

# METALS ARE OUR PASSION

SUSTAINABILITY REPORT 2021



**CRONIMET**  
*Holding GmbH*





Dear Readers,  
dear Friends of CRONIMET,

**You are reading the first Sustainability Report of the CRONIMET Group! With this report we wish to take the opportunity to report transparently on our wide-ranging social and ecological commitment as well as on the embedding of corporate governance within CRONIMET. Our aim in doing so is not just to document, but also to inspire.**

For more than 40 years the core of our business model has been the embodiment of sustainability: We ensure that raw materials are returned to the material cycle and thus close the loop. But we are not resting on our laurels. We are going further: In our strategic goals we commit ourselves to sustainability as the foundation of our business operations.

In times of great political uncertainty, climate change and increasing social inequality, the demands on companies like CRONIMET in

terms of living up to their social responsibilities are also growing. In my role as CEO my aim is to give my colleagues clear guidance in this respect and create an environment with CRONIMET in which we can enjoy working together to make a fairer and more sustainable life possible for everyone. It is important to me that each individual in our corporate group identifies with our values and helps to spread them. Our employees are what defines us as a company, we are ONE CRONIMET! We all contribute to our success and our positive development with expertise and passion.

In order to remain commercially successful, we invest in innovative technologies, drive forward new business fields and thus further establish ourselves as an all-round supplier of primary and secondary raw materials at the leading edge of the market. In doing so we take into account not only business management parameters



Jürgen Pilarsky, CEO CRONIMET Group

but also numerous non-financial performance indicators in our decision-making processes.

We are well on the way to achieving our ambitious targets – in particular climate neutrality – by 2030. In this respect we regard the diversity and global presence of our CRONIMET Group as a great opportunity, and we invite you to accompany us on this journey.

Jürgen Pilarsky  
CEO

This first Sustainability Report by CRONIMET was created in accordance with the GRI Standards: „Core“ option for 2021.

The underlying report is registered at the Global Reporting Initiative (GRI).



In 2021, the CRONIMET Group had operating subsidiaries in all countries marked in light blue.



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## A SUSTAINABLE CORE BUSINESS

We ensure that metal raw materials are preserved through recycling and returned to the cycle. To achieve this we use cutting-edge technology, modern IT and our global network.

Demand for stainless steel is undiminished: After all, this material is used in a wide range of consumer goods, vehicles, infrastructure and industrial plant and machinery. The raw materials needed to produce stainless steel in its various alloys are in short supply, and the costs of mining are high for both people and the environment. This applies to chromium,

nickel, molybdenum and titanium, among others. It is therefore all the more important to close the material cycle by recycling.

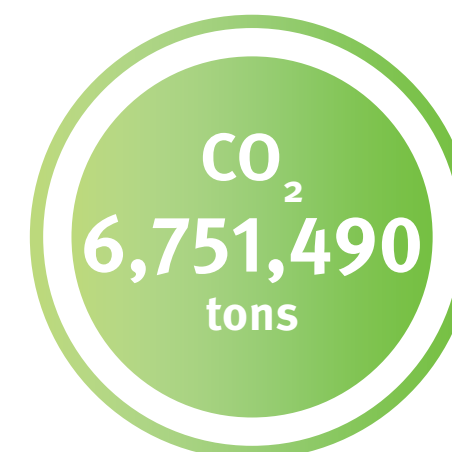
As the world's leading recycler of stainless steel, the CRONIMET Group stands for the careful and efficient use of resources. To serve the raw material requirements of the economy in a sustainable way, we rely on our global network and our expertise in analyzing, purchasing and processing of secondary metallic raw materials. At the same time we are working on increasing the proportion of recyclable metals: Innovative business models such as the processing of industrial sludges and electric

car batteries are examples of this. Our wide portfolio ranges from stainless steel and metal scrap to special alloys and superalloys. In addition to scrap, we also produce and trade in primary raw materials as an all-round supplier and create added value in this form. We achieve this with additional services such as the milling of ferroalloys for powder metallurgy. Our aim is to be the first point of contact for our customers and to provide them with customized solutions for maximum resource efficiency.

In this way our business model makes a significant contribution to the circular economy.



