Sustainability report

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2020

KME

Site Osnabrück

KME

Sustainability Report

2020

KME Germany GmbH
KME Special Products GmbH
Osnabrück

Index

Worldwide, 2020 was a dramatic year, forcing even industries to drastically change their planned actions. KME has also suffered the consequences of the pandemic, but this has not affected the Sustainability Report's evolution.

In fact, the Sustainability Report is currently in its fourth year, further increasing the scope of activities examined. The first year with the KME Italy plant in Fornaci di Barga, the second with the service centers of Besançon in France and Barcelona in Spain, the third with the KME Mansfeld GmbH plant and finally in 2020 with the Osnabrück plant, both in Germany.

As already mentioned in previous editions, the decision to produce and publish this Sustainability Report, with the support of an independent company, is not a regulatory requirement for KME, but rather the expression of a precise and strategically oriented focus on the modern concepts of CSR, ESG and Circular Economy.

Presentation

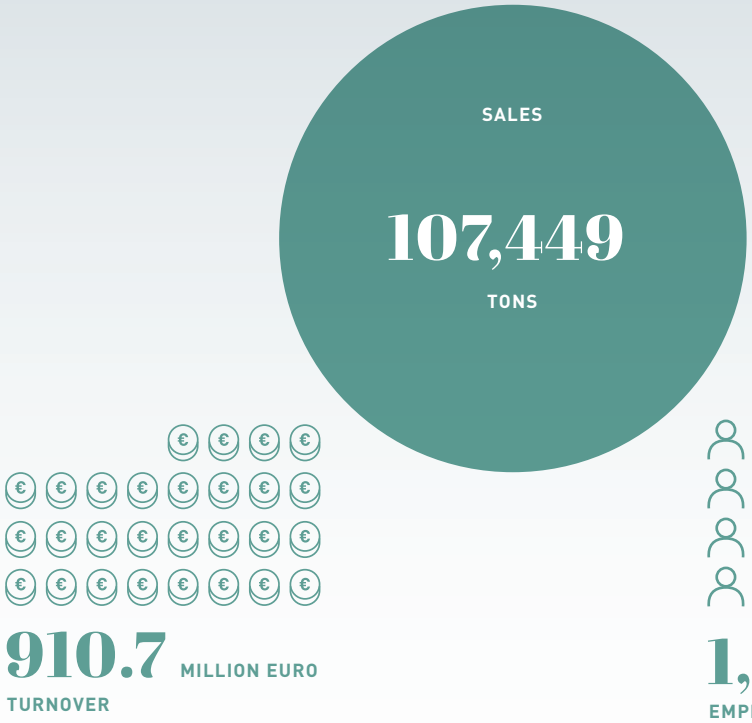
Sustainability and economic, social and environmental responsibility are key factors in the industrial model pursued by KME. Hence, we pay attention to the expectations of all our stakeholders, with the consequent demand for transparent and exhaustive communication on our activities.

Excellence and innovation are not only principles applied to production, but also to the workers' well-being and that of the territory where the company operates.

The Sustainability Report 2020 that we present to all of you shows the further improvement of all the various aspects of our activity; a result achieved through the commitment of our staff of which we should all be particularly proud.

Claudio Pinassi

CEO KME Managing Director



KME

KME GERMANY GMBH
KME SPECIAL PRODUCTS GMBH

Strategic value for the circular economy and the European Green Deal

KME

An integrated system of the copper industry in Europe

Report guidance

KME Germany GmbH (hereafter KME Germany) and KME Special Products GmbH (hereafter KME Special) present their first sustainability report as a voluntary act of **transparency and social responsibility**.

The report has been prepared on the basis of the guidelines of the Global Reporting Initiative (GRI), an independent international organization recognized by the UN and the main reference for *sustainability reporting* activities worldwide.

The report uses 4 sets of indicators related to the GRI standards:

- **general**, regarding the legal and organizational profile of the company;
- **economic**, concerning the main economic results and the added value distributed;
- **environmental**, in particular concerning energy, materials, water, waste, emissions;
- **social**, concerning personnel, training, occupational health and safety, equal opportunities, human rights, relations with the local region.

In order to further illustrate the company's activities and strategies, in addition to the reporting carried out on the basis of GRI guidelines and standards, a special chapter of the report also uses **circularity indicators** to measure the company's performance in relation to the objectives connected with the transition to a circular economy.

REPORTING

This sustainability report covers the year 2020. Data for 2018 and 2019 are also reported to allow an assessment on the key indicators performance over the last three years.

There are two separate and cooperating companies operating at the plant: **KME Germany** (copper products) and **KME Special** (special products).The division into two legally separate companies took place in July 2020: in the report all data are however reported in aggregate form for the whole year; some data are also reported separately.

MATERIALITY MATRIX

The most relevant issues to be reported in the report were identified through discussion with the **management** and key **stakeholders** (employees, shareholders, institutions, local community, trade associations, research bodies, etc.). The tool used to select the most interesting indicators is the "**materiality matrix**", which measures the degree of importance attributed to the various aspects subject to reporting*.

SUSTAINABILITY GOALS

The company's activities and performance are also reported with reference to the **sustainability goals of the UN's "2030 Agenda"**.

**Stakeholders and company management were asked to assign a priority level from a minimum of 0 (not relevant) to a maximum of 100 points (very relevant) to the various aspects being reported. The evaluations make up the "materiality matrix".*

CONTEXT

ESG factors in credit assessment

ESG (*Environmental, Social and Governance*) factors are also becoming increasingly important in measuring the sustainability of investments and in credit assessment. In fact, the European Supervisory Authorities issued regulatory technical standards on February 2, 2021 that require banks to integrate climate and sustainability risks into their risk and strategy *frameworks* and to include specific policies related to ESG factors in the lending process.

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3 PARTICIPATION OF EMPLOYEES AND INCLUSION OF THEIR INTERESTS

4 COMPANY CONTRIBUTION TO THE DEVELOPMENT OF INFRASTRUCTURE AND THE RELATIONSHIP WITH THE REGION

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DEEPENING

The sustainability report
Essential tool for companies in the ecological transition

The first forms of **social reporting** date back to the 1980s. Created as a voluntary tool, their objective was to assess the impact of company activities on the community. In the 1990s, **environmental declarations were introduced** to report the most significant data from the point of view of environmental impact. Year after year, in the wake of a change that has increasingly affected society and the business world, reporting tools have progressively expanded their scope from social issues to the environmental dimension.

But an even more important turning point came in 2014, when the **European Directive on "non-financial reporting"** made sustainability reporting a mandatory

requirement for some specific types of companies, including banks, insurance companies, and listed companies. The purpose of that directive was to push companies to transparently report their environmental and social performance - in addition to their economic performance - and at the same time to encourage the construction of management systems that increasingly integrate sustainability into business strategies. Even more interesting is the fact that in recent years **an increasing number of companies** - in addition to those required by law - have decided voluntarily to present **their own sustainability report**. This is the sign of a profound change that is taking place in the world of economics and business culture.

Today we are facing another **important change, which will mark a further qualitative leap**. The Sustainability Report will take on an even stronger value in the new European context. With the **"Next Generation EU" Plan**, the European Union has put in place a strategy that aims to address the serious economic and social crisis caused by the pandemic through a profound change focused on **ecological and digital transition**. Among the actions envisaged by the European Union as part of the **Green Deal** there is also the **strengthening and extension of sustainability reporting**.

To this end, in April 2021, the Commission presented its proposal for a new Sustainability Reporting Directive. This proposal broadens the range of stakeholders, with a twofold objective: on the one hand to increase information on opportunities and risks related to sustainability, and on the other hand to support companies in their growth path within the ecological transition. It is no coincidence that the new Directive is connected to the **EU regulation on taxonomy**, the first system in the world for classifying sustainable economic activities.

The **sustainability report** is therefore becoming an **increasingly important tool** for companies not only to communicate their results but also to support innovation processes and strengthen **corporate strategies** in the context of the **ecological transition**.

The new European directive on sustainability reporting

"I warmly welcome the European Commission's proposal on corporate sustainability reporting and believe it can finally address the major data gaps currently plaguing the EU sustainable finance landscape. By integrating sustainability with financial data, we will create a 'one-stop shop' for all information about a company, including its green credentials, which will also be immensely useful for investors".

Christine Lagarde
President of the European Central Bank

CONTEXT

New rules for a sustainable economy

The European taxonomy regulation

On July 12, 2020, the European Union's Taxonomy Regulation came into force. A measure intended to help achieve the goals of the Green Deal.

This regulation establishes the world's first classification system for sustainable economic activities, which will make it possible to assess the environmental sustainability of investments.

The regulation establishes 6 environmental targets. It provides for classifying an economic activity as environmentally sustainable if it contributes to at least one of the following objectives:

- climate change mitigation;
- adaptation to climate change;
- sustainable use and protection of water and marine resources;
- transition to a circular economy, including waste prevention and increased use of secondary raw materials;
- pollution prevention and reduction;
- protection and restoration of biodiversity and ecosystems.

To be considered environmentally sustainable, economic activities will need to:

- contribute substantially to the achievement of at least one of the six environmental goals;
- not cause significant harm to any of the environmental objectives;
- be carried out in compliance with minimum social safeguards;
- conform to the "technical screening criteria".

1
Building a sustainable future

1.1 Next Generation EU

It was not just any ordinary year that this report covers. The entire world has been devastated by the pandemic. The health emergency has caused millions of victims and a serious economic and social crisis, laying bare many aspects of fragility and vulnerability of our societies.

We cannot think of getting out of such an upheaval by simply going back to the way it was before, putting what we experienced behind us. To ensure a better future for humanity, many things must change. And the first change needed is one that is summed up in the concept of sustainable development.

- **Environmentally** sustainable, because it is capable of preserving ecological balances and addressing the climate challenge.
- **Socially** sustainable, because it can reduce inequality and promote cohesion.
- **Economically** sustainable, thanks to companies driven by values of social and environmental responsibility that work not only to achieve the necessary economic and financial results, but also for the well-being of the community.

Focusing on sustainability means working to build the economy of the future: an economy on a human scale, respectful of the environment and at the same time capable of producing wealth and well-being for society.
The UN's 2030 Agenda for Sustainable Development is the most important reference project for finding solutions to global problems. The "Next Generation EU" plan constitutes the strategic axis for a sustainable development of Europe.

The construction of sustainable development depends on the choices made by governments and institutions, but also on the behaviour of businesses and citizens. KME is committed to this direction.

A GREEN DEAL THAT LOOKS TO THE FUTURE

Already at the end of 2019, even before the global health emergency, the European Commission had launched the Green Deal, with the aim of making the climate challenge the opportunity for a new development model.

With the Green Deal, Europe wants to become the first carbon neutral continent - i.e. with "zero net emissions" of greenhouse gases - by 2050, through a socially fair ecological transition and an industrial revolution capable of ensuring sustainable production.

When the Covid-19 pandemic broke out, the European Union took a further step in this direction. With the "Next Generation EU" Plan, it adopted an even more ambitious strategy, backed by an unprecedented financial commitment, to promote economic recovery by taking the ecological transition, along with the digital transition, as a strategic

priority. In March 2020, the new Circular Economy Action Plan was presented and at the same time the new European Industrial Strategy was adopted. Two different tools but with the same goal: to build a green and digital economy, to make Europe a global leader in sustainability and strengthen its economic competitiveness.

NATIONAL RECOVERY AND RESILIENCE PLANS

The European Union's Plan stems from the awareness that we cannot limit ourselves by repairing the damage caused by the pandemic, but we must think about the future and the next generations. For this reason, the Recovery Plan has as its fundamental pillars the ecological transition and the digital transition.

In support of the Next Generation EU plan, a financial commitment worth 750 billion euros has been

CONTEXT

The United Nations 2030 agenda

In 2015, the United Nations approved the Global Agenda for Sustainable Development, containing 17 goals (Sustainable Development Goals - SDGs) to be achieved by 2030. Evaluating the current model of development as unsustainable, the UN highlights the need for all countries of orienting global development towards sustainability. In order to achieve these goals, a strong commitment is required not only from governments but also from all social players, starting with businesses and citizens.

earmarked, in addition to the 1.1 trillion euros provided in the Multiannual Financial Framework for the period 2021-2027.
In order to use the European funding, each State will have to implement by 2026 its own National Recovery and Resilience Plan with reforms and investments aimed at the "Next Generation EU" objectives. At least 37% of investments must concern projects for the achievement of climate targets. All expenditures must in any case be consistent with the objectives of the Paris Climate Agreement and the principle of "do no harm to the environment". This is an extraordinary opportunity to accelerate the construction of sustainable development, orienting public policies and private investment in this direction, with the aim of a solid and lasting economic recovery.

CONTEXT

The new European industrial strategy

During 2020, the European Commission presented its new industrial strategy.
The goal is to sustain Europe's industrial leadership by directing industrial policy toward three priorities:

- Maintain and strengthen the competitiveness of European industry on a global level;
- Make Europe a carbon neutral continent;
- Develop digital infrastructure.

The strategy defines the drivers *of* Europe's industrial transformation and proposes a set of actions to accelerate the green transition to an increasingly **green, circular and digital** economy.

1.2 The copper industry in the ecological transition

THE RED METAL THAT HELPS THE GREEN ECONOMY

Copper plays a very important role in the ecological transition. Thanks to its characteristics, it is the most widely used metal in the key sectors of the green economy: renewable energy, energy efficiency, circular economy, smart building, sustainable mobility.

In short, red gold - as copper is called - is a critically important material for the green economy and the ecological transition. It is an essential material for the IT systems - smart grids, 5G fiber optics, home automation - that are transforming our cities into smart cities.

