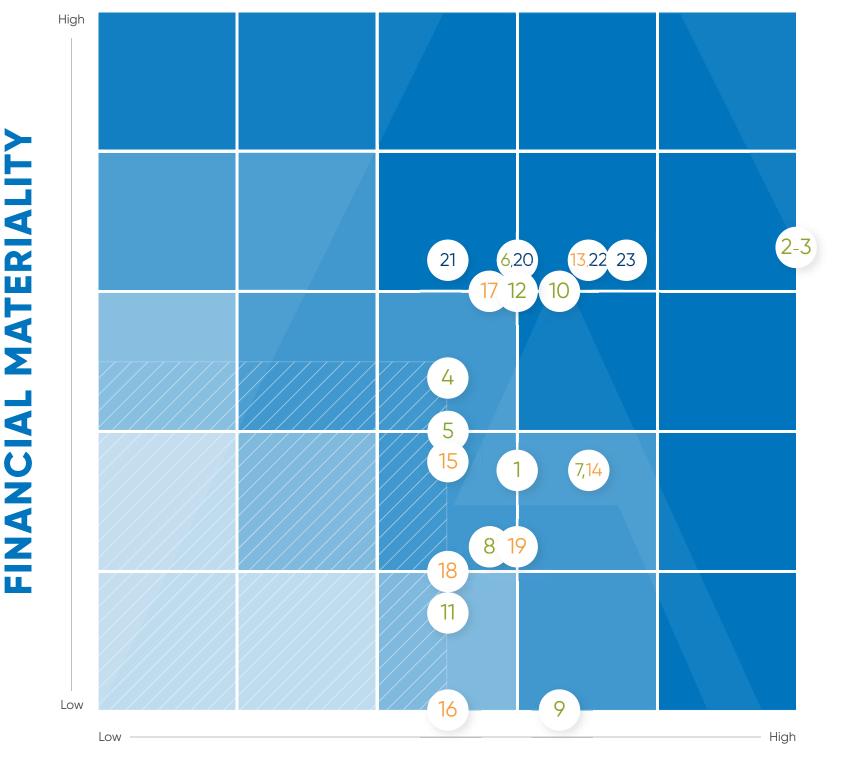
We are committed to stakeholder inclusion and proactive communication to ensure a transparent dialogue based on trust. This helps us to better understand the requirements and expectations of our stakeholders, and to further define relevant topics for our long-term business success.





As the result of the Double Materiality Assessment, our material environmental topics are climate change, fresh water, our positive contribution to solving pollution-related issues, biodiversity, resource use, and circular economy. Our material social topics are our own employees, the workers in our value chain, and the communities on which our operations and value chain have an impact. In governance, business conduct sets the foundation for all economic activities.

This chart illustrates the topics identified as material to ANDRITZ. They set the framework for our sustainability reporting.



#### **ENVIRONMENT**

- 1. Climate change adaption (E1)
- 2. Climate change mitigation (E1)
- 3. Energy (E1)
- 4. Pollution of air (E2)
- 5. Pollution of water (E2)
- 6. Microplastics (E2)
- 7. Water (E3)
- 8. Impact on the state of species (E4)
- 9. Impacts on the extent and condition of ecosystems (E4)
- 10. Resource inflows, including resource use (E5)
- 11. Resource outflows related to products and services (E5) 12. Waste (E5)

#### SOCIAL

- 13. Working conditions (S1)
- 14. Equal treatment and opportunities for all (S1)
- 15. Working conditions (S2)
- 16. Equal treatment and opportunities for all (S2)
- 17. Other work-related rights (S2)
- 18. Communities' economic, social and cultural rights (S3)
- 19. Rights of indigenous peoples (S3)

#### GOVERNANCE

- 20. Corporate culture (G1)
- 21. Protection of whistle-blowers (G1)
- 22. Management of relationships with suppliers
- including payment practices (G1) 23. Corruption and bribery (G1)

### **IMPACT MATERIALITY**

## **VAST BUSINESS OPPORTUNITIES IN THE GREEN TRANSITION**



ANDRITZ already generates a large portion of its total revenue from products and solutions that contribute to the production of renewable energy, environmental protection, the circular economy, and e-mobility. The expected growth of these markets as well as our innovations will provide new opportunities. Decarbonization is a particularly important part of our strategy, and we acknowledge carbon capture as one of the technologies of the hour. Also green hydrogen is a pivotal technology in shaping the future of the global energy sector and plays a central role in all climate-related objectives.

## **SUSTAINABILITY** GOVERNANCE

ANDRITZ's sustainability governance is designed to ensure and strengthen our sustainability commitments, expressed in strategies, targets and topical approaches, and steer the implementation of the commitments made.

> **ANDRITZ Supervisory Board** Audit Commitee

**ANDRITZ Executive Board** 

SUSTAINABILITY LEADERSHIP TEAM Focus: integrating sustainability into business

COMPLIANCE COMMITTEE Focus: ensuring legal compliance across ANDRITZ

Sustainability-related Group functions incl. Sustainability, QHSE, HR, and Compliance

**Business areas** 

External and internal frameworks, principles, and policies

Our sustainability governance is described in detail in our Non-Financial Statement according to CSRD/ESRS.



ANDRITZ is a participant in the United Nations **Global Compact** Initiative and supports its ten principles on human rights, labor, environment, and anti-corruption.



## **OUR COMMITMENT: INITIATIVES, POLICIES AND KEY CERTIFICATIONS**

### **INITIATIVES**

- Science Based Targets initiative (SBTi)
- GHG Protocol
- UN Sustainable Development Goals (SDGs)
- OECD Guidelines for Multinational Enterprises
- Universal Declaration of Human Rights
- International Labor Organization's (ILO) Guiding Principles on Business and Human Rights
- Declaration on Fundamental Principles and Rights at Work as well as other relevant ILO labor standards
- UN Guiding Principles on Business and Human Rights (UNGP)

### **KEY ANDRITZ POLICIES**

- Code of Conduct and Ethics
- Supplier Code of Conduct
- Group Health, Safety and Environmental Management Policy
- Group Product Quality Policy
- Group Procurement Policy
- Group Human Resources Policy
- Policy Statement on ANDRITZ's Human Rights and Environmental Protection Strategy
- Group Anti-Corruption and Anti-Bribery Policy
- Global Competition and Antitrust **Compliance Policy**
- Whistleblowing Policy
- Statement on Tax Behavior Group Data Privacy and Protection Policy
- Cyber Security Compliance Statement
- Remuneration Policy



### **KEY CERTIFICATIONS**

#### **MULTI-SITE ISO CERTIFICATION**

(% of covered employees)

	2024	2023	202
ISO 9001:2015 – Quality management systems	93	92	Ç
ISO 14001:2015 – Environmental manage- ment systems	82	79	
ISO 45001:2018 – Occupational health and safety management systems	82	74	

A full overview of the certifications can be found in our Non-Financial Statement according to CSRD/ESRS. Locations across our operations are audited regularly based on our audit plan.