CO<sub>2</sub> SAVINGS



Recycling stainless steel scrap helps to save CO<sub>2</sub> emissions. According to a study by the Fraunhofer Institute IMWS, this amounts to 4.3 tons of CO<sub>2</sub> emissions per ton of stainless steel.

CRONIMET; (P.9) shutterstock,  
(P.12, 13) Aimé Dogo, David  
Bernard, Aloisius Grundschole,  
Martina Tirolf (P. 14) EQ Resources,



# CLOSING THE LOOP



At CRONIMET we recover metals by means of recycling - without any loss of quality. We return scrap to the material cycle, thus conserving resources and making an important contribution to securing the supply of raw materials and protecting the climate. For this purpose we use our know-how, the experience and commitment of our employees and modern technology.

The scrap is generated in manufacturing processes or contained in consumer products that are disposed of at the end of their useful life. However, for us this scrap is not waste, but becomes a valuable raw material. CRONIMET purchases the scrap via a worldwide network of buyers, then analyzes, sorts and processes it. As a secondary raw material or recycled material, we return it to the circular economy. Our products – material blends specially put together according to customer requirements – are melted directly by manufactur-

ing companies and used in a wide range of sectors and industries, including the automotive industry, aviation and in medical application. At the end of their useful life these metals return to us, are recycled and once more become available as a raw material. Waste becomes raw material – thanks to CRONIMET.

Analyses and modern technologies play a major role when it comes to preparing materials for direct use in steel mills, foundries and vacuum smelters. The quality requirements of our customers are high. Particularly in the case of special or super alloys, the focus is on alloy specific separation and decontamination. That's why we rely on well-defined, tried-and-tested processes as well as effective and customized IT solutions. Our trained, experienced specialists use a mobile X-ray fluorescence spectrometer as early as the incoming goods stage. This enables them to determine the chemical composition of the material and identify alloys. The

results are transferred directly to the SAP system using an app specially developed by CRONIMET. For a more precise information base, the material is analyzed again in our laboratories, if necessary. Methods such as laser-induced plasma spectroscopy and optical emission spectroscopy are suitable for this. They enable us to take the single-variety batches into account in the best possible way when compiling and calculating the material mix. CRONIMET also has a specialized fleet of vehicles and machinery with baling and briquetting presses, shears, chip crushers, washing and drying equipment.

We are continuously developing our processes and capacities. Our experience of more than 40 years, our know-how relating to the individual materials and the use of the right technologies help us to achieve our goal: Constantly increasing the proportion of recyclable materials in order to close further recycling loops and thus ensure the sustainability of our products and services.

## STAINLESS

Stainless Steel Scrap

## SUPER AND SPECIAL ALLOYS

Ni based Alloys

Co based Alloys

NiCo Alloys

CuNi Alloys

## HSS / CrMoV

HSS

CrMoV

## NEW METALS AND PURE METAL SCRAP

New Metals and Pure Metal Scrap

## TUNGSTEN CARBIDE

Tungsten Carbide Scrap (WC)

Tungsten alloys

## FERRO ALLOYS

Ferro Alloys

## TITANIUM

Titanium CP

Alloyed Titanium

FeTi

Our product portfolio covers a wide range of diverse materials. These can be divided into seven categories as shown above.



# IN DIALOG



We are convinced that companies can only live up to their social responsibility if they include the interests of their stakeholders in their decisions. Regular interaction with our stakeholders and a frank dialog on an equal footing are part of the way we conduct our business.

Sharing ideas with our stakeholders helps us to gain better insights into their needs and to address current issues. In 2021 we began an internal process to systematically define all our relevant stakeholders and divide them into eight principal groups: Customers, suppliers of primary raw materials, suppliers of secondary raw materials, financial partners, employees, executives, owners and legislators. This results in four sections for us: The procurement market, the sales market, the financial market and the communications market.

After this process of analysis we looked in each case at the expecta-

tions these parties have in relation to us. They range, among other things, from compliance with legal requirements to aspects of sustainability and transparency in our communications, from good corporate governance to fair business practices and unbureaucratic processes.

We have analyzed the extent to which we already meet these stakeholder expectations, such as compliance with legal requirements. In addition, we have also collected ideas and formulated targets on how these and any changing expectations can be met in the future.

We will continue to drive this process forward and, together with our stakeholders, discuss the key issues in an open dialog at regular intervals and add new aspects relating to our corporate responsibility. For this purpose we are developing suitable formats and rolling them out one by one.