COPPER IN THE CIRCULAR ECONOMY

Why does copper play such an important role in the circular economy? First, because it can be recycled without losing its properties. Recycled copper is

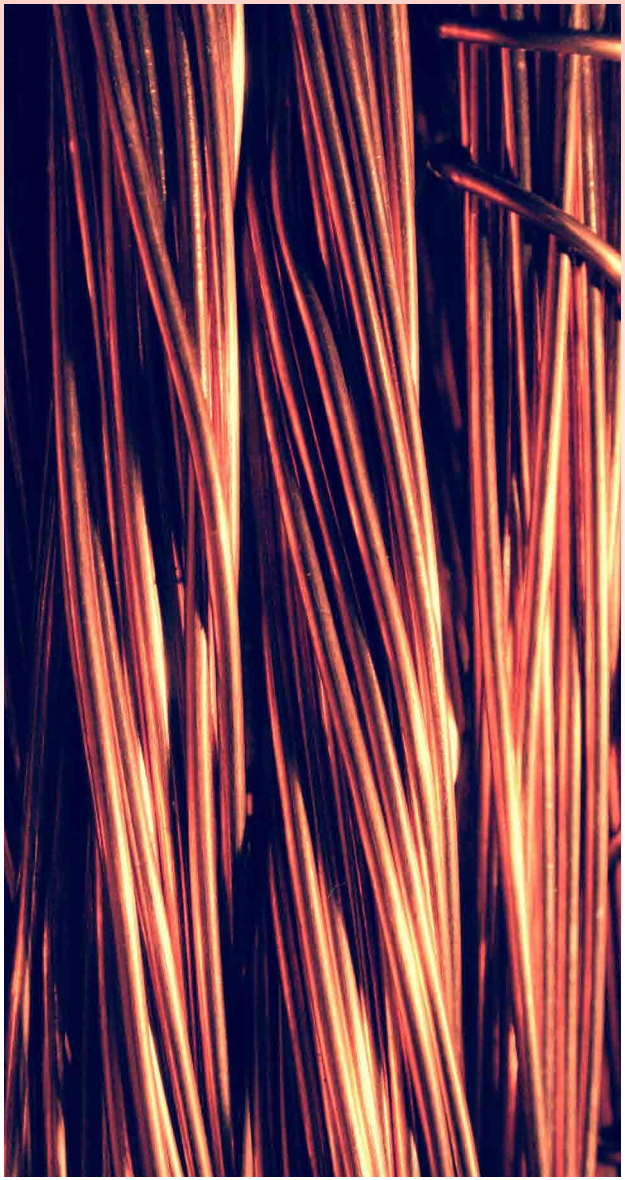
no different from mine-produced copper. Once the useful life of a product is over, it can therefore be recovered and reused to create new products. As can be imagined, it is mainly the most technologically advanced countries that recover and recycle copper, thus reducing the consumption of virgin raw materials and dependence on exporting countries. And the high recyclability of scrap, at the same time, minimizes copper's contribution to waste generation.

But that's not all: another important quality of copper is its durability. The life cycle of a copper product is very long. Durability is another strong point in respect to the principles of the circular economy. This is why we can speak of a real permanent resource, essential for the circular economy development.

DEEPENING

An eternal material

Who knows if the alchemists, choosing to adopt the ancient Egyptian *ankh* symbol to indicate copper, were thinking of something similar to what we today call "circular economy". For the ancient Egyptians, in fact, that symbol evoked eternal life. And if there is a material that, because of its potentially infinite recyclability, can be considered eternal - or rather "permanent" - it is precisely copper. What is certain, even without bothering the ancient Egyptians or alchemists, is that copper is today a major player in the circular economy.



THE BENEFITS OF RECYCLING

Approximately one third of copper's global demand is met through recycling. In Europe the percentage is even higher: according to the International Copper Study Group in our continent about 50% of the copper used comes from recycling. This helps to meet the growing demand (+250% since the 1960s) and at the same time reduces the environmental impact of production. It is clear that this also reduces dependence on raw material producing countries.

But it is above all the environmental advantages that stand out. First of all, the lower consumption of natural resources: a fundamental issue in a planet with limited resources and where the global consumption of material, in the absence of corrective measures, could double in the next 30 years. Then there is the lower consumption of energy: recycling requires up to 85% less energy than primary production. And among the

environmental benefits there is also the reduction of CO_2 emissions: only on a European scale it is estimated to lower emissions, thanks to recycling, equal to about 30 million tons per year.

In our continent, more than 2 million tons of copper are reused annually, from end-of-life products and production scrap recovered directly within production cycles. The increase in recycling is also due to innovative technological solutions that allow greater efficiency in the refining of secondary scrap and in the processing for the melting of high purity copper scrap.

A CRUCIAL MATERIAL FOR THE ENERGY TRANSITION

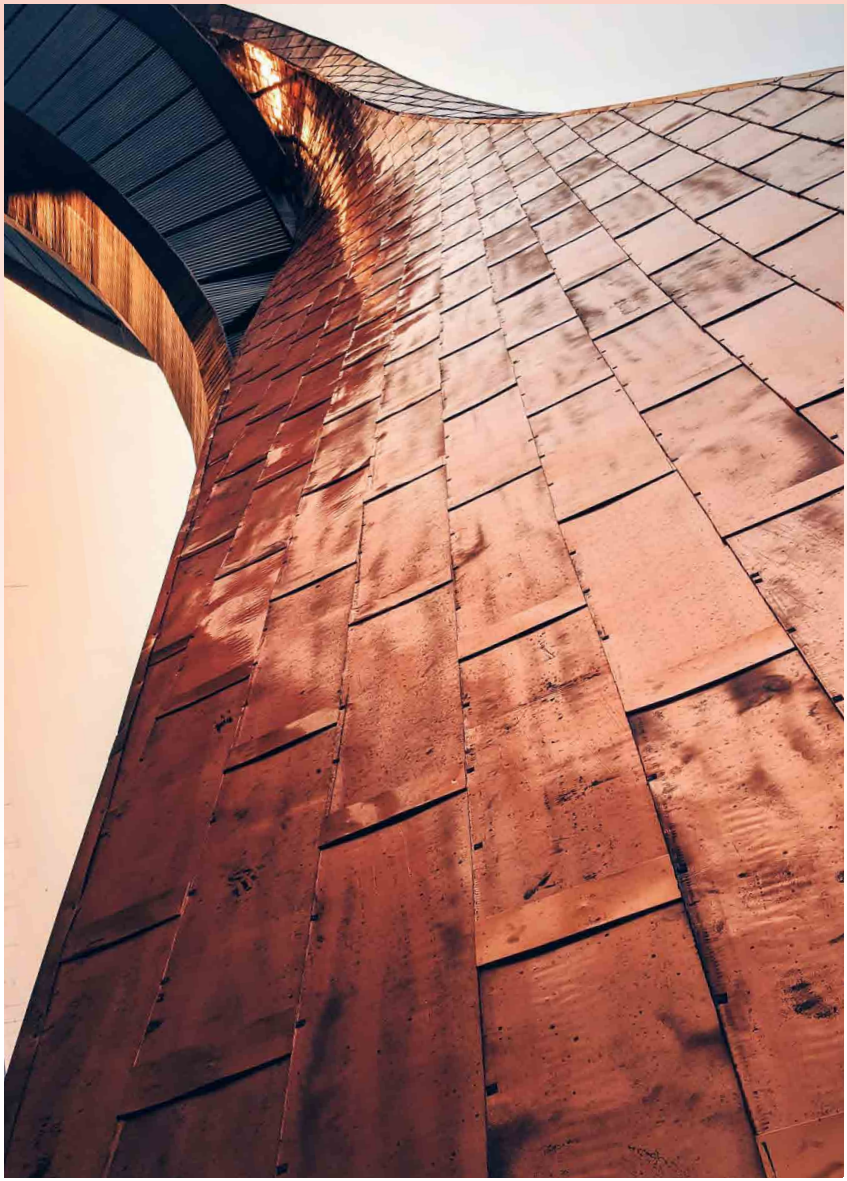
Copper is the best conductor of heat and electricity; only silver is a better conductor, but being a precious metal it cannot be used on a large scale.Thanks to its characteristics, copper is the most widely used metal in key sectors of the green economy: from renewable energy to high-efficiency plants, from smart building to sustainable mobility. Copper is therefore a crucial material - but perhaps we should say the crucial material - in the energy transition. It is essential both for renewable energy production plants - from photovoltaic to wind, from hydroelectric to geothermal - and for transmission and distribution networks. It is fundamental for e-mobility: car production, charging stations, batteries. It plays an important role in the energy efficiency of buildings and information systems - smart grids, fiber optics, home automation - that are transforming our cities.

A GROWING DEMAND FOR COPPER

The energy transition, therefore, requires the use of a large quantity of materials. Copper, first of all. And then cobalt, nickel, graphite, manganese, lithium,

palladium, zirconium, platinum, rare earths. These are the so-called "critical raw materials". Renewable energy systems, for example, require 4 to 12 times more copper than fossil fuel power generation. While electric vehicles use up to four times more copper than conventionally powered vehicles, it is estimated that copper demand for electro mobility could rise fourfold in the next seven years.

The International Energy Agency's report "Role of Critical Minerals in Clean Energy Transitions" predicts,



in connection with moving away from fossil fuels and implementing climate agreements, a sharp increase in copper and "critical materials" consumption over the next twenty years. The dimensions are staggering. Overall, their consumption could increase by as much as 6 times by 2040 compared to current values. A problem with environmental implications but also economic, due to rising prices, and geopolitical as the supply of these materials depends on a limited number of countries.

The demand for copper is therefore set to grow impetuously. It is expected to double to an average of 60 million tons per year. And prices, according to analysts, are also set to skyrocket. The price of the raw material has more than doubled in the last year, exceeding the threshold of 10 thousand dollars per ton.

DEVELOPING THE CIRCULAR ECONOMY

The best solution is to accelerate the development of the circular economy. Use resources even more efficiently. Design products to be more durable, reusable and repairable. Reduce production waste as much as possible. Increase recovery. Develop industrial symbiosis. Responding to the growing demand for copper not through mining, but primarily through recycling and greater resource efficiency.

1.3 Our commitment

As in the early 1900s, when the plant was one of the protagonists of electrification in industry, today, after more than 100 years of history, it will support the turn towards a sustainable economy characterized by renewable energies and circular economy.

Our copper products are made with a minimum of CO_2 and help to reduce harmful carbon emissions in other fields during the products lifetime.

Our factory is a responsible player and strives to protect the environment through reducing emissions and overall environmental impact.

The idea of copper recycling has taken a firm place in economic activities since the beginning of copper production. So we work embedded in the European metal industry to establish copper cycles and to save resources. For years, our activities have focused on the circular economy as a pillar of sustainability in development. All copper-containing waste is recycled. All other waste is recycled or returned to other use.

DEEPENING

KME - On the way to climate neutrality

KME makes a significant contribution to climate protection with sustainable corporate measures. The transformation of production methods and associated operational processes is in focus of the targeted development towards climate neutrality.

Copper is the basis of all KME entrepreneurial activities . The handling of this sustainable material is a commitment to ecologically sensible action. Due to its outstanding technical and environmentally friendly properties, copper is indispensable for the energy transition and the generally envisaged transformation to climate neutrality. Above all, its unlimited recyclability makes the material particularly climate-friendly.

Several important measures in this direction have already been taken and their implementation continued in 2020. Further measures are underway in 2021, and more are planned in the coming years.

STATE OF DEVELOPMENT

ENERGY MANAGEMENT

With its certified energy management according to ISO 50001, KME makes an important industrial contribution to the conservation of resources.

COPPER RECYCLING

Numerous pioneering measures for the use of innovative recycling technologies as well as for closing material cycles, increasing the recycling rate and recovering heat have already been implemented. Results and benefits far exceed the industry standard. Today, we already rely on a very high recycling rate of over 75% in our foundries.

KME ECOLOGICAL COPPER

KME offers the market a material with a particularly climate-friendly CO_2 balance, which is ensured by the use of exclusively secondary raw materials (100% copper scrap). We thus avoid the use of new metals, which are highly energy-intensive in production.

CURRENT ACTIVITIES

TRANSITION ENERGIES

KME has been working continuously for many years on process optimisations to avoid environmental pollution. Currently, various development projects are creating the technological prerequisites for replacing fossil fuels with renewable energy sources to an even greater extent. Already today, more than 60% of the electricity used comes from renewable energies.

NEW GUIDELINES

A roadmap for climate neutrality for KME is currently being drawn up. After identifying the necessary technological prerequisites, the corresponding measures will be developed. The solutions go beyond the current state of the art and are partially not yet available for the processes of the non-ferrous industry.

METALS PRO CLIMATE

The initiative "Metals pro Climate" illustrates the contribution of the non-ferrous metals industry to climate protection through scientific and technology-based solutions. The industry's savings potential is an essential factor in industrial activities against global warming. Chairman of the initiative is Ulrich Becker, former CEO of KME Group.

FURTHER MEASURES

- KME continues to work on continuous energy efficiency improvement among all operational areas.
- The CO_2 emission values of the company and its products are completely recorded and balanced. Participation in various benchmarking projects in the copper industry ensures a correct status assessment at all times.
- As part of the CDP sustainability ranking, we report our CO_2 emissions on a voluntary basis. The CDP is a non-profit organisation that promotes transparent climate reporting.
- By committing to the Science-Based Targets Initiative (SBTi), we oblige to set a science-based climate target to reduce our CO_2 emissions, which will contribute to limiting global warming to 1.5°C in accordance with the Paris Agreement and to become climate-neutral by 2050 at the latest.
- For the efficient realization of the company's goal of climate neutrality, KME works together with competent external partners. Customers and suppliers are also involved in order to achieve the most far-reaching results possible.

DEEPENING

Copper, essential in times of crisis

Copper is now needed to manufacture essential medical equipment, to keep vehicles on the road, to keep electrical power flowing, and to ensure suitable food supply. Life as we know it would come to a sudden stop without copper.

Copper and the medical fight against COVID-19: the health industry relies upon copper for the delivery of medical gases and copper is needed for medical equipment used for diagnostics as well as equipment to treat and to monitor patients' progress.

Copper is essential to the economy: the copper and copper alloy semi-manufacturing industry is an essential contributor to the continuous operation of the global economy.

Copper is needed for generation and distribution of electricity to homes, shops and industry.

Copper is used in the transport system delivering power to trains and streetcars, in signal wire, in vehicles for the distribution of power, and on-board computers.

Modern computing would not exist without copper in circuit boards and processors and essential air-conditioning in data-centres.

Copper is a global product and relies on international supply chains. Much copper is mined in countries and regions where copper demand is low and shipped to countries where copper is needed. It is essential that ports remain open so that they can handle copper that is being trans-shipped.