## $\mathbf{)22}$ 95 75

70

## WE CARE -THE ANDRITZ **SUSTAINABILITY** PROGRAM

Our sustainability program, "We Care," drives our initiatives and goals for 2021–2025, following a multidimensional and practice-oriented approach.

In 2024, we remained focused on climate action and decarbonization. During the reporting year 2024, 75% of the electricity used in our operations came from renewable and low-carbon sources. Improvements in energy efficiency further reduced our Scope 1 and 2 emissions.

We developed science-based climate targets for emissions reduction and submitted them to the Science Based Targets initiative (SBTi) for validation. Beyond emissions and climate action, we strengthened our approach to the sustainable use of natural resources.

Looking ahead to 2025, we will finalize our environmental goal setting (E) and review our strategies for social sustainability (S) and governance (G).





# **OUR CURRENT ESG TARGETS, PROGRESS, AND ACTIONS ENVIRONMENTAL PERFORMANCE**



Reducing the environmental impact of all business activities is a key priority for ANDRITZ. We are committed to halving our greenhouse gas (GHG) emissions (Scope 1 and 2) by the end of 2025 compared to 2019, while significantly reducing water consumption and waste generation. We achieved these original three targets set for 2025 already in 2024. An important milestone this year is the first-time reporting of our company carbon footprint<sup>1</sup>, further enhancing transparency and accountability in our sustainability efforts.

With our sustainable solutions and products, we enable our customers to achieve their sustainability goals. We monitor the positive impact we have on the green transition with an ANDRITZ-specific KPI. The definition of our KPI includes

Environmental targets	Metric	Base year 2019	Status 2021	Status 2022	Status 2023	Status 2024	Target 2025	Original target 2025
Reduce CO <sub>2</sub> emissions (scope 1+2)	tons CO <sub>2</sub> e/ MEUR revenue	28.1	29.3	18.6	18.0	13.7 (-51%)	14.0 (-50%)	14.0 (-50%)
Reduce water consumption	m <sup>3</sup> /MEUR revenue	158.3	180.6	153.6	130.6	136.8 (-14%)**	130.0 (-18%)**	142.5 (-10%)**
Reduce waste volume	tons/MEUR revenue	10.7	7.8	7.0	8.7	6.8 (-36%)**	6.5 (-40%)**	9.6 (-10%)**
Increase revenue from sustainable solutions and products	% of total revenue	46*	42	45	45	44	>50	>50

Note: Only the sales of the included locations were incorporated.

\* Figures relate to 2020 as no comparable data for 2019 available

\*\* -10% target for water and waste was already achieved in 2023. An additional reduction target of -5% was integrated into the base year calculation to develop a revised 2025 target.

the EU Taxonomy Regulation complemented by activities with environmental benefits not yet included in the taxonomy. ANDRITZ aims to generate more than half of its revenue from sustainable products and solutions by the end of 2025. In 2024, 44% of the revenue came from these products and solutions.

<sup>1</sup> More information available in the Non-Financial Statement according to CSRD/ESRS.

## "Scope 1 and 2 targets achieved, next goal: SBTi"





## **SOCIAL PERFORMANCE**



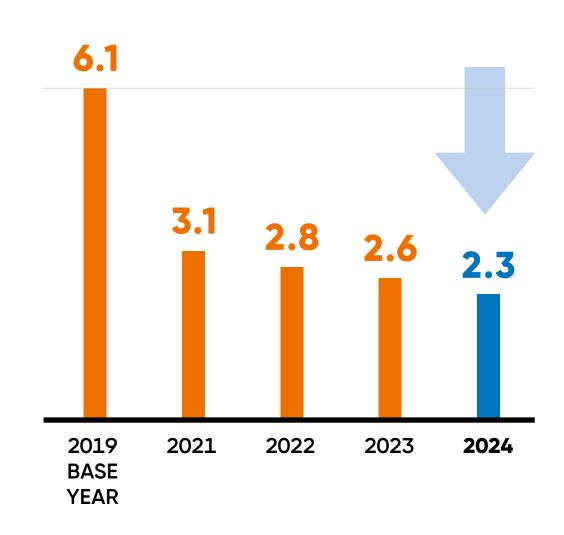
Our goals in this area focuses on ensuring workplace safety and strengthening ANDRITZ as an attractive employer. We are committed to continuously reducing the frequency of workplace accidents that result in lost working hours, lowering voluntary employee turnover, and increasing the representation of women in our workforce. While we have made progress across all these areas, we recognize that further efforts are needed to achieve our ambitions. Our new Health & Safety commitment statement "Committed to No Harm" guides us forward.



Social targets	Metric	Base year 2019	Status 2021	Status 2022	Status 2023	2024	Target 2025
Reduce LTIFR by 30% compared to the preceding year	Accidents*/million working hours	6.1	3.1	2.8	2.6	2.3 (-12%)	-30%
Reduce voluntary turnover rate	% of total employees	6.0	6.5	6.0	5.1	4.1	<4.5
Increase share of female employees	% of total employees	16.2	16.6	16.4	17.0	17.2	20