This Sustainability Report is a key component of the stakeholder

dialog. From now on it will make the measures we take towards greater sustainability transparent each year by highlighting the key issues. These have been identified in a materiality analysis taking into account the stakeholder perspective – and will be regularly reviewed and updated in the future.

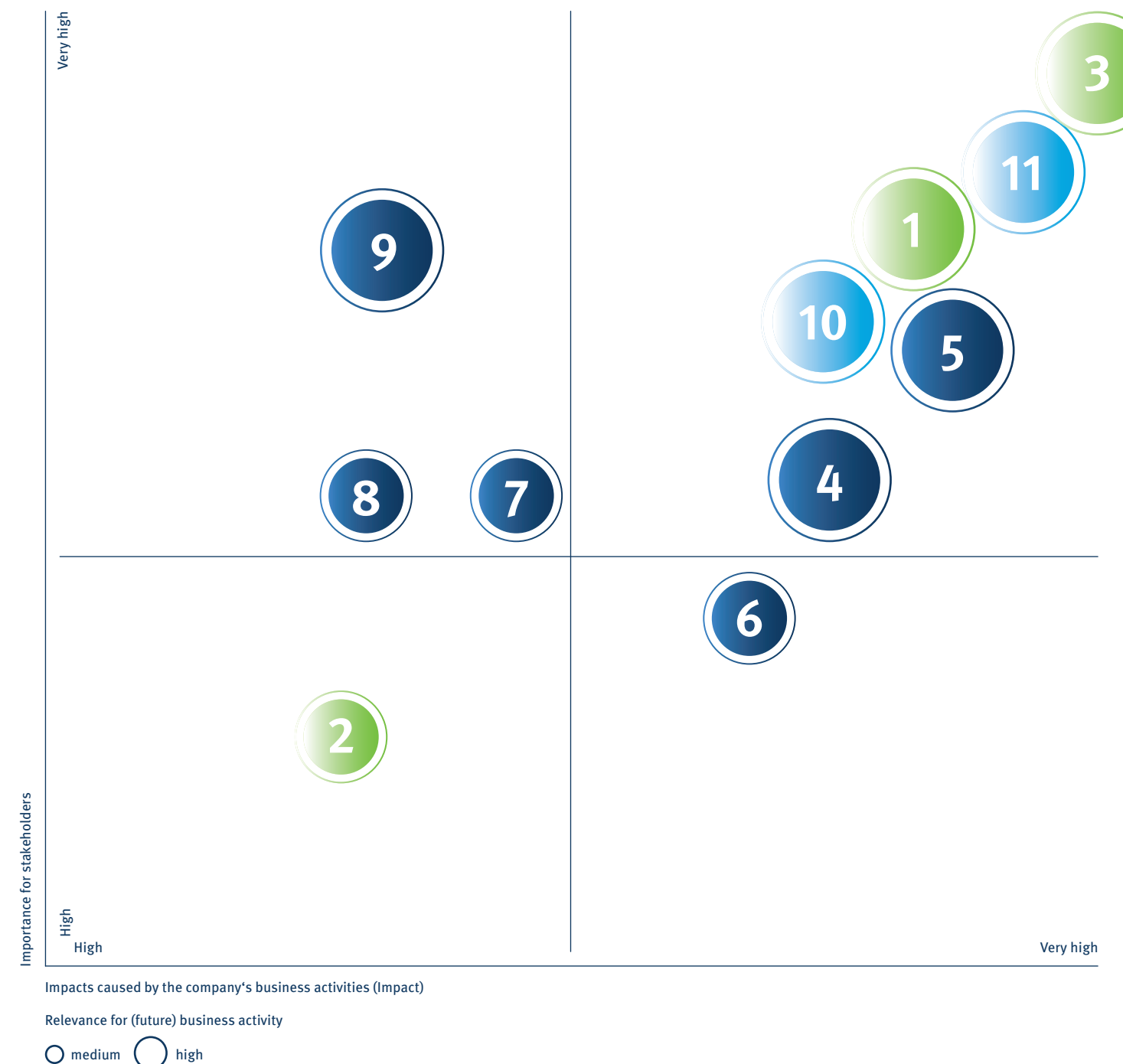


As CFO of CRONIMET Holding GmbH Bernhard Kunsmann is amongst others in charge of Corporate Communication which includes our exchange with internal and external stakeholders.