The copper industry is essential during the COVID-19 pandemic and will be needed more than ever once the crisis has passed and the global economy returns to normal.

Copper keeps people safe: copper helps keep food fresh and long-lasting for extended periods of time by ensuring freezers, chillers and refrigerators do their job of keeping food cold.

Copper is essential in the food-canning industry for the welding of cans.

Copper is used in air-conditioning units to lower the ambient temperature in countries with hot and humid weather and also to provide heat in countries with colder weather.

In general the copper processing industry is a more low-risk workplace for the spread of COVID-19: the copper semis industry has a highly efficient manufacturing process. Therefore, existing working practices at KME are well structured which means that as an effective protective measure, the primary requirement for distance between persons is easily implemented and enforced in the workplace.

2
The companies

Two companies

In the plant there are two operating companies, distinct and cooperating: KME Germany (copper products) and KME Special (special products).

The division into two legally separate companies took place in July 2020.

Effective as of July 1, 2020 KME Group has bundled its operations and sales activities on Osnabrück Site in separate legal entities, following a corporate reorganization to reflect the specialization and divisional competences:

The finalization of spin-offs and renaming consist of:

- **KME Germany** (former Fricke GmbH) executes operations and sales of the "Copper Products" Business Unit, including foundry and central services;
- **KME Special** (former KME Germany & Co. KG) executes operations and sales of the "Special Products" Business Unit.

Both companies will continue to carry out their respective activities in the Osnabrück plant and managed as a joint operation under KME SE, as their 100% shareholder, which also controls KME Mansfeld GmbH in Hettstedt, which is also producing Copper semi finished products. This reorganization will allow to further focus KME expertise in its two specialized divisions and to offer its customers an efficient and dedicated service.

Our history

1873 Hermann Kämper gives up his position as technical and business director of an important wire mill to become an entrepreneur. On the 1st of July he founds together with the brothers Carl and Hermann Witte the Wire and Pin factory Witte and Kämper, in which iron wire is drawn and also further processed into pins.

1888 On this arch of a new and additional production ,which could start with the existing factory equipment, the engineer Emil Schemmann decides on the important material in the future: copper

1890 On the initiative of Hermann Witte it comes off to a conversion to a public limited company, the "Osnabrücker Kupfer- und Drahtwerk" (OKD) with an original capital of 1,2 Mio RM

1919 The Gutehoffnungshütte Aktienverein, Oberhausen, acquires the majority of the OKD share capital. The company subsequently grows by starting cable production and becomes internationally known through exports.

1945 On 25th March, 1/3 of the production facilities and half of the buildings are destroyed. It is no longer possible to continue production. The 3rd of April, the OKD is occupied by British troops. In successsion the reconstruction of the destroyed plant begins. The first order after the war are shaft covers for the "MS Europa". The client is Norddeutscher Lloyd.

1966 The 28th December 1966, the entry in the commercial register is made by the merger of all copper-processing companies belonging to the Gutehoffnungshütte AV group to form Kabel-und Metallwerke Gutehoffnunsghütte AG.

1982 Kabelmetal electro GmbH, Hannover, founded one year earlier, is sold to the French company Les Cables de Lyon, based in Clichy. Kabelmetal secures a minority stake in Les Cables de Lyon.

1987 The Kabel- und Metallwerke Gutehoffnungshütte AG, Osnabrück, takes over the majority holding in Stolberger Metallwerke GmbH & Co. KG, Stolberg. One year later the R. & G. Schmöle Metallwerke GmbH & Co. KG, Menden, are also taken over.

1989 The company name is shortened to KM-kabelmetal Aktiengesellschaft.

1999 The Italian SMI- Società Metallurgica Italiana SpA, Florence, acquires majority stake in KM share capital.

1995 On June 14th, the Annual General Meeting of KM-kabelmetal AG approves the merger of the three largest copper processors within the SMI Group, thus creating a new European business unit under the umbrella of KM Europa Metal AG (KME).

1998 Following the contribution of the non-ferrous metal activities of Europa Metalli, based in Florence, and Tréfimétaux, based in Paris the company is renamed KM Europa Metal AG, or KME for short.

2006 The location in Osnabrück celebrates its 125th anniversary.

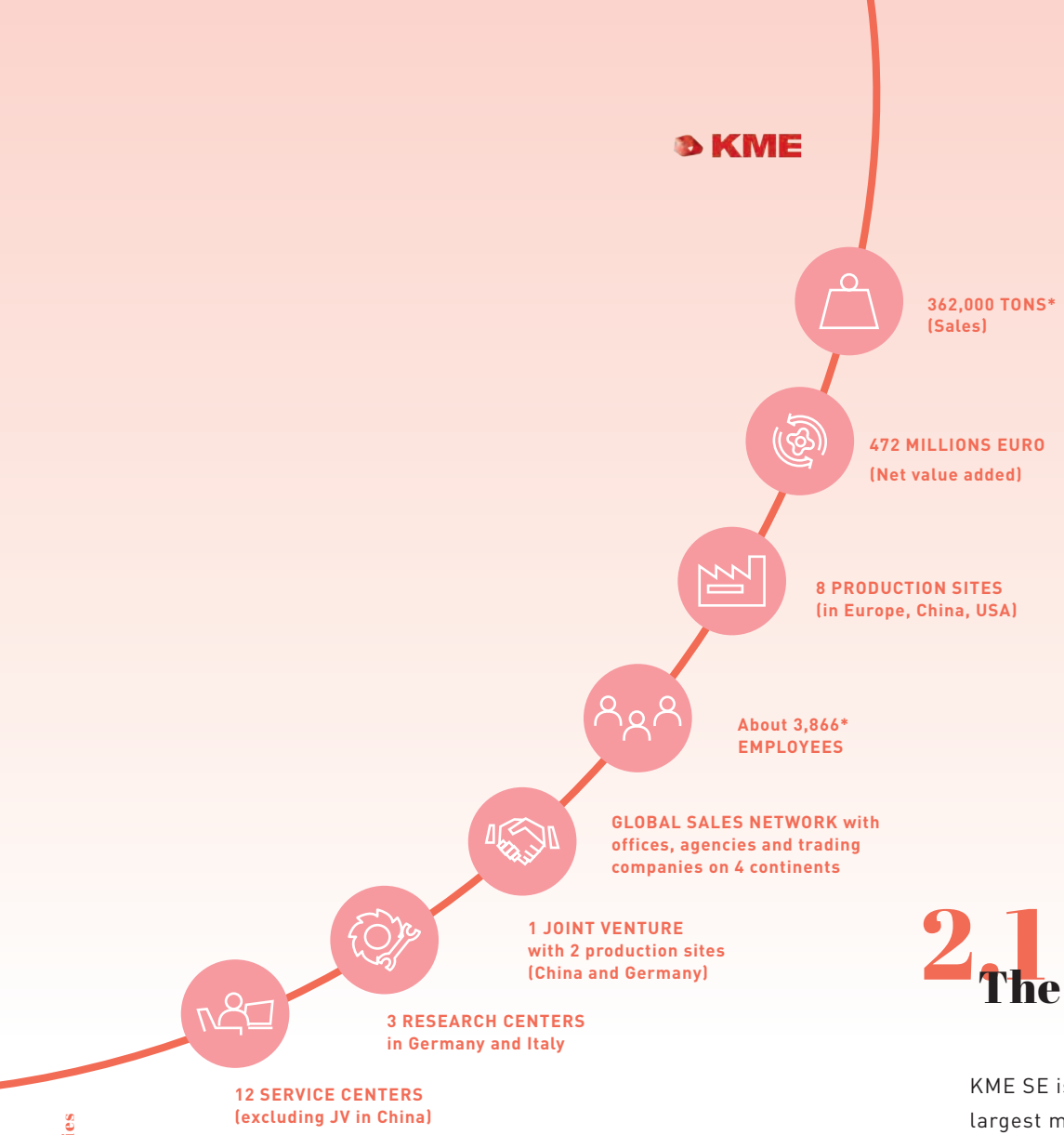
SMI-Società Metallurgica Italiana changes its name to KME Group S.p.A., making the link with it´s indutrial and productive reality more direct.

2007 GIM General Metallurgical Industries is integrated into Intek S. p. A. . In order to strengthen the integration between the different companies of the group, the KME Group decided to introduce the single brand KME© for all it´s subsidiaries. As a result, KM Europa Metal AG is renamed KME Germany AG, Europa Metal AG on 1st of May, 2007.

2008 On April 1st, 2008 KME Germany AG transfers it´s operating business to it´s new subsidiary, KME Germany AG & Co. KG.

2019 The conversion of KME AG into KME SE is followed by a 100% takeover of MKM Mansfelder Kupfer und Messing GmbH and the sale of brass and tube production in Germany and Spain. In addition, 49% of Trefimetaux SaS in France was acquired.

2020 KME Group has bundled its operations and sales activities on Osnabrück Site in separate legal entities, following a corporate reorganization to reflect the specialization and divisional competences.



2.1 The KME Group

KME SE is one of the world's largest manufacturers of copper and copper alloy materials. Controlled by Intek Group S.p.a, KME Group has production facilities in **Europe** (Germany, Italy, France, Spain), **China** and the **United States**.

* *Excluding Trefimetaux Group and Joint Venture in China*

FIG 2.1 Group structure

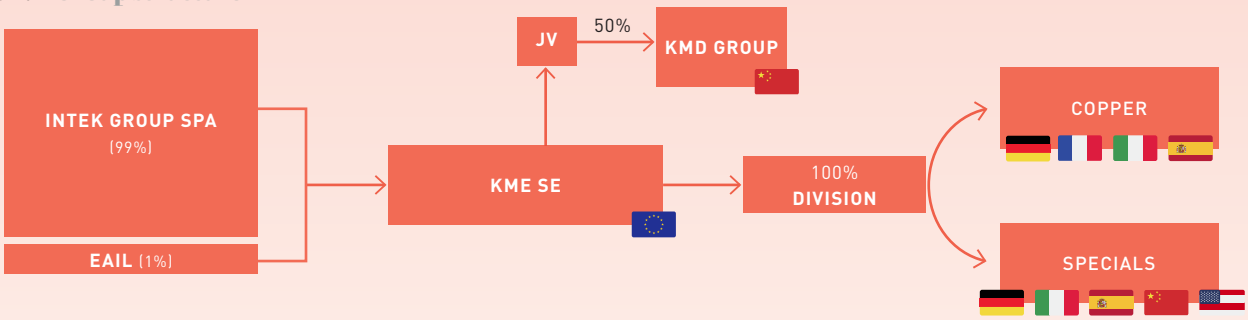
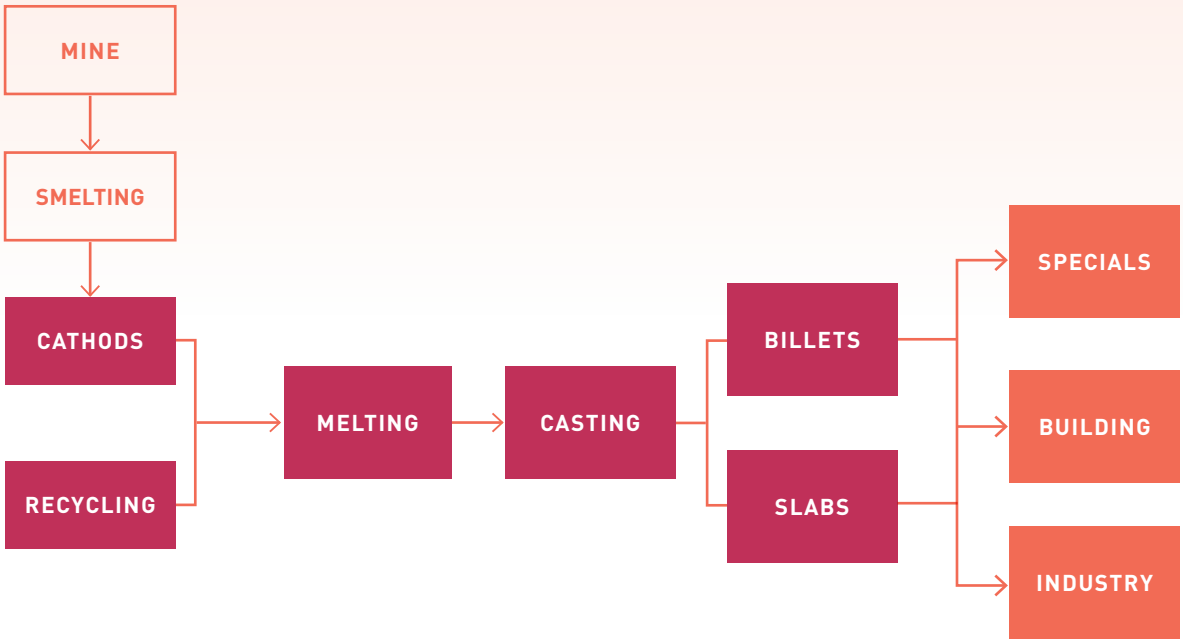
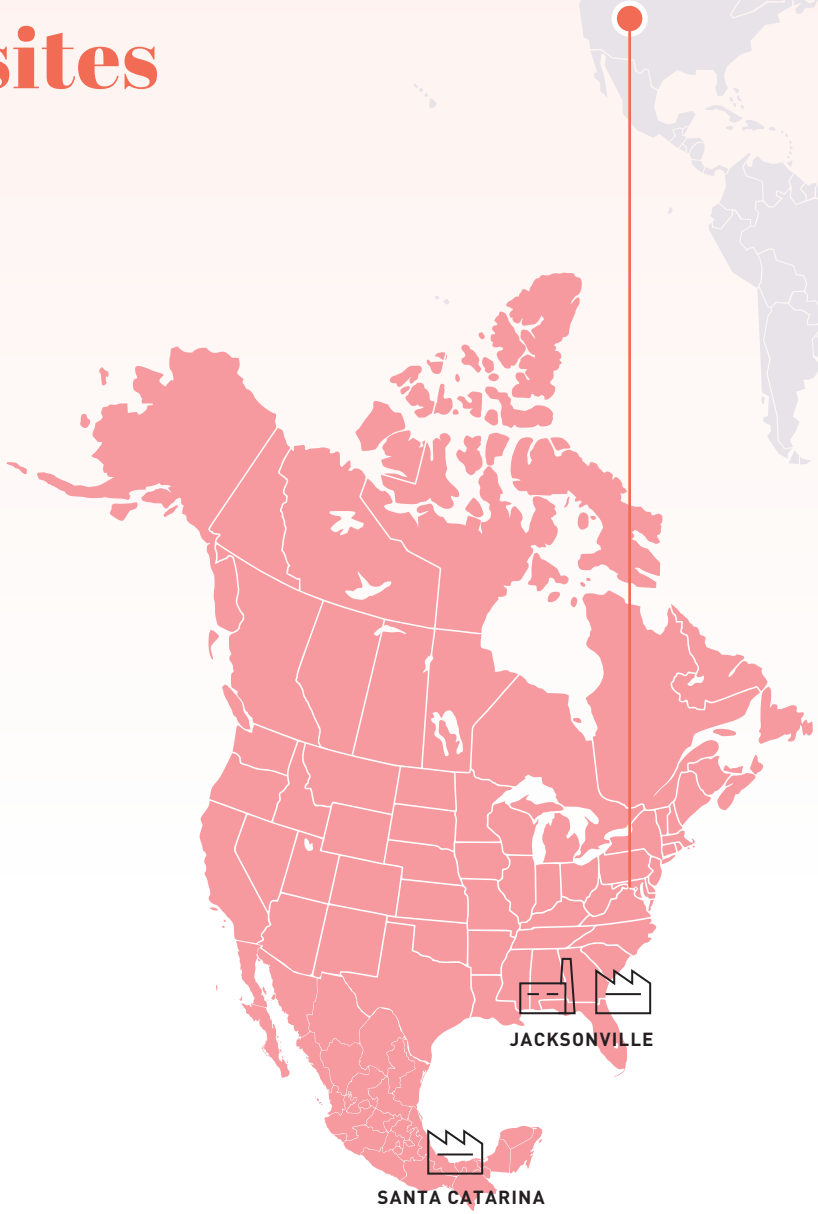