\* Accidents causing >1 day's absence

#### LOST TIME INJURY FREQUENCY RATE





### **GOVERNANCE PERFORMANCE**



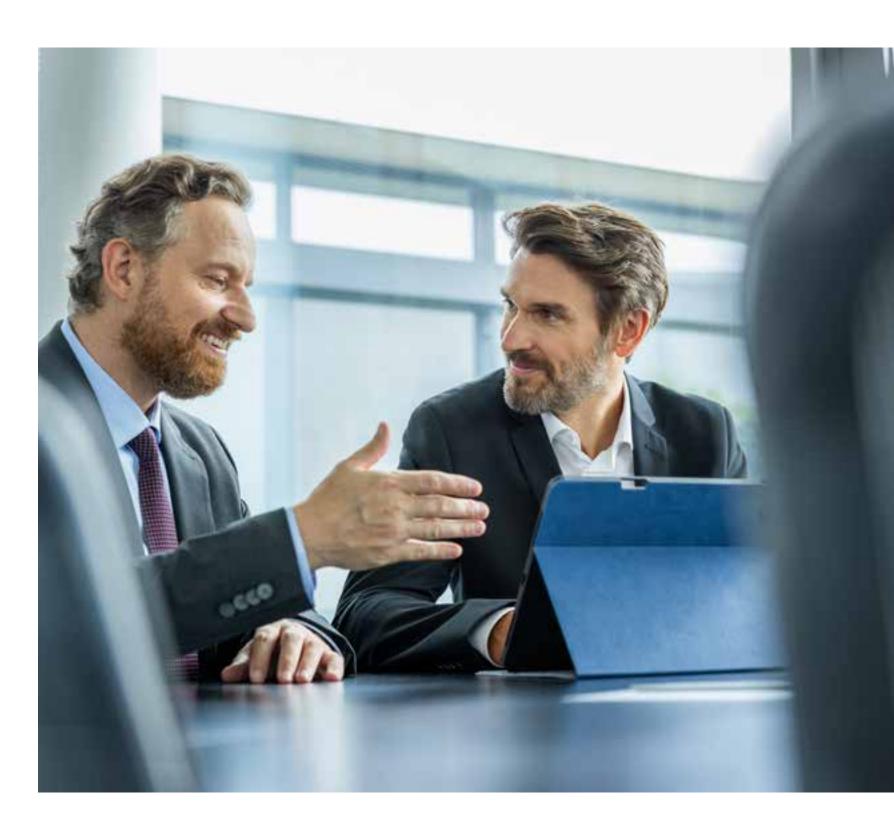
We are committed to minimizing corporate risks and continuously strengthening compliance, with a particular focus on sustainable supply chain management and resilience. Our resilience assessments consider key criteria such as financial

stability, flexibility, technological competencies, and geographic diversification. As a testament to our progress, supplier compliance coverage has reached a record high of 91%.

Governance targets	Metric	Base year 2019	Status 2021	Status 2022	Status 2023	Status 2024	Target 2025
No event-driven profit warnings	Number of event based profit warnings	0	0	0	0	0	0
No compliance violations	Number of incidents of corruption and antitrust violations	0	0	0	0	0	0
Coverage of 85% of the supply volume* by assessed suppliers by 2025	% supply volume* with assessed suppliers	78**	82	82	90	91	85

\* Accumulated external purchasing volume (direct spend) through suppliers with an annual purchasing volume of more than EUR 250,000 in one of the past two consecutive years, and new suppliers created in current year with a purchasing volume of more than EUR 25,000

\*\* Figures relate to 2020 as no consistent and comparable data for 2019 are available





## TURNING COMMITMENT **INTO ACTION**

To achieve our ESG targets, we have implemented effective actions in our focus areas.

#### **ANDRITZ PATENTS SUPPORT AND ENABLE SUSTAINABILITY**

The sustainability analysis of our patent portfolio value showed that the proportion of the sustainable patent values is 54% – much higher than the mechanical engineering sector average of 9.5%. The analysis which was conducted by patent valuation expert InTraCoM GmbH reveals a strong emphasis on efficiency improvements, automation, and process optimization.

## **ENVIRONMENTAL**

In 2024, we advanced decarbonization, expanded renewable energy use, and improved resource efficiency to reduce our environmental footprint.

- glass, and switching to LED lighting.
- water strategy in 2025.

• We have submitted our science-based scope 1, 2 and 3 targets to SBTi for validation. Our new targets are for 2030.

• We increased the share of low-carbon energy. Currently three-quarters of the electricity that ANDRITZ purchases comes from renewable and low-carbon sources.

Photovoltaic systems in operation at ANDRITZ sites more than doubled compared to last year. They are now producing 11 GWh of green electricity in the reporting year.

Based on an energy assessment of 40 locations conducted between years 2023–2024, action plans were developed to reduce energy consumption through measures such as building insulation, installation of triple glazing with low-E

• The ANDRITZ Water Team was established and oversees 60% of the company's water withdrawals across various locations. By initially prioritizing specific sites to enhance water management and move toward water stewardship, ANDRITZ is laying the groundwork for a comprehensive



#### **TURNING NUMBERS INTO ACTION: A SMARTER** WAY TO MANAGE CARBON EMISSIONS

ANDRITZ is working on implementing a global carbon accounting solution for carbon emissions management. Standardizing and ensuring the global availability of material master data and weight information aims at ensuring a comprehensive corporate carbon footprint database. In parallel, we are developing a customized Product Carbon Footprint (PCF) app to assess and report emissions across the entire lifecycle of specific products.





## SOCIAL

A safe, inclusive, and engaging workplace remains a priority. In 2024, key initiatives included:

- New Health & Safety (H&S) commitment statement "Committed to No Harm" was defined. It highlights the direct link between H&S and business excellence and strongly introduces the concept of mutual care for each other.
- 8 ANDRITZ Life Saving Rules were identified, allowing us to focus on the most critical activities causing injuries and incidents within the organization.
- Implementation of the Behavior-Based Safety (B-BS) training program started in piloting plants.

#### LEADERSHIP IN HEALTH AND SAFETY (LIHS) TRAINING

The Leadership in Health & Safety (LiHS) methodology identifies formal and informal leadership as the key element to positively influence behavior and establish a solid safety culture in organizations. During 2024, a total of 650 leaders engaged in the one-day LiHS workshop, aimed at implementing the Leadership in Health and Safety methodology in the organization. In Q1/2025 more than 1000 managers are expected to take the training. Finally, the LiHS program will be cascaded down to the rest of the organization through a condensed event delivered by the safety leaders of the different locations. The training is supported by additional online training.



Most workplace incidents are caused by unsafe behavior rather than unsafe conditions. The B-BS program involves observing employees' actions, providing feedback, and reinforcing safe practices while addressing and correcting unsafe behaviors through coaching and training. This evidence-based approach helps ensure that interventions are effective and can be measured and adjusted over time to improve workplace safety continuously. More than 60 H&S experts, responsible for larger and most complex manufacturing facilities, took the advanced B-BS course, consisting of a full six days of training.







#### **INCLUSION IS A JOURNEY FOR EVERYONE**

The ANDRITZ inclusion program focuses on targeted recruitment and employer branding to increase diversity, with an emphasis on HR initiatives and succession planning. A global D&I internal communication and education program was started to educate employees about the meaning of D&I at ANDRITZ and why it is important to reach our business goals.