# OUR FOCUS

Our materiality matrix shows what is particularly crucial with regard to our sustainability commitment. We divide our key subjects into the fields of environment, social and governance (ESG). In addition to our internal point of view, we have also taken into account the perspective of our most important stakeholders. The size of the circle indicates the importance of each topic for our future business operations.

- ENVIRONMENT
  - 1) Climate Change
  - 2) Waste Management
  - 3) Sustainability of Trading Goods and Services
- SOCIAL
  - 4) Recruitment and Retention (Work-Life Balance)
  - 5) Occupational Health and Safety
  - 6) Training and Development
  - 7) Diversity and Equal Opportunities
  - 8) Philanthropic Activities / Contributions
  - 9) Responsibility in the Supply Chain
- GOVERNANCE
  - 10) Compliance and Good Corporate Governance
  - 11) Risk Management and Anti-Corruption





# PROTECTING THE CLIMATE: WHAT WE DO

The management of CRONIMET Holding GmbH has extended the strategic goals for the year 2025 to include sustainability as a foundation. In doing so, we are committed to climate neutrality as a goal to be achieved by 2030. A key to this is the gradual reduction of our carbon footprint.

The first step towards this goal is to record greenhouse gas emissions to mark the starting point. After all, climate change and the related issue of energy consumption and emissions in particular are among our key topics.

For the present Sustainability Report, the data for calculating Scope 1 and Scope 2 emissions were collected at all operational sites. We recorded our emissions of greenhouse gases within Scopes 1 and 2 across the group for the first time in 2021, mainly carbon dioxide from the

combustion of fossil fuels and the purchase of electrical energy. The result: Approximately 19,000 metric tons of CO<sub>2</sub>eq.

This is the figure by which we will be measured in the future. It is important for us to reduce CO<sub>2</sub> emissions by using renewable energies. For this purpose we are also investing directly in photovoltaic installations at our sites. Energy efficiency measures such as energy-saving LED lighting equipment also play an important role in reducing emissions. We are aware of the ecological efficiency

of our products and services in the context of the circular economy. We are taking the next step by reducing our carbon footprint. In doing so, we are assuming corporate responsibility. Modern technologies are also playing an integral part. We use these to further develop our company. Electric drive systems are not only used in our company vehicles. Charging facilities are already available for these at numerous locations. We consider the electrification of our machinery as the key to reducing emissions in the processing and handling of our scrap.

TOTAL AMOUNT  
OF CO<sub>2</sub> IN TONS:  
**18.946**  
CO<sub>2</sub> eq  
(Scope 1+2)



E-mobility and therefore also e-forklifts are part of our climate strategy. Further electrification of the machinery will reduce their carbon footprint in the long term. For this purpose we are working closely with the relevant manufacturers. This enables us to find customized solutions.







# DIVERSITY THAT DEFINES US

**Our colleagues all contribute their experience, views, know-how and commitment to the company. This diversity makes us efficient and competitive.**

We are absolutely convinced that we need the skills and commitment of all our employees in order to continue to be successful. We see diversity, which is what distinguishes CRONIMET as a global group of companies, as an enrichment. It fosters creative solutions and helps to increase our productivity. CRONIMET promotes equal opportunities – equity – and is firmly opposed to discrimination and resolutely committed to a fair working environment based on trust. This basic attitude applies unconditionally and throughout the company. It is firmly anchored in our corporate values, our

management principles and our corporate culture. Our Code of Conduct ensures that we treat each other with respect. Discrimination based on gender, skin color, age, ethical background, faith or sexual identity is not tolerated.

Our executives play a special role in this. In their function as role models they shape our solidarity and support their staff. Our leadership principles set out this basic approach. They are an integral part of the annual review for all personnel with management or project responsibilities. The aim is to approach diversity with openness, fairness and tolerance, and to reconcile work, family and leisure. As a family-run company, it is particularly important to us to reconcile the requirements of both family and career – for men and women alike. CRONIMET aims to encourage

women to realize their potential. Accordingly, we support our female employees in their further development and career planning.

A graphic showing ten stylized human figures in two rows of five. The figures are colored in blue, green, and white, representing different nationalities.