FIG 2.2 KME value chain



KME

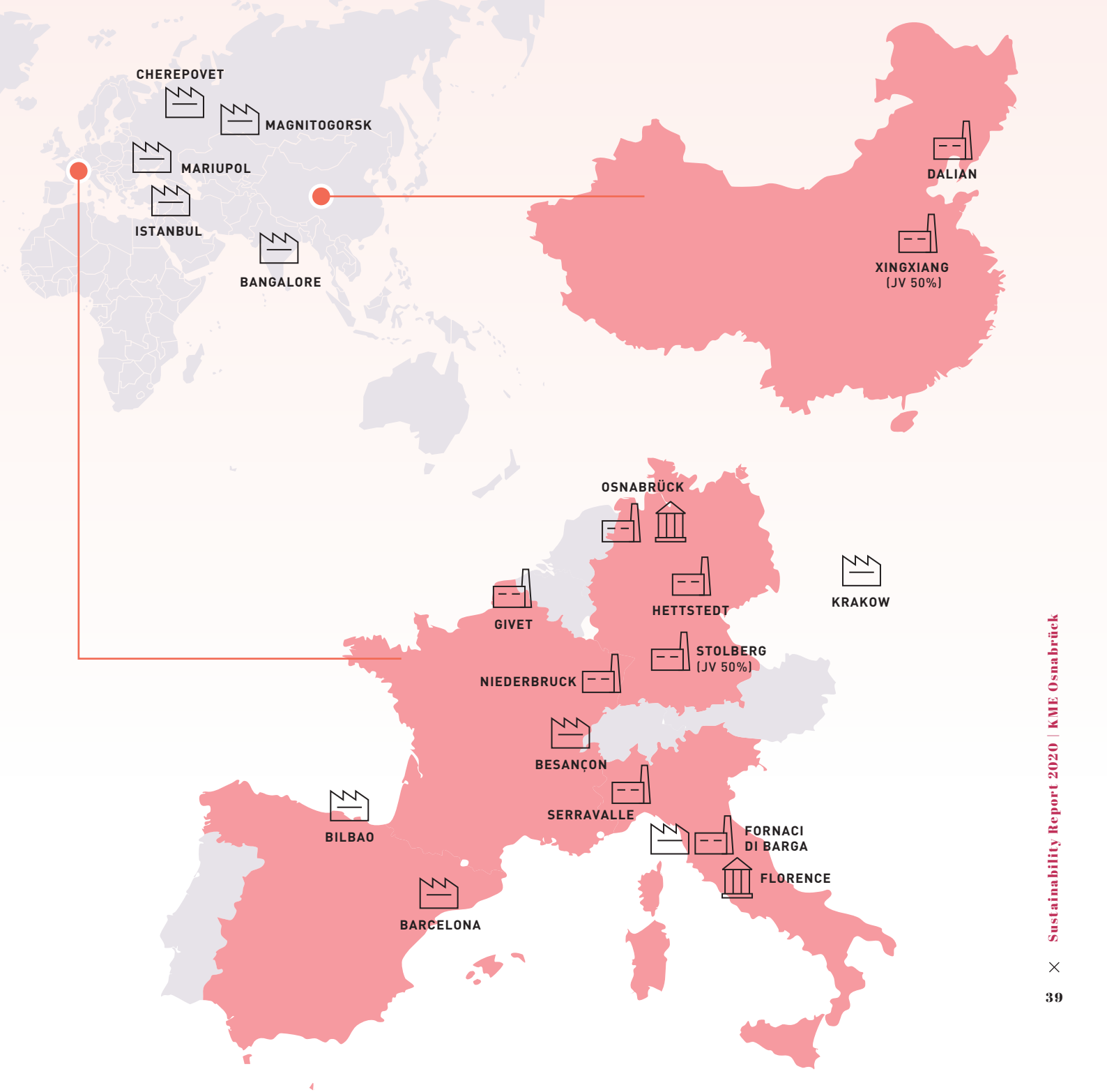
Production sites



PRODUCTION PLANT

SLITTING CENTER

HEADQUARTERS


CHEREPOVET
MAGNITOGORSK
MARIUPOL
ISTANBUL
BANGALORE
DALIAN
XINGXIANG
(JV 50%)
OSNABRÜCK
HETTSTEDT
KRAKOW
GIVET
STOLBERG
(JV 50%)
NIEDERBRUCK
BESANÇON
SERRAVALLE
FORNACI
DI BARGA
FLORENCE
BILBAO
BARCELONA

KME

Overview

COPPER PRODUCTS

ROLLED

- Used in the electric and electronics industries, roofing and cladding, automotive, renewable energies, power transmission, mechanical industry, minting and telecommunications.
- Construction, mechanical, architecture

BARS

- Flat bars, round bars, square bars and profiles made of copper and low-alloyed copper alloys
- Power engineering, electrical engineering
- Wind power
- Switch gear construction, buses, transformers, wind power (onshore/ offshore

WIRE

- Wires and strands in cables and conductors, railway materials
- Lightning protection/ earthing, power engineering, heavy current engineering, telecommunications, solar power, offshore/submarine cables
- Automotive, rail, aviation, space travel, packaging industry

TUBES

- Plumbing tubes for sanitary and heating installations
- Copper tubes for air-conditioning & cooling
- New building and restoration

SPECIAL PRODUCTS

- Tube moulds, cooling plates and casting wheels for melting and casting
- Extruded special products from rods, bars, profiles and tubes with applications in welding and machining
- Pipes, fittings, flanges, tubes and tube fittings for seawater applications
- Steel & Metal Industry, Machine Building, Chemical Industry, Shipbuilding, Offshore

Key end markets

KME is well positioned to meet the growing demand in its key end markets

STEEL

- #1 globally
- Highly customised products developed in close collaboration with customers and in-house or external research facilities
- ATSM - Advanced Thin Slab Mould plate in field ramp up
- Fibre optical temperature measurement under launch

AUTOMOTIVE

- Copper will experience a higher share in programs
- Stability of board nets will require higher share of copper
- 48V technology requires higher battery stability
- Autonomous driving and digitalization will increase electrical components
- Charging stations will drive copper components

CONSTRUCTION

- Modern roofing and cladding solutions
- Classic sheets and coils are manufactured in state-of-the-art production facilities according to EN 1172 and KME's own strict guidelines
- Plumbing tubes for sanitary and heating installations
- Modern roofing and cladding solutions
- Classic sheets and coils are manufactured in state-of-the-art production facilities according to EN 1172 and KME's own strict guidelines
- Plumbing tubes for sanitary and heating installations

OTHER

- Wide and diverse range of industrial rolled pro-ducts, tubes and special products
- Alloys based on copper-nickel, copper-zinc and copper-aluminium (cladded materials) products highly resistant to the extremely corrosive effects of sea water in the marine industry.
- Copper tubes for air-conditioning & cooling

KME

The history of the KME Group

KME's history dates back to 1886. Since then, it has developed copper production activities in Europe. In 2006, it acquired a majority stake in China, where it further expanded through a joint venture in 2014. Since 2017, it has also been operating in the U.S.

1902
The Orlando family takes over the management of SMI (Società Metallurgica Italiana). SMI, founded in 1886, was already listed on the Milan Stock Exchange in 1897.

1990
SMI acquires 76.9% of Germany's leading producer of semi-finished copper and copper alloy products KM - Kabelmetal AG and becomes the GIM-SMI Group.

1995
GIM-SMI Group establishes KM Europa Metal AG (KME). KME concentrates the management of the Group's European activities in a single company, located in Germany, which controls 100% of the Group's industrial activities in Germany, France, Italy and Spain. In the same year, KME and the Finnish Outokumpu Group set up an equal joint venture in LOCSA (Laminados Oviedo Cordoba S.A.) based in Oviedo, Spain, for the production of rolled products.

1999
SMI acquires 98.17% of KME's shares through a voluntary tender.

2005
Intek S.p.A. becomes the majority shareholder.

2006
SMI changes its name to KME Group S.p.A. and increases its stake in DD Heavy Machinery to 70%.

2012
KME Group S.p.A. incorporates Intek S.p.A. and changes its company name to Intek Group S.p.A.

2014
The plumbing tubes business in UK is sold to Mueller and a JV is set up with Golden Dragon and Chogquing Wanzhou Economy Technology Development Co.

2015
Pipe production at the Osnabrück plant is transferred to Menden, optimizing the plant structure.

2016
KME sells 49% of its stake in KME France S.A.S. (now Tréfimétaux S.A.S.) to European Copper Tubes Limited. The sale includes part of the assets of the plants in Givet and Niederbruck (France) and Serravalle Scrivia

(Italy). KME now operates these plants through its subsidiary Tréfimétaux S.A.S. in a joint venture with European Copper Tubes Limited.

2017

Expansion into the U.S. market through the acquisition of a production facility serving the U.S. Navy program.

2019

- KME AG changes its legal form to SE, European Company;
- KME SE acquires 100% of MKM Mansfelder Kupfer und Messing GmbH;
- KME Brass Italy, KME Brass Germany, KME Brass France, Kabelmetal MessingBet and KME Ibertubos, as well as the German copper tube business in Menden are sold to the Chinese group Hailiang Netherland B.V.;
- KME SE buys 49% of the shares of Tréfimétaux S.A.S., acquiring 100% control.

2020

The KME headquarter in Osnabrück is divided into two companies: KME Germany (copper products) and KME Special (special products).

DEEPENING

KME
Leader in technological innovation

- Intellectual property of approximately 50 patents and 60 trademarks related to alloys and processes.
- A team of more than 70 research and development staff based in three research centers in Italy and Germany.
- Current areas of research and development include:
  — Materials processing and recycling (separation of tin and copper scrap).
  — Energy efficiency and process redesign.
  Coating enhancements for extreme temperature conditions and high casting speeds.
  — Use of automation in manufacturing and digital development.

2.2 The plant

The plant occupies an area of 575,297 m^2, out of which 388,399 m^3 buildings and sealed areas.

There is also a **research center**, supporting innovative developments, which includes approx. 50 patents and 60 trademarks.

Sales
107,449 tons

(Rolled, Billets for tubes, Engineered, Extruded and Drawn, Marine applications, Tube Bundles)

Employees
1,661

Copper products

Industrial rolled copper

KME offers its customers a wide and diverse range of industrial rolled products, high quality and service to provide the best solution for specific needs, e.g.:

- the electric and electronics industry;
- household appliance manufacturing;
- air conditioning/refrigeration;
- mechanical industry.

- metal small wares,
- telecommunications
- automotive industry

COPPER PRODUCTS ARCHITECTURE

Durable **TECU**® products from KME give plenty of opportunities for modern architecture in roofing and cladding. The striking natural surfaces in copper and copper alloys enable singular design.

TECU®ECOLOGICAL COPPER

for a greener, more responsible architectur

ROOFING

TECU®Classic sheets and coils are manufactured in state-of-the-art production facilities according to EN 1172 and KME's own strict guidelines.

They are made from Cu-DHP - oxygen-free, phosphorus-deoxidized copper with limited residual phosphorus.

Cu-DHP is outstandingly malleable, regardless of temperature or rolling direction.

Special products

Melting & casting

The BU Engineered Products has all the resources and technical expertise for designing and manufacturing high performance and innovative products for the melting and casting industry.

- AMT — Advanced Mould Technology
- AME — Advanced Mould Engineering
- AMM® — Advanced Mould Materials
- AFM® — Advanced Funnel Mould
- AMC — Advanced Mould Coatings
- AME — Advanced Mould Engineering
- ACT — Advanced Crucible Technology
- ASM® — Advanced Slab Mould
- AMM — Advanced Mould Monitoring
- ATSM — Advanced Thin Slab Mould

Extruded & drawn products

Special requirements demand special solutions. The Special Division, of which the BU Extruded & Drawn Products is a part of, supplies just this sort of solution - often developed in close collaboration with customers and in-house or external research facilities.