- sity and inclusion.
- tation in the long term.

- Development of the H&S management tool continued, introducing additional processes for incident reporting and investigations, corrective actions management and H&S performance monitoring including the reporting.
- Key Group policies on H&S were reviewed, strengthened, and rolled out.
- More than 1,460 improvement actions from work-life balance to regular feedback and inclusive leadership practices resulted in an increased participation rate in the second employee engagement survey in 2024 as well as a higher engagement index rating.



• Measures to strengthen internal communication and enhance inclusivity among leaders throughout the Group continued, with the aim to foster a strong culture of diver-

• A global Diversity, Equity, and Inclusion (DEI) Committee was created to support our inclusion program implemen-



\*Glint, survey tool for employee engagement, benchmark index

#### **EXCELLENT RESULTS OF THE EMPLOYEE ENGAGEMENT SURVEY**

With a 76% response rate, the ANDRITZ employee engagement index now stands at 76, up from 75 in 2023. As highlights: ANDRITZ China achieved an impressive 99% response rate. North America showed a remarkable +17% increase in response rate compared to 2023. There was a significant increase in comments from 19,576 in 2023 to 33,786 open comments in 2024. We are committed to continuing to support improvement in areas such as inclusive leaders, communication, and equal opportunities, ensuring every voice is heard and valued.







## GOVERNANCE

We strengthened compliance, transparency, and ethical business conduct through updated policies and risk management measures.



- fairs and Export Control).
- Q4/2024.

• The sustainability reporting was developed in accordance with the EU Corporate Sustainability Reporting Directive (CSRD) requirements and its ESRS standards.

• To fulfill the German Supply Chain Due Diligence Act (LkSG) compliance requirements, the supplier compliance risk program was updated, and risk assessments of the German subsidiaries were again carried out through existing processes, such as HR onboarding processes. In addition, the policy statement was updated, and the report was submitted online to BAFA (Federal Office of Economic Af-

• A new whistleblower policy was published in Q1/2024 as well as a new sanctions and export control policy in

• The existing procurement letter was updated.

#### **ISO CERTIFICATIONS FOR ANTI-BRIBERY** AND COMPLIANCE MANAGEMENT RENEWED **AND EXPANDED**

A re-certification audit was carried out for ANDRITZ AG and ANDRITZ-HYDRO GmbH in Austria to extend the certificate for the ISO 37301 (compliance management) and 37001 (anti-bribery management) standards. In addition, all our operating companies in the US were included in the existing certification. Finally, it was decided to extend the ISO certification to all ANDRITZ companies in 2025.

#### **POLICIES GUIDE BUSINESS CONDUCT AND ETHICS**

Compliance and ethical behavior have always been the basis of our business activities. In 2024 several policy documents were developed: the ANDRITZ Supplier Code, which sets forth the minimum requirements for all suppliers, was renewed, and a new Human Rights Policy drafted.





# OUR BUSINESS CONDUCT

Compliance and ethical conduct have always been the basis of ANDRITZ's business activities. Integrity, respect, reliability and sustainability form the foundation of our compliance culture. The main elements of today's ESG requirements are covered by the ANDRITZ Group's existing compliance management system, particularly with regard to the topics of "S" and "G". Our corporate values, principles and rules are outlined in a Code of Conduct and Ethics, which complements comprehensive legal and regulatory requirements.

Across ANDRITZ globally, we have established an effective compliance management system that deals with business-critical issues ensuring continuous global coverage in all our regions of operation. This includes the prevention of corruption, anti-competitive behavior and insider trading as well as antidiscrimination, supplier compliance, export controls and data protection. In addition to a number of full-time compliance professionals, the compliance system is made up of members from different group functions. It ensures that risk assessments are carried out and that compliance policies and procedures are implemented, improved and monitored. We also conduct internal and external audits to assess the effectiveness of the rules and make further improvements.

Regional compliance officers at ANDRITZ subsidiaries play an important role as the first point of contact for local employees and as multipliers of compliance knowledge. Board-level compliance directors are mandated to make sure

ANDRITZ ANNUAL REPORT 2024



#### COMPLIANCE

### HIGHLIGHT

In 2024 the ANDRITZ Executive Board approved a plan to extend the certification of the Compliance Management System according to ISO 37001 and 37301 to all operating companies of the ANDRITZ Group.

all relevant compliance processes are fully implemented in their respective affiliate companies.

The ANDRITZ Code of Business Conduct and Ethics has been developed for employees. It is available in 14 languages and is taught in mandatory compliance training sessions. In addition, targeted training sessions are provided to employees based on their job families and special needs.

The success of our group-wide compliance program depends on all members of our supply chain committing to the same values, principles, and rules as outlined in our Supplier Code of Conduct. All ANDRITZ suppliers must also undergo an onboarding process, and, if necessary, are subjected to a compliance audit. Appropriate risk assessment processes are being implemented to meet the increased scrutiny requirements for the supply chain particularly in relation to the German Supply Chain Act (LkSG). ESG ratings for suppliers are becoming part of the assessment process for the supply chain.

We encourage all our employees, business partners and other stakeholders to voice any concerns through our anonymous whistleblowing system. This system is fully compliant with the EU whistleblowing directive as well as corresponding laws in EU member states.

The group-wide compliance regulations establish the requirements for developing, implementing, and maintaining a compliance management system along with measures to help prevent, and where necessary identify and investigate cases of corruption.







## **2024 IN FIGURES: PROFITABILITY STABLE**, **REVENUE DECLINING SLIGHTLY**

#### **ORDER INTAKE**

The ANDRITZ Group's order intake amounted to 8,277 MEUR in 2024 and thus remained relatively stable at the high level of the previous year (-3% compared to 2023: 8,852 MEUR). The main reason for this was the downward trend in Pulp & Paper and Metals, with the other two business areas showing strong performance and continuing to increase their order intakes. Incoming orders for sustainable solutions and products developed particularly strongly.

#### REVENUE

cant decline.