## MORE THAN 32

DIFFERENT NATIONALITIES  
ARE REPRESENTED  
IN OUR GROUP OF COMPANIES

# SAFETY AT WORK

The work in our scrap yards is physically demanding. The health of our employees is therefore a top priority for CRONIMET. This is ensured by a well-structured occupational health and safety management system. An important component is the ISO 45001-compliant management system “Safety and Health in the Workplace (SGA)”. Its aspects are firmly defined as management tasks worldwide – over and above the legal requirements.

Systematic occupational health and safety includes regular assessment, hazard monitoring and regular training of all employees by competent specialists. Training is designed and carried out on a topic-specific basis and for all areas – from office to the laboratory to the scrap yard. Particular attention is paid to the use of the correct personal protective equipment (PPE) and to keeping the machinery and vehicle fleet up to date with the latest technology. Any changes have to be communicated to the machine and vehicle operators in a timely and comprehensive manner.

CRONIMET uses the “Lost Time Injury Frequency Rate” (LTIFR) to measure the frequency of occupational accidents and/or the number of occupational accidents at a given location. The group-wide value for 2021 is 2.33. This means that for every 200,000 hours worked there were 2.33 occupational accidents after which those affected were absent from work for more than 24 hours. This rate is admittedly low. Nevertheless, every accident is one too many.





# HELPING ...

CRONIMET aims to live up to its social responsibility and contribute to prepare society for future. Together with our employees and non-profit organizations we are committed to regional and global activities that go beyond our business activities – in line with our corporate culture and values. In doing so we are committed to fighting hunger and poverty, fostering education and preserving an environment worth living in. Our support is based on three pillars: Voluntary commitment on the part of our employees, long-term partnerships with non-profit organizations, and emergency aid in the event of natural and humanitarian disasters.



## ... THE POOREST OF THE POOR IN TOGO

The Togo-Hilfe e.V. association, founded in 2002, works completely on a voluntary basis. The members finance all the administrative costs themselves, so that 100% of the donations collected in Germany can be passed on to the West African country. Every person has the right to education – no matter where they live in the world. This guiding principle inspires our support for children and young people, who are to be given brighter prospects through schooling and vocational training. In addition, the association uses the donations it receives to promote measures to improve hygiene and health. In accordance with the principle of “helping people to help themselves”, the construction of wells, for example, enables a better supply of drinking water. CRONIMET has wholeheartedly supported the valuable work of the association for many years.

## ... THE NEEDY PEOPLE IN KARLSRUHE

Food banks do immensely important work in Germany for what is sadly a large number of people. In Karlsruhe, CRONIMET has been supporting the “Beierteimer Tafel”, a local food bank, annually since 2017 with cash and in-kind donations, as well as collection campaigns. During the Covid-19 pandemic CRONIMET employees also supported the food bank by collecting food and hygiene articles, with a total of 30 boxes being donated. CRONIMET also made the purchase of a new refrigerated truck possible through a donation.

Eighteen of our Czech employees planted a total of 27 trees in October 2021, thus setting an example for more awareness of how we treat nature.



## ... AFTER THE FLOOD HIT TOWN

In July 2021 the Ahr valley was hit by flooding of unprecedented proportions. The Aloisius Elementary School in Bad Neuenahr-Ahrweiler was also severely affected: Its entire basement with classrooms, cafeteria, support rooms and the computer room was flooded and completely destroyed. In the sports hall, which had only been renovated in 2020, the water was two meters high. CRONIMET made a donation and helped to purchase new teaching materials and musical instruments, as well as digital equipment for the classrooms. A soccer field built in 2017



was brought back into shape. The children themselves contributed to its financing with a charity run. Parts of the donations also benefited financially struggling families and enabled the traumatized children to go on excursions to the zoo or a museum.

## ... OUR SPORTING NEIGHBOURS

Since 2010 we sponsor the „Karlsruher Rheinbrüder“. The successful canoeists are our neighbors in the Rhine harbor. The club supports talented children in a way that they develop towards the (inter)national top. Sport is also a vehicle for integration, which is why CRONIMET helped in financing a new boat for Saeid Fazloulou, who fled Iran in 2015.





# INNOVATIONS FOR RECYCLING

Recycling is sustainable. Innovative processes are helping to ensure that more and more material can be recycled, opening up interesting future markets for CRONIMET around the globe.