- Copper- Silver
- ProCu®: Hollow Profiles and Profiles
- ANCU®-Anodes
- OSNA-Cu58®
- ELBRODUR®
- OSNISIL®

Marine applications

Shipbuilding and offshore technology applications place especially high demands on the materials they use. KME developed products made of alloys based on copper-nickel, copper-zinc and copper-aluminium are highly resistant to the extremely corrosive effects of sea water.

- OSNA® 10/30 tubes and fittings for seawater applications
- OSNALINE® tube bundles
- Fittings of large diameter made of special material for marine shipbuilding

2.3 Governance dated 2021

KME Germany
Managing Directors: Kakha Avaliani, Claudio Pinassi
Chairperson of the Supervisory Board: Diva Moriani

KME Special
Managing Directors: Axel Gerle, Dr. Bernhard Hoffmann

The managing directors represent the companies in and out of court.
A Supervisory Board has been appointed for the company KME Germany.The tasks of the Supervisory Board are defined in § 111 of the German Stock Corporation Act (Aktiengesetz) and essentially consist of supervising the managing directors. Furthermore, the Supervisory Board commissions the auditor to audit the annual financial statements in accordance with the German Commercial Code.
The management of KME Special is supervised by the executive body of KME SE.
The auditing company for both companies is Deloitte GmbH.

KME Germany

Members of the Supervisory Board

Diva Moriani
Managing Director
(Chairperson of the Supervisory Board)

Marco Miniati
Executive Director
(Vice-Chairperson of the Supervisory Board)

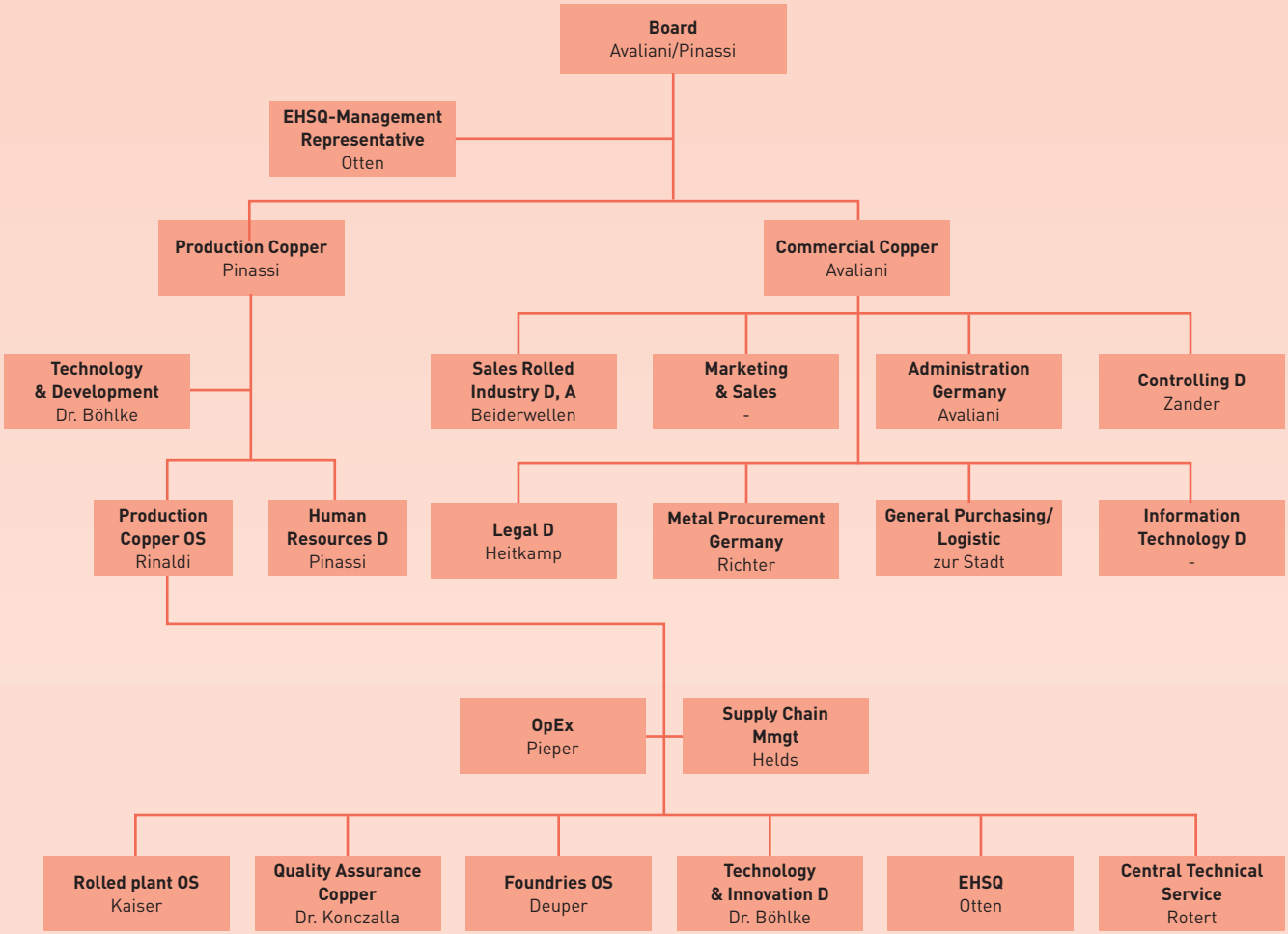
Ulrich Becker
Executive Board

Pierpaolo Di Fabio
Executive Board

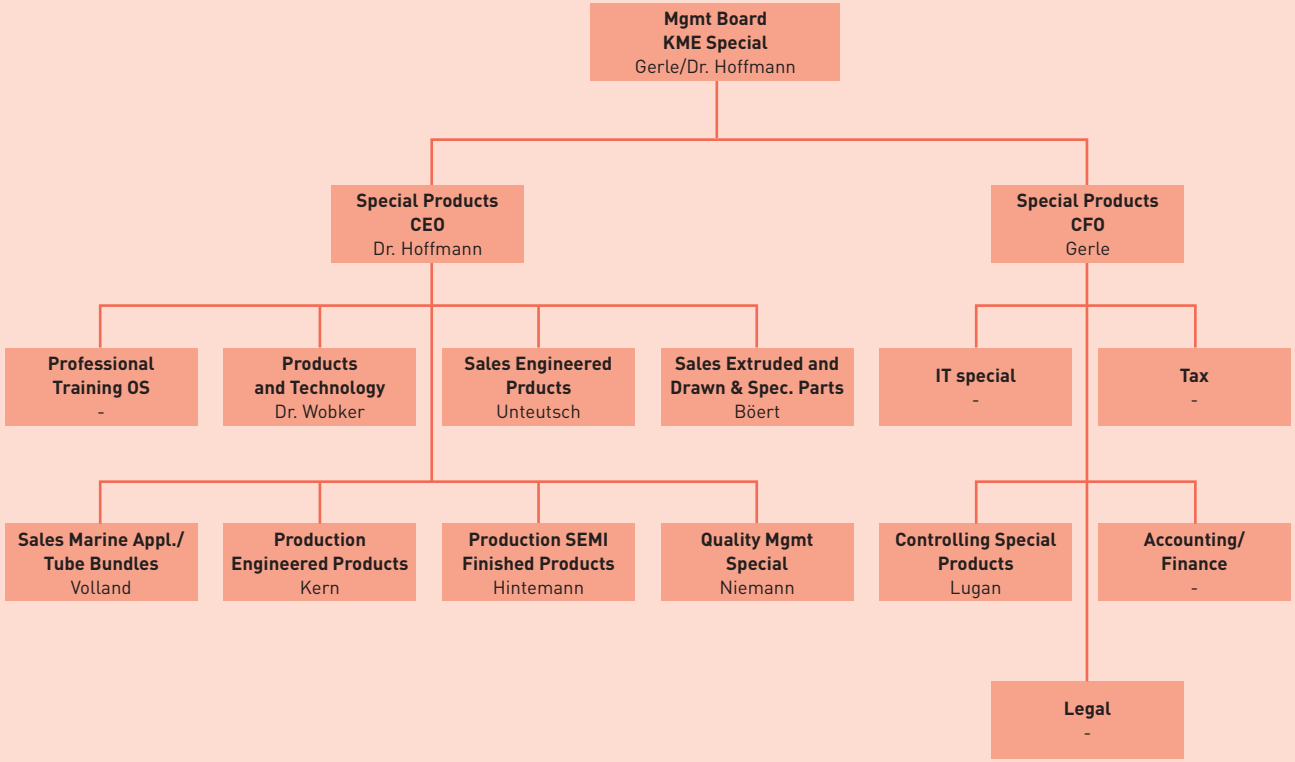
Volker Asmus
Works Council

André Lücke
Works Council

Copper Division
Organigram KME Germany



Special Division
Organigram KME Special



2.4 Code of conduct

The company operates according to principles of social responsibility. It is aware of the consequences of its business decisions and actions in economic, technological, social, and environmental terms, based on its code of conduct.

KME voluntarily contributes to the long-term well-being and development of a global society at every possible point in the places where it operates. It is oriented towards ethical values and universal principles, in particular integrity, honesty and respect for human dignity. The code of conduct applies in all KME units, as well as any possible point for its suppliers and other parts of the value chain.

KME actively works to ensure that the following core values for social responsibility are put into practice in business management and are respected.

KME

ADHERENCE TO LAWS

- KME complies with the applicable laws and other legal requirements of the countries in which it operates. To this end, KME has systems in place to control, for example, the identity of its customers and business partners to prevent money laundering. KME's philosophy is to establish business relationships only with fully compliant partners.

ORGANIZATIONAL INTEGRITY AND GOVERNANCE

- KME orients its activities towards ethical values and universal principles, in particular integrity, honesty, respect for human dignity, openness and non-discrimination based on religion, ideology, gender and ethnicity.
- KME rejects corruption, as set forth in the relevant United Nations Convention. It uses appropriate means to promote transparency, integrity, responsible leadership and corporate accountability.
- KME pursues fair business practices and fair competition. It promotes cooperation with the supervisory board.

CONSUMER INTERESTS

- KME complies with consumer protection laws and appropriate sales, marketing and information practices.

COMMUNICATION

- KME communicates openly and is oriented towards dialogue on the requirements of the code of conduct and its implementation among employees, customers, suppliers and other stakeholders.

HUMAN RIGHTS

- KME is committed to promoting human rights. It respects human rights as set forth in the United Nations Charter.

PRIVACY

- KME protects privacy.

HEALTH AND SAFETY

- KME is committed to ensuring health and safety, in particular, ensuring a safe and health-promoting work environment, avoiding accidents and injuries.

HARASSMENT

- Protection of employees against physical, sexual, psychological or verbal abuse.

FREEDOM OF CONSCIENCE

- Protecting and guaranteeing the right to freedom of conscience and freedom of expression.

WORKING CONDITIONS

KME adheres to the following core work standards:

- Child labor

  Prohibition of child labor, i.e., the employment of persons under the age of 15, provided that local legal requirements do not provide for a higher age limit and provided that no exceptions are allowed.
- Forced labor

  Prohibition of forced labor of any kind.
- Salary remuneration

  Work rules relating to compensation, particularly with respect to the level of compensation as required by applicable laws and requirements.
- Employee rights

  Respect the employee's right to freedom of association, freedom of assembly and collective bargaining.
- Prohibition of discrimination

  Treatment of all employees in a non-discriminatory manner.
- Working hours

  KME adheres to labor standards regarding maximum allowable work hours.

ENVIRONMENTAL PROTECTION

- KME meets the requirements and standards for environmental protection and acts in an environmentally conscious manner. To take greater responsibility for natural resources, it adheres to Rio's Declaration principles.

CIVIC ENGAGEMENT

- KME contributes to the social and economic development of the countries and regions in which it operates and promotes voluntary activities by its employees.

KME

DEEPENING

No supply from war zones

KME purchases materials only from approved and registered suppliers, and constantly inspects their work. It **does not purchase materials from mines located in regions of armed conflict**.

Lawfullness

KME fights **corruption** in all its forms by embracing the principle enshrined in the UN Convention: "*No potential additional income of any amount can justify illegal business practices*".

With regard to foreign countries where gifts may be offered as a form of courtesy, KME requires its employees to ensure that no dependence can develop on either the donor or the recipient, and that all applicable national and international regulations are complied with. The company also requires them to inform the project supervisor about gifts of any kind.