**Revenue in MEUR** 

	2024	2023	+/-	
Pulp & Paper	2,779.8	3,036.0	-8.4%	Pulp & Paper
Metals	1,707.2	1,997.7	-14.5%	Metals
Hydropower	2,170.5	2,020.9	+7.4%	Hydropower
Environment & Energy	1,619.4	1,497.3	+8.2%	Environment & Energy

#### **Order intake in MEUR**

#### The Group's revenue was nearly at the same level as in 2023, reaching 8,314 MEUR, a slight decrease of 4% year-on-year (2023: 8,660 MEUR). The Environment & Energy business area achieved a significant increase (+15%) due to the processing of their high order backlog, while the Metals and Hydropower business areas showed a stable development. The Pulp & Paper business area, on the other hand, recorded a signifi-

#### **EARNINGS**

EBITA (the Group's operating result) developed in line with the revenue and decreased by 4% to 713 MEUR (2023: 742 MEUR). An increase in the operating result was recorded in the Environment & Energy and Hydropower business areas, whereas the other two business areas decreased. The EBITA margin remained unchanged at 8.6% (2023: 8.6%).

#### **ORDER BACKLOG**

The ANDRITZ Group had an order backlog of 9,750 MEUR as of December 31, 2024. This was 1% lower than the figure for the previous year (December 31, 2023: 9,873 MEUR). The business areas Hydropower and Environment & Energy recorded an increase on the previous year, whereas the order backlog of Metals and Pulp & Paper decreased.

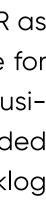
#### **NET WORTH POSITION AND CAPITAL STRUCTURE**

Total assets amounted to 8,163 MEUR (December 31, 2023: 8,497 MEUR), the equity ratio increased to 27.9% (December 31, 2023: 25.4%). Liquid funds stood at 1,434 MEUR as of December 31, 2024 (1,787 MEUR as of December 31, 2023). Net liquidity decreased to 905 MEUR (December 31, 2023: 921 MEUR).

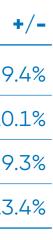
2024	2023	+/-
3,461.1	3,987.4	-13.2%
1,811.2	1,839.6	-1.5%
1,537.9	1,521.7	+1.1%
1,503.5	1,311.3	+14.7%

#### **Earnings (EBITA) in MEUR**

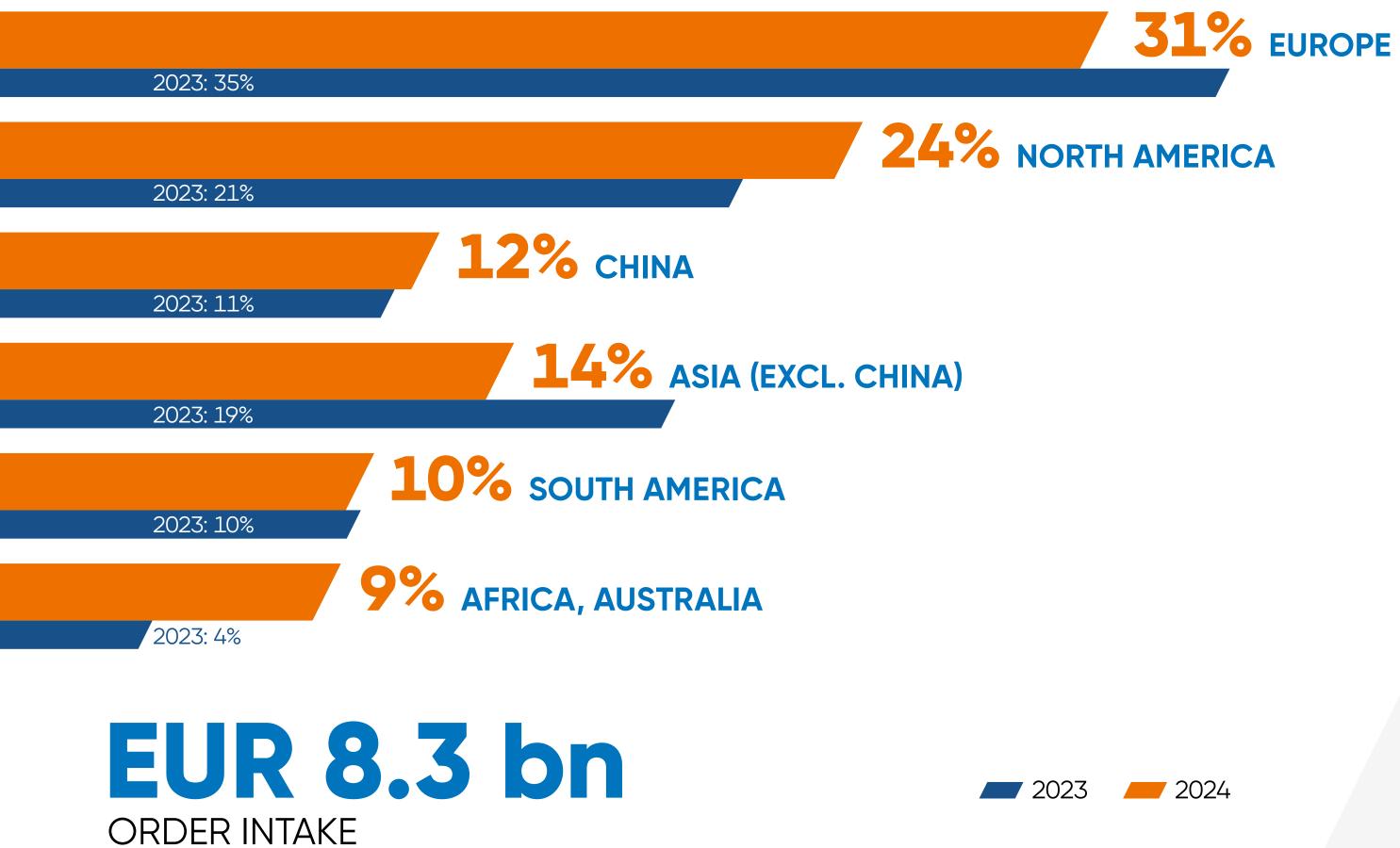
	2024	2023	
Pulp & Paper	373.7	412.5	-9
Metals	73.0	91.4	-20
Hydropower	96.3	88.1	+9
Environment & Energy	170.0	149.9	+13







# **ORDER INTAKE BY REGION 2024**





## **THE ANDRITZ SHARE: AWARDED BEST STOCK IN AUSTRIA IN 2024**

In 2024, international capital markets were influenced by easing monetary policies, with major central banks lowering interest rates as inflation decreased. Geopolitical tensions and the wars in Israel and the Ukraine continued to put a strain on the global economy.

Both the industrial production for capital goods and the manufacturing sector kept declining in the euro area and the United States in 2024, while the purchasing managers' indices (PMI) remained subdued. GDP growth in the euro area recovered moderately in the course of the year but stayed low overall. In the US, GDP growth remained close to 3%, similar to 2023. GDP growth in China amounted to around 5% in 2024.