In Mount Carbine, Australia, the mining of tungsten formed coarse-grained sand until 1987, called “tailings”. Like mining spoil, this was long regarded as waste due to the lack of technical approaches for processing it. Thanks to the technologies and know-how of the CRONIMET Group the valuable metal can now be extracted and introduced into the economic cycle. The plan is to process over eleven million tons of this material. The resulting high-quality tungsten oxide concentrate can be sold to international customers either directly or after remelting into ferrotungsten. By further optimizing the process, production is to be increased in the medium term from the current 40 up to 90 tons per month. In its recycled state, tungsten meets the regulations for import into the EU. The project can be rolled out further, so it may become possible for mining waste in other parts of the world to be processed, with the materials thus obtained making a contribution to

securing raw materials for the global economy. As a particularly durable and versatile metal, tungsten is also classified as a critical raw material by the EU due to its scarcity.

Australia is also the starting point for another innovative business model: CRONIMET has held a stake in the Australian company Pure Battery Technologies (PBT) since the end of 2020. This company has developed a patented process to significantly improve the carbon footprint in the production of batteries for electric cars. This makes it possible to use lower-cost materials. In addition, industrial waste from the electric car battery manufacturing process and processed spent batteries can be recycled in the form of the resulting black mass. This allows the raw material cycle to be closed, which in turn improves the related carbon footprint.

#### Unique worldwide

Year after year oil-containing sludge, metal powder and dust

account for vast quantities of waste, some of it hazardous, which has to be disposed of at high cost. The problem is fine particles in the contaminated sludge. CRONIMET Envirotec offers a globally unique process for this purpose: The oil is removed from the sludge, which is then dried and freed from all impurities by means of vacuum distillation. The resulting dust is compacted under high pressure (briquetting). The special feature of this recycling process is that the properties of the materials are not changed – so they remain valuable and are particularly suitable for later reutilization as raw materials in the steel industry.

Thanks to CRONIMET Envirotec’s technologies, producing companies can turn their sludges, dust types and powders back into recyclable raw materials, thus increasing resource efficiency. Among other honours, this business model has earned the company Germany’s Raw Materials Efficiency Award and a nomination for the German Sustainability Award.





# OPERATING PROFIT

71 million €

# TURNOVER

3,3 billion €

TOTAL  
EMISSIONS  
(SCOPE 1+2)



CO<sub>2</sub>  
18.946  
tons

ENERGY  
CONSUMPTION  
WORLDWIDE

65 million KWh

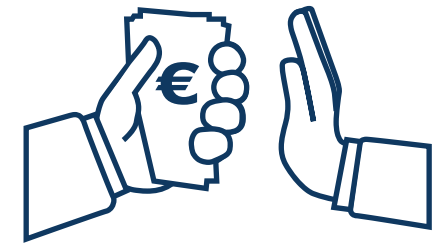


72 LOCATIONS  
WORLDWIDE



## CRONIMET IN NUMBERS

Analyses, values and measurables are an essential part of our everyday operations. Because transparency is particularly important to us in the context of sustainability communications, we provide some of the most important facts, figures and data from the environment, social and governance fields at a glance.



CASES OF  
CORRUPTION

0



LTIFR  
LOST TIME INJURY  
FREQUENCY RATE

2,33

The number of work-related injuries with lost time divided by total hours worked and multiplied by 200,000.



FOUNDATION

1980

CRONIMET is  
founded in  
Karlsruhe



1,6  
MEGATONS OF  
RECYCLED SCRAP

NUMBER OF EMPLOYEES



1.577





# RISKS AND OPPORTUNITIES

Risk Management has been established at CRONIMET since 2018 and is now firmly anchored throughout the group. Risks are defined as deviations from planned targets, and can be positive (opportunities) or negative (threats).

Negative deviations are a particularly important focus because they could endanger the company's existence which is why the issue is managed centrally. The approach is divided into the following five steps, which are repeated regularly: Identification, analysis, aggregation, mitigation and monitoring.

Risk Management also plays a crucial role in increasing trans-

parency and thus in the management's decision-making processes. In addition, Risk Management supports the safeguarding of the company's future success as well as the company's goals, accordingly promoting an increase in the value of the company. During the implementation process, attention was also paid to strengthening the awareness of our employees. Our target is to respond even more quickly to emerging developments in the future. For this purpose our current key performance indicator system is being expanded.