2,5 Certifications

EHSQ MANAGEMENT SYSTEM
(Environmental, health, safety and quality aspects)

The management systems implemented at KME comply with the requirements of the international standards:

KME Germany

- ISO 9001:2015 (Quality Management System)
- IATF 16949:2016 (Quality Management System for Automotive Applications)
- ISO 14001:2015 (Environmental Management System)
- BS OHSAS 18001 (Occupational Health and Safety Management Systems)
- ISO 50001:2018 (Energy Management)

KME Special

- ISO 9001:2015 (Quality Management System)
- ISO 14001:2015 (Environmental Management System)
- BS OHSAS 18001 (Occupational Health and Safety Management Systems)
- ISO 50001:2018 (Energy Management)

2.6 Sales

In 2020 sales amounted to 107,449 tons, of which:

- 94,880 tons KME Germany
- 12,512 tons KME Special

Sales by geographical area are distributed as follows:

- 75.2% in Germany
- 13.2% in other EU countries
- 11.6% in the rest of the world

FIG 2.3 Sales

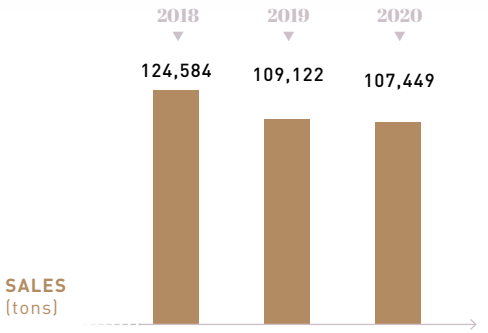
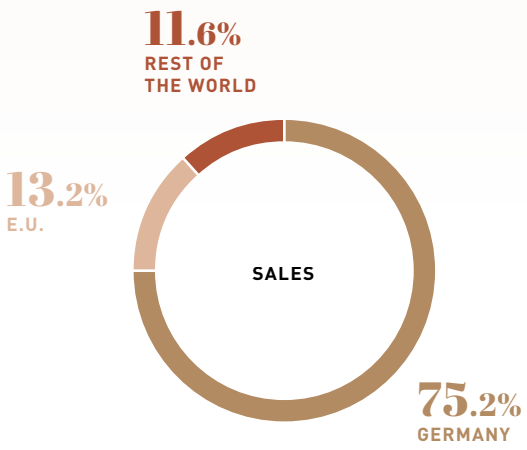
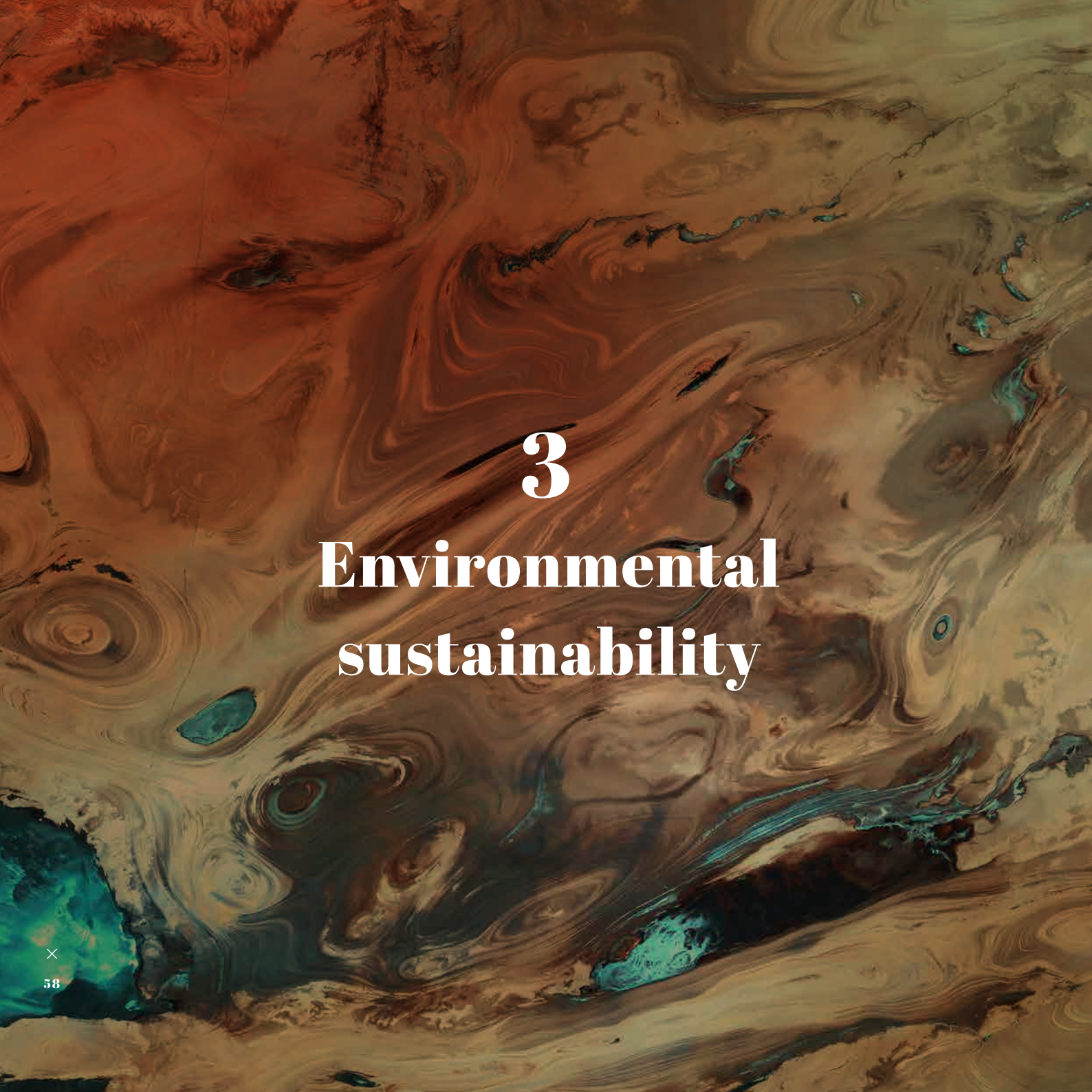


FIG 2.4 Sales by geographical area





3
Environmental sustainability

ENERGY EFFICIENCY

-17.8%

Energy consumption the last three years

CIRCULAR ECONOMY

60.5%

percentage of **recycled metals** on total metals used

CLIMATE

-37%

CO_2 emissions in the last three years

WATER

98.1%

percentage of **recycling** on total water used

3.1 Environmental management system

As stated in the KME Group's Code of Conduct, protecting the environment is a priority for our business.

There are 5 assets in operation that require approval under German law. In addition, these assets are subject to the European Industrial Emissions Directive and are controlled by German authorities. The results of the inspections are made public. For years, these reports have confirmed that the company is operating in compliance with the European law.

The installation of a certified management system includes the obligation of the top management to specify the energy and environmental policy and to have the necessary resources ready to activate procedures and processes that aim to support a continuous improvement in energy and environmental performance.

To this end, the energy and environmental performance is assessed, deficits identified and measures generated. Internal and external audits are carried out. Results are reported to the management.

CONTEXT

Company policy

CONCERNING ENVIRONMENTAL PROTECTION, ENERGY EFFICIENCY, OCCUPATIONAL HEALTH AND SAFETY AS WELL AS QUALITY MANAGEMENT (EHSQ)

We wish to maintain our companies in the long-term through the continual fulfilment of shareholders' fair profit expectations. The essential requirements for achieving this are the long-term satisfaction of our customers, the health and safety of our employees, efficient and sustainable business processes, as well as reasonable consideration of the issues which concern all other interested parties.

This policy documents our attitude towards economical and ecological responsible management of business activities whilst providing safe and reliable jobs. We are convinced that quality, environmental protection, industrial safety and health protection as well as energy efficiency represent a positive complement to the economic activity of our company and are therefore considered equally important.
The manufacture of our products by melting, casting, drawing and rolling, together with mechanical processing, involves energy-intensive processes. Even using state-of-the-art technology, these processes nevertheless involve certain safety-related residual risks as well as the utilization of natural resources. The situation of our location within urban areas also necessitates an increased degree of consideration.

The management system applies in this context and takes the following requirements into consideration:

- **ISO 14001** — Environmental management system
- **ISO 50001** — Energy management system
- **BS OHSAS 18001** — Occupational Health and Safety Management
- **ISO 9001** — Quality management system
- **IATF 16949** — QMS standard for the automotive industry (KME Germany)

Apart from the fulfilment of requirements resulting from the ongoing evaluation of our processes concerning quality, industrial safety and health protection, and environmental protection and energy efficiency we commit ourselves to:

- the continuous improvement of our management systems
- fulfilment of customer requirements

- adherence to prevailing legal requirements and all requirements in the context of this management system
- continual improvement of our energy related performance

For the determination of our targets and as an indicator of our achieved performance derived from the contextual analysis we establish the following strategic framework:

- assurance of high customer and employee satisfaction
- adherence to the zero defect principle (minimal failure costs) and the "zero-accident company" philosophy
- opening up to new markets by innovation in product development and expansion of strategic partnerships
- continuous improvement of performance, in particular by
  — optimising internal processes and interfaces within the company, innovation in process development
  — continuous improvement of energy and resource efficiency.
- prevention of occupational diseases as well as preservation and improvement of employees'health
- reduction of environmental impact, with regard to air pollutants and sound emissions
- consideration of state of the art technology in investment plans
- procurement of energy efficient products and services inasmuch as they are affecting our energy related performance

MONITORING

By means of internal and external audits, we review the effectiveness and improvement of the management

system and the requirements to which we are obliged to adhere.
All managers are committed to implementing necessary quality measures, corrective and preventive actions relating to their area of responsibility in a manner, which takes root causes and deadlines into account and to constantly monitor adherence as well as effectiveness of these measures.

PARTNER COMPANIES

We put great emphasis on the procurement of flawless, environmental-friendly and energy-efficient products and services. We expect our business partners to share our rules and goals. Performing activities at our premises, we require adherence to the same standards as we exercise ourselves.

COMMUNICATION

Open dialogue ensures the transparency of our actions. For this purpose we guarantee our employees, as well as persons acting on our behalf, access to all necessary information and training. We review the company policy regularly to ensure relevance and appropriateness and inform employees as well as all other persons acting on our behalf. Further interested parties have the opportunity to view our policy on our company website. Other appropriate information can be supplied upon justified request.
We urge all employees and other persons who work for KME to engage actively and, by means of their personal commitment, to contribute to the successful implementation of this policy and its' related targets
As senior management, we assure our own commitment as well as the provision of all necessary information and resources.

DEEPENING

European environmental standards for copper industry

Companies producing copper and semi-finished copper products operate in compliance with European Union environmental regulations. Environmental permits are regulated by the **Industrial Emissions Directive** 2010/75/EU, which requires the use of the best available technology and sets emission limits.

As part of the regulations affecting the copper industry, it should also be noted that:

- Copper producers are partly affectedby the **Emission Trading Scheme (ETS)** for the reduction of CO_2 emissions. Operators of large energy plants and energy-intensive industrial plants in Europe take part in the ETS. The ETS is an instrument of EU climate policy with the aim of reducing greenhouse gas emissions at the lowest possible economic cost by issuing a limited number of emission rights and then trading them on a market;
- All facilities are directly or indirectly affected by chemicals legislation, such as REACH 1907/2006.

Other regulations relevant to copper products include:

- **EU Water Directive**;
- **Regulation (EG) Nr. 1272/2008 for Classification**, Labelling and Packaging is of more interest for all manufacturers and also for industry manufacturers in the EU. The CLP regulation contains uniform requirements for the classification, labeling and packaging of chemical substances and mixtures.

CONTEXT

REACH regulation

- REACH ("*Registration, Evaluation, Authorisation and restriction of Chemicals*") is a European Union regulation to protect people and the environment from potential risks from **chemicals**, while strengthening the innovative and competitive capacity of the chemical industry in the European Union.

- **Manufacturers and importers of chemicals** must process the data and assess the potential risk. This information is communicated to ECHA. This is where the possibilities for a **material's safe use** are defined and the necessary measures for the user to manage the risks are communicated.

- KME supplies copper and copper alloy products in the form of hot-rolled and cold-rolled sheets and strips, as well as pressed and drawn tubes, sections and bars, perforated parts and special products such as casting dies. All materials or preparations contained in the products **have been registered or pre-registered by KME** or another party upstream in the **supply chain**.

- KME is a **downstream user** of substances that are contained in copper or copper alloy products. The substances are subject to the registration procedure as phase-in substances, the use of which in the production of copper and copper alloy products is considered for registration.

- As far as **semi-finished products** in copper and copper alloys are concerned, according to REACH regulations, these products are not subject to the obligation to draw up a safety data sheet. Nevertheless, KME provides customers with product information documents by means of a **voluntary sheet**.

3.2 Energy

Reducing energy consumption is a very important objective for the copper industry. First of all from an environmental point of view, to contribute to the reduction of greenhouse gas emissions. But it is also important from an economic point of view to reduce production costs.

CONTEXT

Energy efficiency to protect the climate

Copper is essentially climate friendly. According to calculation published by the Eco Institute in Freiburg, its global **warming potential** per kilogram of primary metal is 2 kg of CO_2 equivalent. In comparison, one kilogram of gold has a global warming potential of 18,000 kg of CO_2 equivalent. The cumulative energy consumption of gold per kg of primary metal is nearly 8,700 times that of copper. However, the energy expenditure in copper production is still high.

Because the energy used to obtain copper from recycled materials is up to 90% less than that required to obtain copper from ore, we use recycled copper in addition to copper from ore. And the companies pay close attention to **energy conservation**, taking a wide range of measures to significantly increase its energy efficiency. We have an **energy management system** based on the international standard ISO 50001:2018, which applies consistently and successfully.

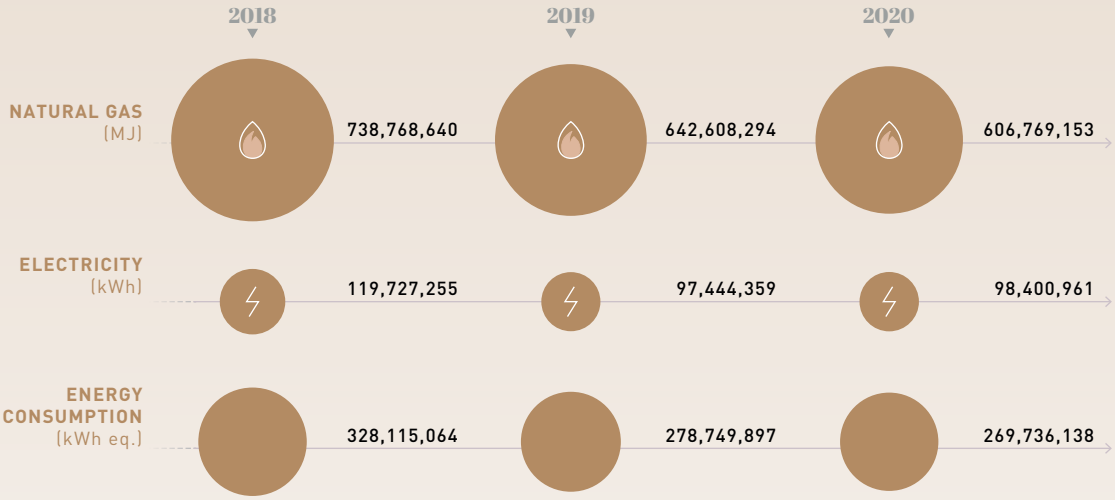


FIG 3.1 Energy consumption

ENERGY CONSUMPTION

The factory uses natural gas and electricity. It also uses limited quantities of diesel and petroleum.

Electricity consumption amounted to **98,400,961 kWh**, while those of natural gas amounted to **606,769,153 MJ**.

Compared to 2019 total consumption is reduced by 3,2%, while compared to 2018 the reduction is 17.8% less.