Against this backdrop, the ANDRITZ share showed mixed performance in 2024. While the share price developed rather favorably in the first nine months, rising by about 15% until the end of October, a sharp correction in the fourth quarter led to a year-end performance of -13.2%, compared to the ATX Index at +6.6% and the Stoxx Europe 600 Industrial Goods and Services Index at +13.3%. The highest closing price was 64.95 EUR (September 26, 2024), while the lowest was 47.96 EUR (December 23, 2024).

#### LONG-TERM DIVIDEND POLICY

Our dividend policy focuses on continuity. We aim to maintain a progressive dividend policy, with dividends growing alongside the ANDRITZ Group's business. We plan to distribute 50-60% of net profit to shareholders in the long term, depending on capital requirements, acquisition opportunities, and other capital allocation options.

#### **STABLE AND WELL-BALANCED SHAREHOLDER STRUCTURE**

ANDRITZ has a stable and well-balanced shareholder structure. The shareholder structure in the financial year 2024 remained unchanged: 31.5% of the share capital of ANDRITZ Group was held – directly and indirectly – by Custos Privatstiftung and Wolfgang Leitner, Chairman of the Supervisory Board of ANDRITZ Group. Following a successful share buyback of approximately 2.1% of ANDRITZ's share capital in 2024, the company itself held around 6.2% of the share capital as treasury shares. Accordingly, the free float (excluding treasury shares) amounted to approximately 62.3%, largely comprising national and international institutional investors but also retail investors. Around 48% of the shares are held by

institutional investors. Most institutional investors are based in the UK and Ireland, continental Europe and North America, while the largest share of identified retail shareholders are from Austria, followed by Switzerland and Italy.

#### **TRANSPARENT COMMUNICATION POLICY**

Since the IPO of ANDRITZ 2001, our investor relations activities have focused on continuous and transparent communication with all shareholders. In 2024, we participated in various investor conferences and management roadshows. With two new team members, the investor relations department was strengthened. ANDRITZ also successfully hosted a Capital Markets Day in January 2024 and held quarterly earnings calls and webcasts with investors and analysts. We also won awards for Best Stock and Best Midcap Stock 2024 in Boersianer's Golden 500 Ranking, which ranks the leading stock-listed and financial companies in Austria.

#### **BROAD RESEARCH COVERAGE**

ANDRITZ maintains broad equity research coverage by international and regional investment banks and brokers, which has a positive effect on the liquidity of our share. Analysts from Baader Helvea, BNP Paribas (Exane), Deutsche Bank, Erste Group, Hauck Aufhäuser, J.P. Morgan, Kepler Cheuvreux, Oddo/RBI, UBS, Wiener Privatbank and Barclays (new) issued periodic research updates in 2024.

Updated information on research coverage is available at andritz.com/group-en/investors/share/research-coverage