All these processes take place throughout the group in accordance with the relevant national legislation.

## CERTIFIED QUALITY

We put our high level of quality awareness into practice every day. Our work is certified to recognized standards in a range of areas, for example in energy, environmental and occupational health and safety management. Throughout the group we have implemented a quality management system in accordance with DIN EN ISO 9001. In addition, all our German sites with warehousing operations are certified as specialized waste management company as well

as licensed waste treatment plants. If a location is certified according to more than one standard, a process-based Integrated Management Manual (IMM) is established.

CRONIMET has also developed and introduced a process-based Integrated Management Handbook (IHB). It includes the details of the four relevant corporate policies – energy, environment, quality and occupational health and safety – and serves as a guide worldwide.

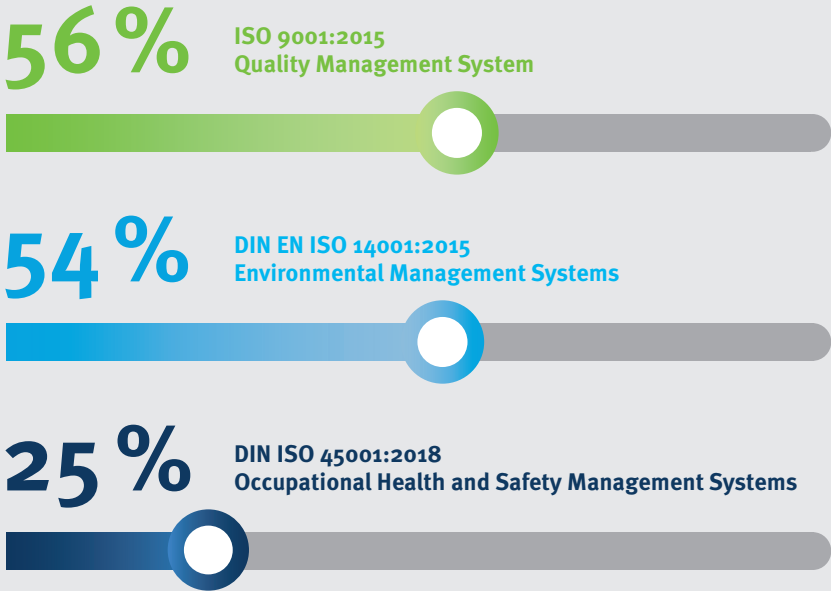
# COMPLIANCE CULTURE

Compliance prevents misconduct, minimizes risks and uncovers corruption and other legal violations. For CRONIMET, this is not just about averting damage from the company. We also want to make a positive contribution to society and the environment through prevention.

CRONIMET's compliance program addresses risks such as corruption, money laundering, antitrust violations and fraud. It defines measures to prevent and detect such misconduct. Guidelines, work instructions and internal controls have been implemented for this purpose. Moreover, target groups oriented trainings are carried out to prevent violations. In addition, a compli-

ance risk analysis is performed regularly in all subsidiaries, from which measures for improvement and further developments are derived. The Chief Compliance Officer, who is also available in an advisory capacity for employees, is responsible for implementing compliance policies. He reports to the CEO of the holding company and to the management. If violations are observed, employees are encouraged to inform their supervisors, the Compliance Department or compliance officers, the HR Department or the worker's council. For this matter, an anonymous whistleblowing system is available, too.

CRONIMET has committed itself to ethical principles which go far beyond legal regulations.



Proportion of operating subsidiaries with the listed certification.



Our GRI Report covers all locations that are integral to our operating performance and/or long-term strategy. Notes on the consolidation scope can be found for each main topic in the detailed report. Not included are CRONIMET’s representations, commercial agencies, joint ventures in which we do not hold a majority stake, and subsidiaries that are up for sale. These include our subsidiary Plant of Pure Iron, based in Armenia, for the shares of which we have already concluded a sales agreement in 2019. This will be completed by 2024 at the latest.

Subject	Page	GRI Disclosure
General Disclosures		102-1 – 102-14, 102-16, 102-18, 102-40 – 102-55
Management Approach		103-1, 103-2, 103-3
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\* All information and data on this material topic can be found in the full GRI-Report using the QR-Code.

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