ENERGY CONSUMPTION	YEAR 2018	YEAR 2019	YEAR 2020
NATURAL GAS (MJ)	738,768,640	642,608,294	606,769,153
DIESEL (MJ)	11,359,274	10,035,826	9,985,938
PETROLEUM (MJ)	61,000	55,815	51,545
HEIZOL EL (MJ)	7,200	-	-
ELECTRICITY (kWh)	119,727,255	97,444,359	98,400,961
TOTAL (kWh eq)	**328,115,064**	**278,749,897**	**269,736,138**

ENERGY INTENSITY

However, the absolute value of consumption does not help to fully understand the efficiency levels, because they obviously depend on the production volume.

The most significant figure in measuring efficiency is energy intensity, i.e. **specific consumption per unit of product**.
In 2020 2,510 kWh eq were consumed per ton of product. Compared to 2019 there was a reduction of 1.7%.

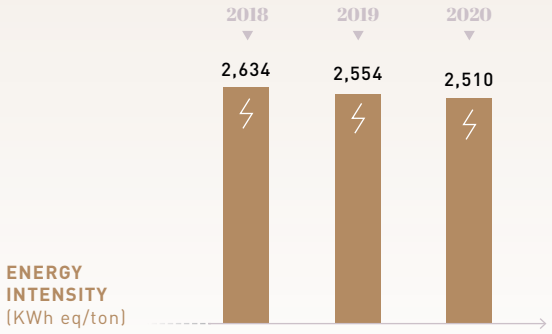


FIG 3.2 Energy intensity

ENERGY EFFICIENCY MEASURES

Some data highlight the results achieved through energy efficiency measures and savings in the use of natural gas and electricity (measures on gas oven, lighting and heating systems, etc.):

- In 2020, through measures related to electricity and gas consumption, the savings were 1,788,776 kWh eq.
- Over the three-year period (2018- 2020), interventions in natural gas and electricity use have saved 2,566,078 kWh eq.

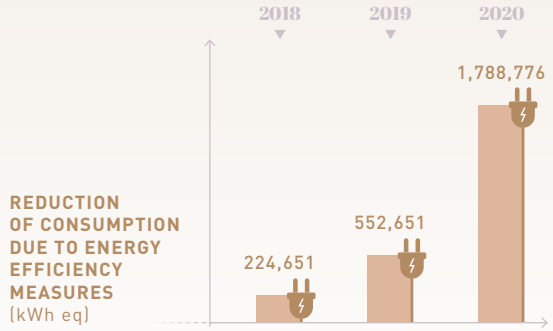


FIG 3.3 Reduction of consumption

3.3 Materials

Efficiency in the use of material resources and the use of recycled materials are very important elements for the environmental industry sustainability. Those who produce copper and copper alloys, from this point of view, can leverage the fact that copper is a so-called "permanent" material, potentially infinitely recyclable. The factory uses copper scraps.

MATERIALS USED

127,544 tons of materials (mining and refining; metal scraps market; metal trade; chemical, wood,

FIG 3.4 Materials used

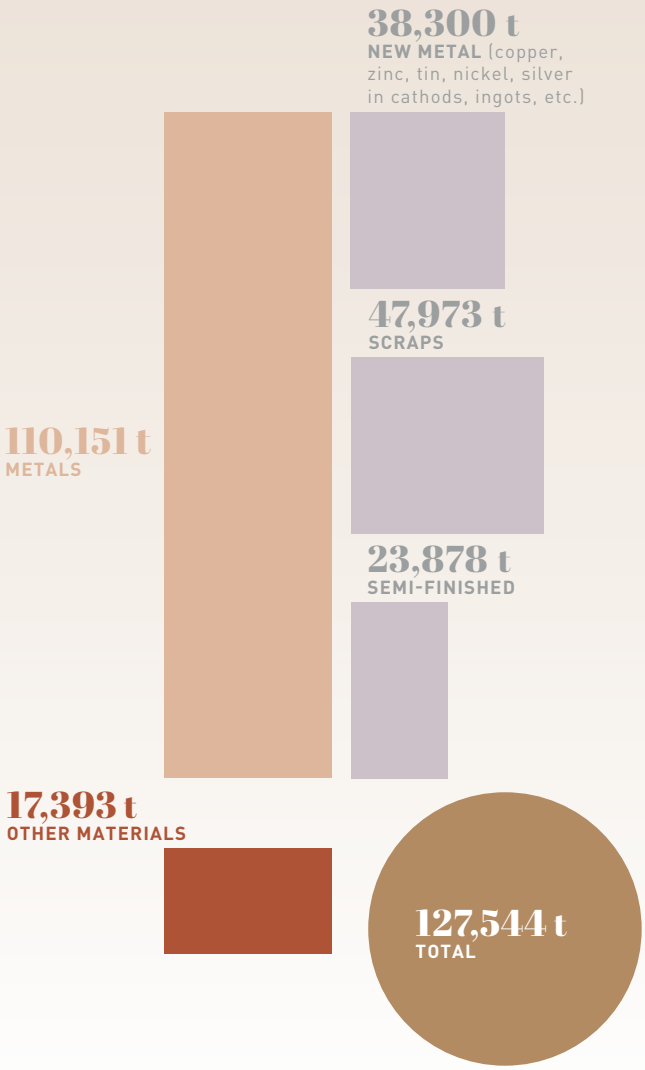
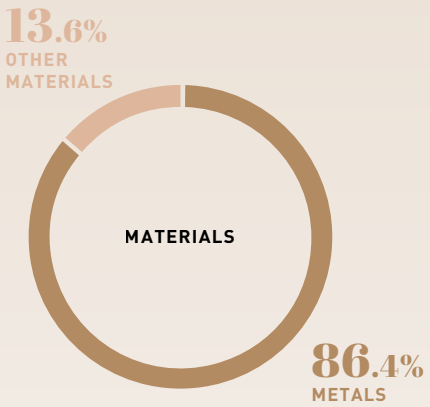


FIG 3.5 Materials used



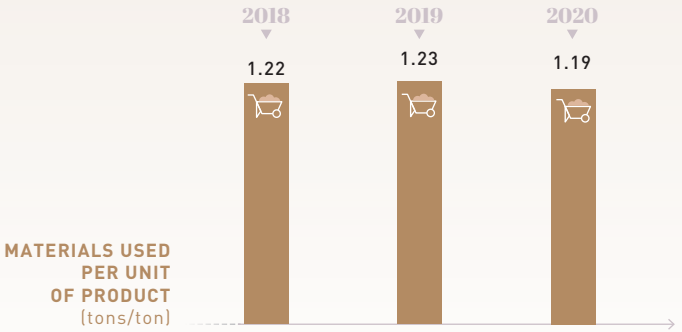
paper, and plastic industry; other sources) were used in 2020. The materials used are 86.4% metals (new metal, scrap and semi-finished)*.

MATERIALS USED PER UNIT OF PRODUCT

In 2020, for every ton of product sold, 1.19 tons of materials were used. Compared to previous years there is a reduction of 3.3%.

**metals not used for the process are not included.*

FIG 3.6 Materials used per unit of product



RENEWABLE RAW MATERIALS	YEAR 2018	YEAR 2019	YEAR 2020
TONS	4,650	3,767	3,517
PERCENTAGE OF TOTAL MATERIALS	3.1%	2.8%	2.8%
PERCENTAGE OF OTHER MATERIALS (NET OF METALS)	24.8%	16.9%	20.2%

RENEWABLE RAW MATERIALS

3,517 tons of materials used in 2020 (wood packaging) can be classified as renewable raw materials. Of the total materials used, they make up only 2.8%, but net of metals the percentage of renewable raw materials rises to 20.2%.

RECYCLED MATERIALS

In 2020, the plant used 47,973 tons of scrap from external recycling processes. Including the use of **recycled packaging** (358 tons), the total amount of materials from recycling is **48,331 tons**, corresponding to **37.87**% of materials used.

INTERNAL RECYCLING

From the point of view of the principles of circular economy, another significant figure is that of internal

FIG 3.7 Recycled materials (%)

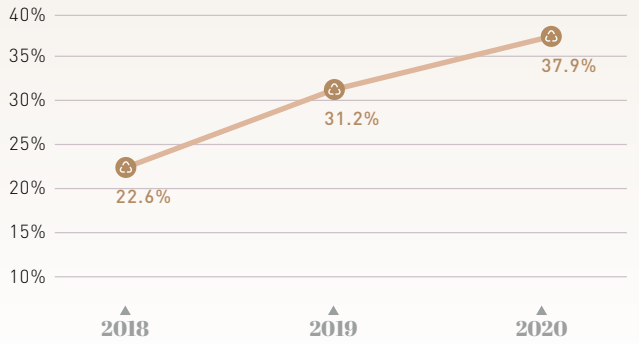
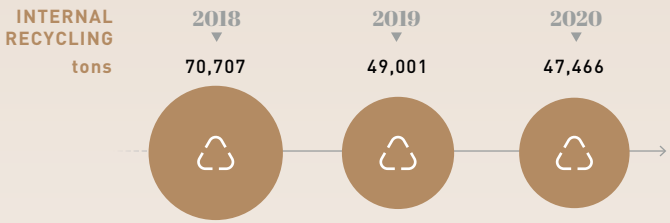


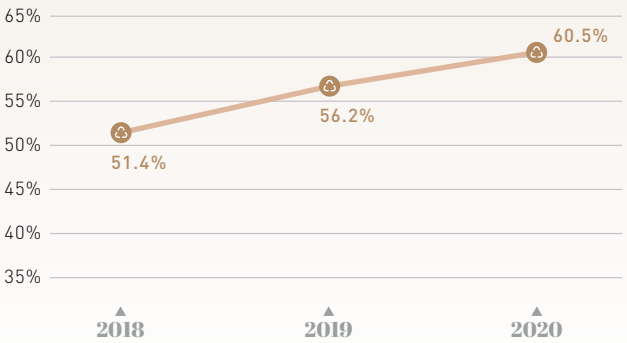
FIG 3.8 Internal recycling



recycling at the plant. In fact, a relevant part of metals, otherwise destined to come out as waste, is reused through internal recovery processes at the plant. 47,466 tons were thus recovered and reintroduced into the production cycle. This makes it possible to increase efficiency in the use of materials, reduce the consumption of virgin raw materials and minimize waste.

Calculating also the quantity of metals re-introduced into the production cycle through internal recycling, the tons of metals processed are 157,617 (metals from outside plus metals recycled inside the plant). In this sense, the percentage of total metals recycled (from external recycling and internal reuse) is 60.5% of metals processed.

FIG 3.9 Total recycled metals (% metals processed)



3.4 Waste

WASTE PRODUCTION

The amount of waste produced by the plant in 2020 amounted to 5,642 tons.

WASTE PER UNIT OF PRODUCT

An important indicator is the amount of waste generated per unit of product. In 2020 it is 0.052 tons per ton of unit of product .

WASTE MANAGEMENT

48.4% of the waste produced is sent for recovery.

FIG 3.10 Waste (tons)

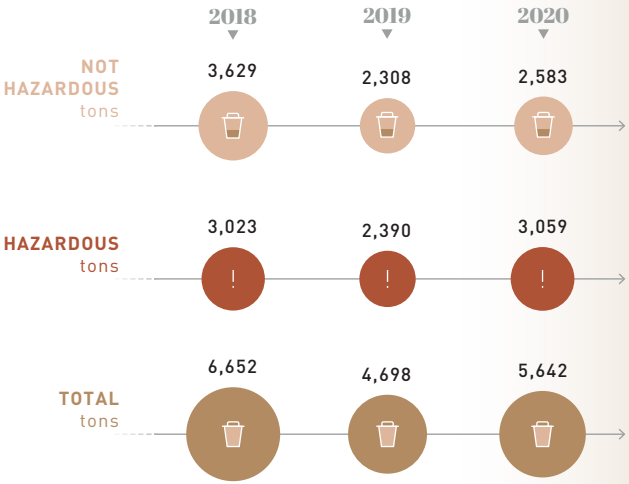


FIG 3.11 Waste per unit of product (tons/ton)

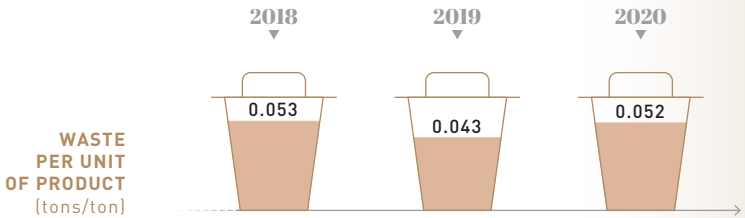
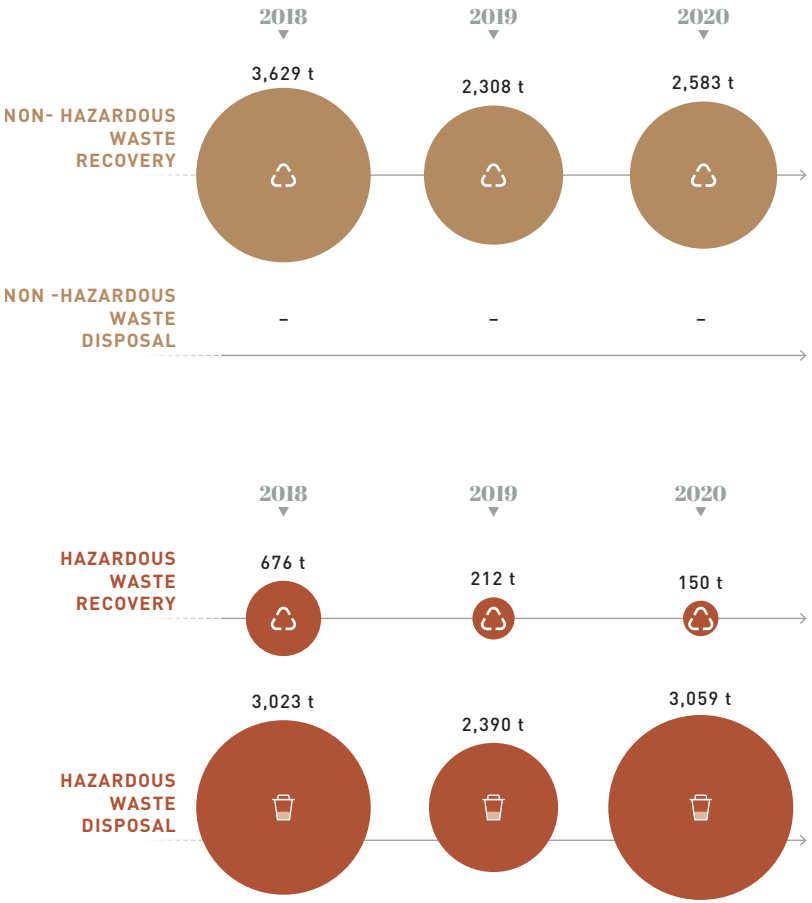


FIG 3.12 Waste management



3,5 Greenhouse gas emissions

Since 2013, copper-producing industries have been involved in the *Emission Trading Scheme (ETS)*, the main tool adopted by the European Union to achieve CO_2 reduction targets in major industrial sectors.