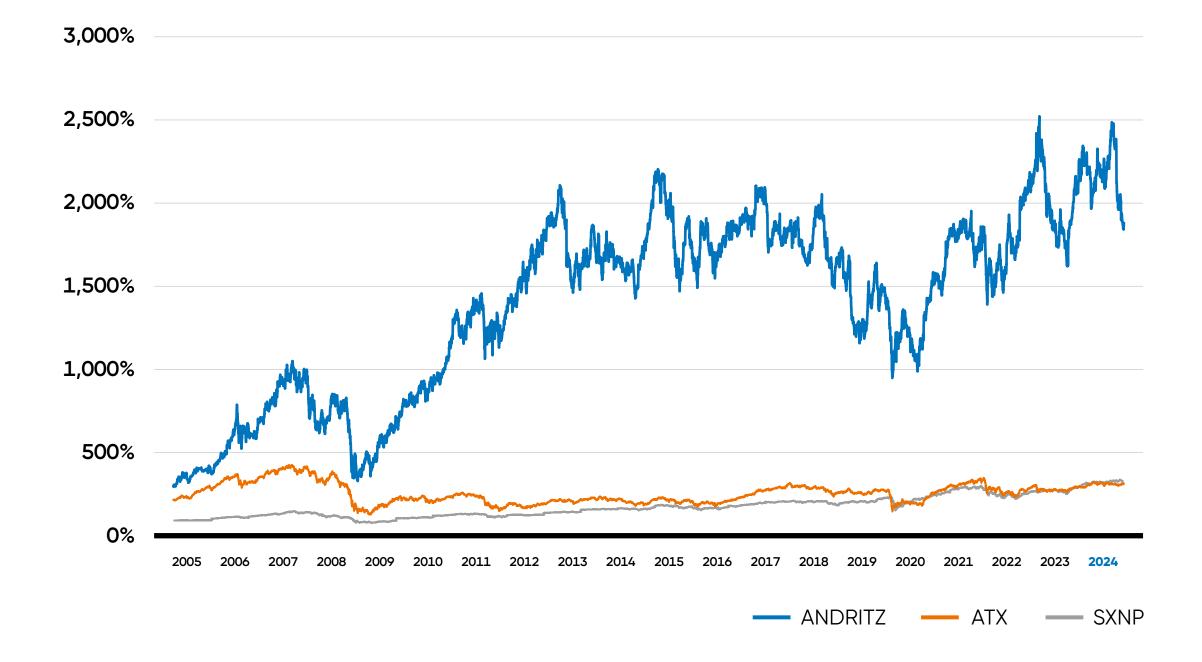




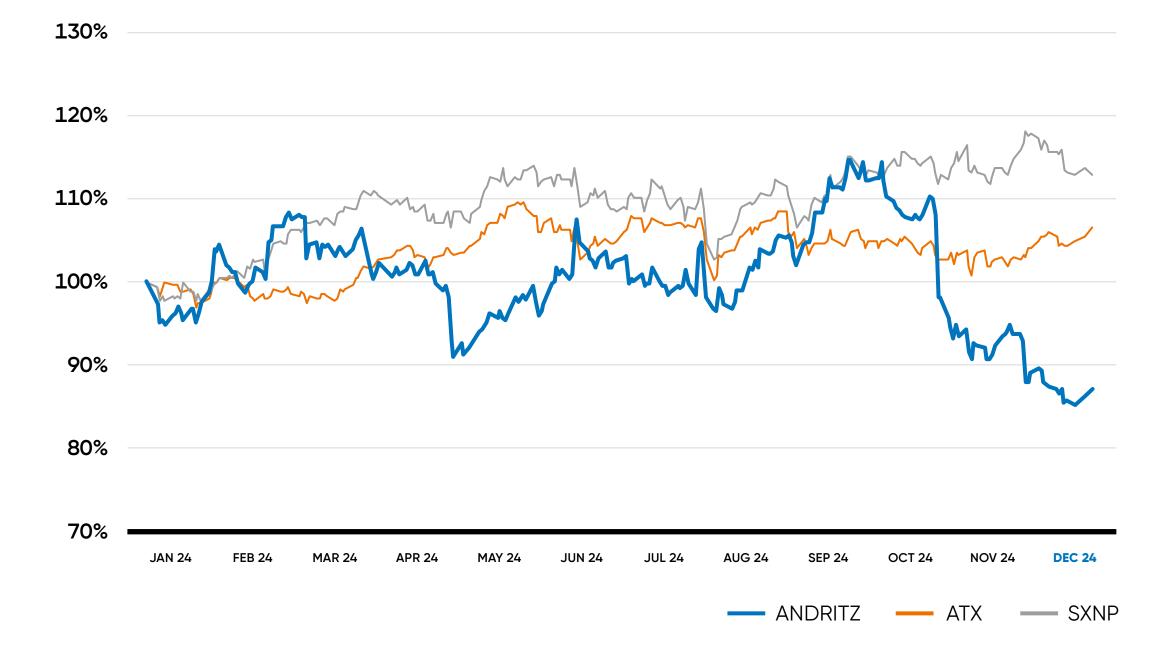


#### **THE ANDRITZ SHARE**

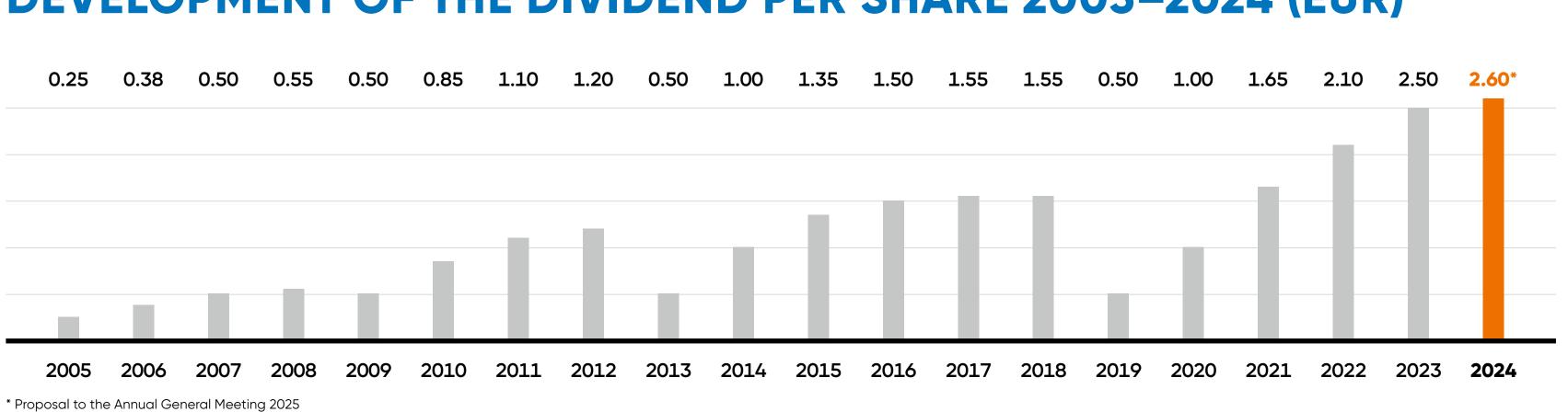
### **RELATIVE SHARE PRICE PERFORMANCE OF THE ANDRITZ SHARE VERSUS RESPECTIVE INDICES SINCE 2005**



### **RELATIVE SHARE PRICE PERFORMANCE OF THE ANDRITZ SHARE VERSUS RESPECTIVE INDICES IN 2024**

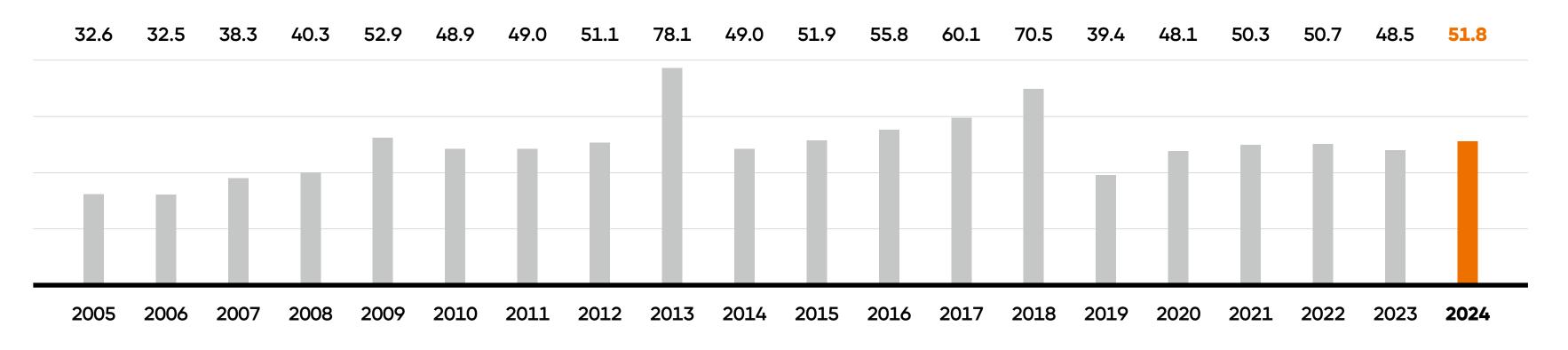






### **DEVELOPMENT OF THE DIVIDEND PER SHARE 2005–2024 (EUR)**

## **DEVELOPMENT OF THE PAYOUT RATIO 2005–2024 (%)**





Average payout ratio

50.0% (2005 - 2024)



### **KEY FIGURES OF THE ANDRITZ SHARE**

Unit	2024	2023	2022	2021	2020
EUR	5.02	5.15	4.14	3.28	2.08
EUR	<b>2.60</b> <sup>1</sup>	2.50	2.10	1.65	1.00
%	51.8	48.5	50.7	50.3	48.1
	9.8	11.0	12.9	13.8	18.0
EUR	23.01	21.99	18.69	15.86	12.64
EUR	64.95	65.90	54.55	50.85	38.82
EUR	47.96	42.10	36.04	36.66	24.36
EUR	48.98	56.40	53.55	45.38	37.48
MEUR	5,093.9	5,865.6	5,569.2	4,719.5	3,897.9
%	-13.2	+5.3	+18.0	+21.1	-2.4
%	-9.3	8.9	23.2	24.3	-0.9
%	7.3	7.9	7.8	5.4	6.1
Shares	209,240	237,344	288,913	313,879	628,900
	EUR EUR % - EUR EUR EUR EUR EUR & X	EUR   5.02     EUR   2.60 <sup>1</sup> %   51.8     -   9.8     EUR   23.01     EUR   64.95     EUR   47.96     EUR   43.98     MEUR   5,093.9     %   -13.2     %   -9.3     %   7.3	EUR   5.02   5.15     EUR   2.601   2.50     %   51.8   48.5     -   9.8   11.0     EUR   23.01   21.99     EUR   64.95   65.90     EUR   47.96   42.10     EUR   48.98   56.40     MEUR   5,093.9   5,865.6     %   -13.2   +5.3     %   -9.3   8.9     %   7.3   7.9	EUR5.025.154.14EUR2.6012.502.10%51.848.550.7%51.848.550.7%9.811.012.9EUR23.0121.9918.69EUR64.9565.9054.55EUR47.9642.1036.04EUR48.9856.4053.55MEUR5,093.95,865.65,569.2%-13.2+5.3+18.0%7.37.97.8	EUR5.025.154.143.28EUR2.6012.502.101.65%51.848.550.750.3-9.811.012.913.8EUR23.0121.9918.6915.86EUR64.9565.9054.5550.85EUR47.9642.1036.0436.66EUR48.9856.4053.5545.38MEUR5,093.95,865.65,569.24,719.5%-13.2+5.3+18.0+21.1%-9.38.923.224.3%7.37.97.85.4

Source: ANDRITZ Group, Vienna Stock Exchange, Bloomberg

<sup>1</sup> Proposal to the Annual General Meeting 2025
<sup>2</sup> Double counting – as published by the Vienna Stock Exchange



# **FINANCIAL CALENDAR** 2025

The financial calendar with updates and information on the ANDRITZ share can be found on the Investor Relations page at the ANDRITZ website andritz.com/investors.

March 17
March 27
March 31
April 1
April 3
April 30
July 31
October 30

Results for the first three quarters of 2025	
Results for the first half of 2025	
Results for the first quarter of 2025	
Dividend payment	
Dividend record date	
Ex-dividend	
<b>Annual General Meeting,</b> Congress Graz	
Record date of Annual General Meeting	



# **ANDRITZ REPORTS 2024**



#### **FINANCIAL REPORT ANDRITZ GROUP**



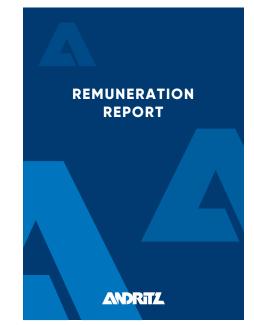
**FINANCIAL STATEMENT** ANDRITZ AG



**NON-FINANCIAL STATEMENT** according to CSRD/ESRS



#### CORPORATE **GOVERNANCE REPORT**

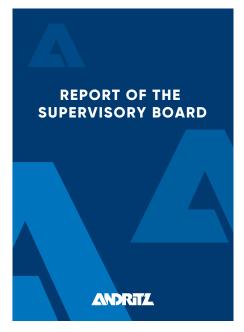


**REMUNERATION REPORT** 



#### **REMUNERATION POLICY**





#### **REPORT OF THE SUPERVISORY BOARD**



# IMPRINT

#### **MEDIA OWNER & PUBLISHER**

ANDRITZ AG Stattegger Strasse 18 8045 Graz, Austria andritz.com T +43 316 6902 0 FN 50935 f at Landes- und Handelsgericht Graz

#### **PROJECT LEAD & EDITORS**

Susan Trast & Niklas Jelinek, ANDRITZ AG Ketchum GmbH, Vienna

#### **GRAPHICAL REALIZATION**

studio bleifrei, Graz

#### DISCLAIMER

Certain statements contained in the ANDRITZ Annual Report 2024 and in the Annual Financial Report 2024 constitute "forward-looking statements". These statements, which contain the words "believe", "intend", "expect", and words of similar meaning, only reflect the Executive Board's beliefs and expectations and are subject to risks that may cause actual results to differ materially. As a result, readers are cautioned not to place undue reliance on such forward-looking statements. The company disclaims any obligation to publicly announce the result of any revisions to the forward-looking statements made herein, except where it would be required to do so under applicable law. The Annual Report 2024 and the Annual Financial Report 2024 contain assumptions and forecasts based on the information available up to the copy deadline on March 4, 2025. If the premises for these assumptions and forecasts do not materialize or risks indicated in the "Risk management" chapter and in the Management Report of the Annual Financial Report 2024 do arise, actual results may vary from the forecasts made in the Annual Report 2024 and the Annual Financial Report 2024. Although the greatest care was exercised in preparing data, all information relating to the future is provided without guarantee.

#### NOTE

In this report, ANDRITZ strives to use gender-sensitive language. If this is not possible in places, any personal terms used relate to all genders equally. The Annual Report 2024 is available in digital form only and is published in English and German. In the event of any discrepancies, the English version shall prevail.

#### **PICTURE CREDITS**

Adobe Stock (page 19, 20, 28, 30, 36, 40, 43, 49, 52, 63-64); Andritz (page Cover, 2, 5, 9, 22, 24-27, 29, 34, 37, 39, 41-42, 44, 46-47, 50, 58, 61, 66-73); Ian Ehm (page 6, 23, 24); iStock (page 38); Suzano (page 5, 10-12); Yusufeli (page 13-15); ArcelorMittal (page 16-18); Veolia (page 21); Silke Reents/ZMS (page 53); UN Global Compact (page 62)

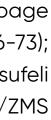
### CONTACT

#### COMMUNICATION

susan.trast@andritz.com

#### **INVESTOR RELATIONS**

investors@andritz.com





Growth challenges us. It pushes us to reach further and set new goals. We drive technology that transforms industries and shapes a sustainable future. Our innovative solutions make our customers successful and our planet greener.

## ANDRITZ. FOR GROWTH THAT MATTERS.