CONTEXT

Towards a zero emissions Europe

The **Paris Climate Agreement** and the United Nations Sustainable Development Goals call for effective action to reduce greenhouse gas emissions. A growing number of countries around the world are committed to this.

The European Union aims to achieve a net-zero greenhouse gas economy by 2050, thus becoming the first carbon neutral continent. The intermediate target set in the European Climate Act, approved in 2021, is to reduce emissions by at least 55% by 2030 compared to 1990 levels.

DEEPENING

Emission Trading

The European Union's **Emissions Trading Scheme (ETS)** is an essential tool to fight climate change and reducing greenhouse gas emissions.

It constitutes the world's first and largest carbon market. It operates in all EU countries plus Iceland, Liechtenstein and Norway. Limits emissions from more than 11,000 energy-using installations (power plants and industrial plants) and about 600 airlines operating between these countries. It covers about **45% of the EU's greenhouse** gas emissions.

The ETS is based on the Cap and Trade principle.

A limit is set on the total amount of greenhouse gases that can be emitted by facilities included in the system. Within the cap, **companies receive or purchase emission allowances** ,which they can trade with each other as needed. They can also purchase limited amounts of international credits from emission-saving projects around the world. The limit on the total number of allowances available ensures that they have real value.

At the end of each year, a company must surrender enough allowances to cover all of its emissions, or heavy fines will be imposed. If a company reduces its emissions, it can keep the allowances in reserve to cover its future needs or sell them to another company that does not have allowances.

Trading provides the necessary flexibility to ensure that **emissions are reduced where it costs the least**. A high carbon price also promotes investment in clean, low-carbon technologies.

DEEPENING

How greenhouse gas emissions are calculated

The calculation of GHG emissions is based on the GHG reporting system, which classifies GHG emissions into:

- Direct emissions;
- Indirect emissions* from the production processes of purchased and consumed energy;
- Other indirect emissions (e.g. from transport).

As information on the latter is not available, the calculation of emissions reported in this report concerns direct emissions and indirect emissions connected with the production of electricity purchased from the grid.

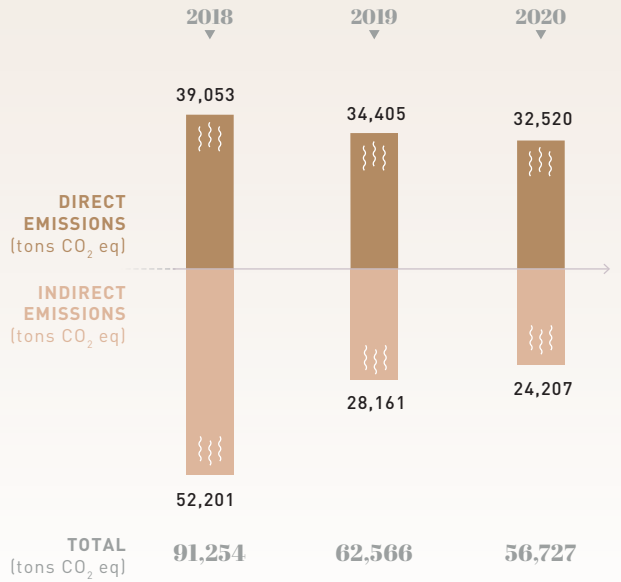
**The calculation of indirect emissions from electricity consumption is made with reference to the greenhouse gas emission factors of the national energy mix.*

TOTAL EMISSIONS

Adding together direct emissions (from production at the factory) and indirect emissions (related to the production of purchased and consumed electricity), total emissions in 2020 were 56,727 t CO_2 eq. with a reduction of 9.3% compared to 2019 and 37.7% less compared to 2018.

GREENHOUSE GAS EMISSIONS CO_2 EQ. (t) % 2020 /2019	
DIRECT EMISSIONS	-5.4%
INDIRECT EMISSIONS	-14%
TOTAL	-9.3%

FIG 3.13 Emissions



SPECIFIC EMISSIONS

Greenhouse emissions (direct plus indirect) per unit of product decreased compared to previous years.

0.53 tons of CO_2eq. per unit of product was generated in 2020, while it was 0.73 in 2018 and 0.57 in 2019. The reduction compared to 2018 is 27.4%.

Direct emissions per unit of product were 0.30 tons/ton in 2020.

FIG 3.14 Emissions per unit of product

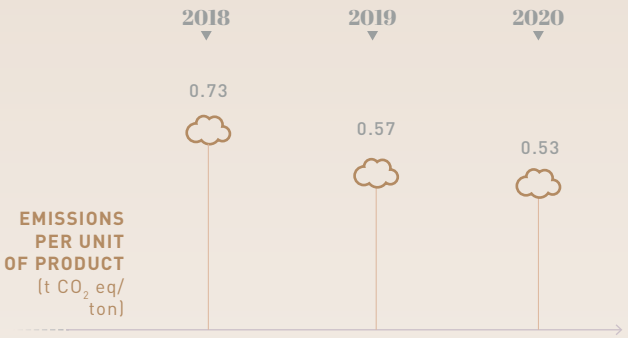
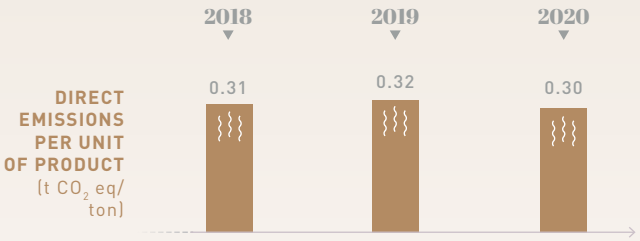


FIG 3.15 Direct emissions per unit of product



AVOIDED EMISSIONS

The measures taken to improve energy efficiency have significantly reduced greenhouse gas emissions. 385.5 tons of CO_2eq. Were avoided in 2020.

In the three-year period 2018-2020 were avoided 643.1 tons of CO_2 eq.

3.6 Other emissions

EMISSIONS

The emissions generated by the activities of the plant concern in particular nitrogenoxides (NOx), sulphuroxides (SOx) and particulate matter (PM). NOx emissions were 36,877 kg (-1.5% compared to 2019). SOx emissions were 8,601 kg (-1.5%) and PM emissions were 2,431 kg (-1.5%).

There are also emissions of hazardous air pollutants, which have been decreasing over the last three years.

FIG 3.16 Emissions

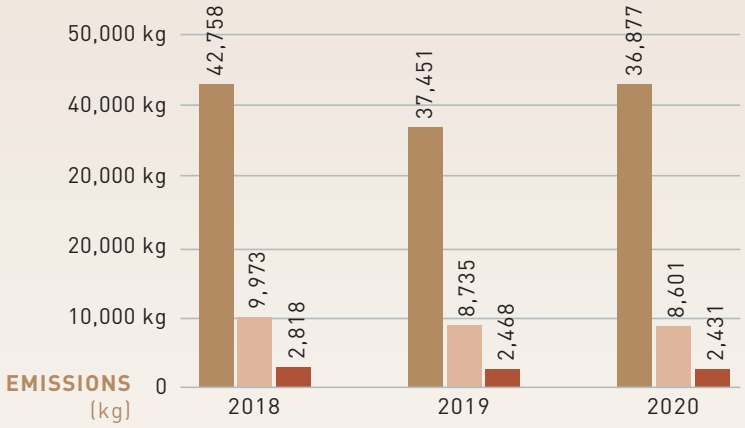
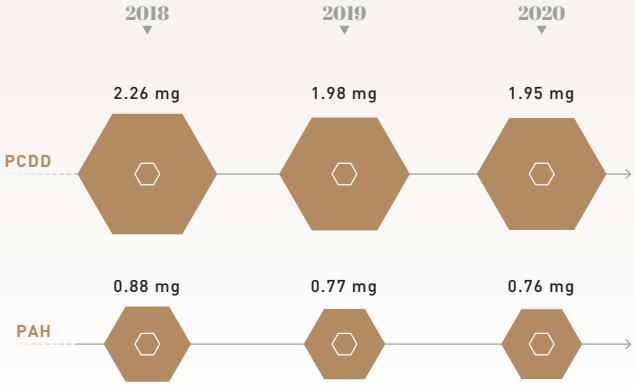


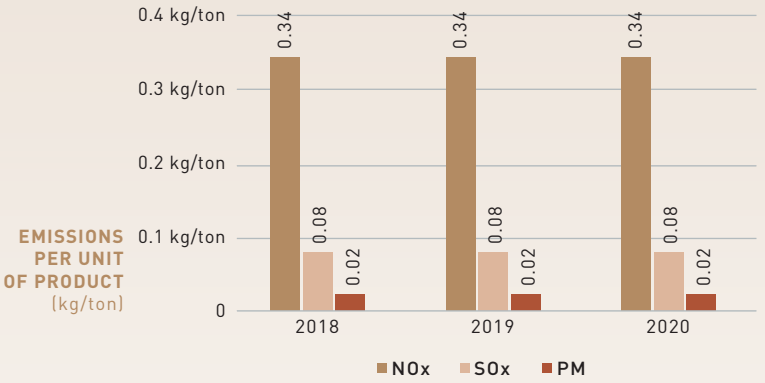
FIG 3.18 Hazardous air pollutants



SPECIFIC EMISSIONS

Data on specific emissions, i.e. the amount of emissions per unit of product, show constant values over the last three years.

FIG 3.17 Emissions per unit of product



Air quality

Air quality is an important element for the environment and for human health. For this reason, increasingly stringent regulations have been introduced in recent decades to reduce emissions that cause air pollution. The main sources of this pollution are the industrial, transport and heating sectors. The first two sectors have been subject to regulations in all industrialized countries since the 1970s. In particular, industrial plants were the first to be subject to limits on emissions and to the obligation to adopt technologies to reduce the production of pollutants or to cull them before they are released into the atmosphere.

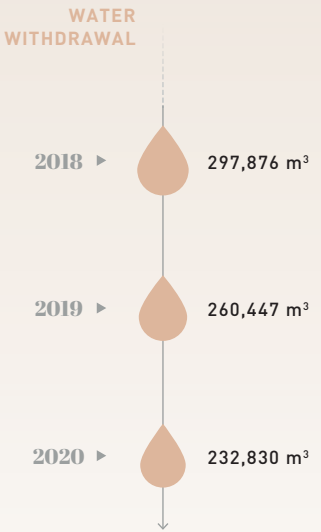
3.7 Water

The amount of water withdrawn in 2020 was 232,830 m^3 (-10.6% compared to 2019).

18,094 m^3 of water (with 9,662 after physico-chemical purification treatment) were discharged into the river.

So 214,736 m^3 of water were consumed in 2020 (-10.9% compared to 2019)

FIG 3.19 Water withdrawal



WATER (m^3)	2018	2019	2020
WATER SOURCE	191,603	149,786	134,062
PUBLIC PIPELINE	106,273	110,661	98,768
WATER WITHDRAWAL	**297,876**	**260,447**	**232,830**
WATER DISCHARGE	**31,026**	**19,366**	**18,094**
WATER CONSUMPTION	**266,850**	**241,081**	**214,736**

RECYCLING

Thanks to this virtuous system, a considerable amount of water is recycled and reused in the industrial process. 12,030,579 m^3 were recycled and reused in 2020. This means that the total volume of water required, without these recirculation systems, would have been 12,263,409 m^3 . The prevailing share of water used in the process comes from recycling: in the last year, this percentage had been 98.1%.
So this system of recycling avoids the withdrawal of significant volumes of water.

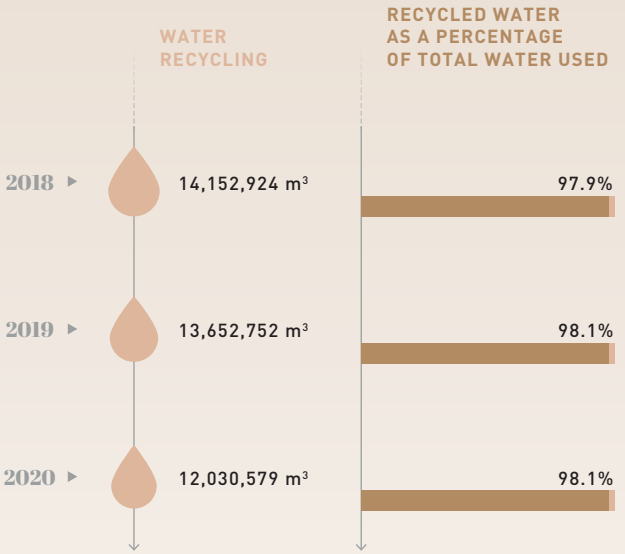


FIG 3.20 Water recycling

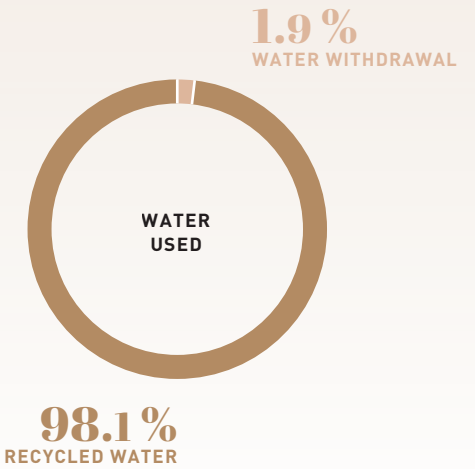
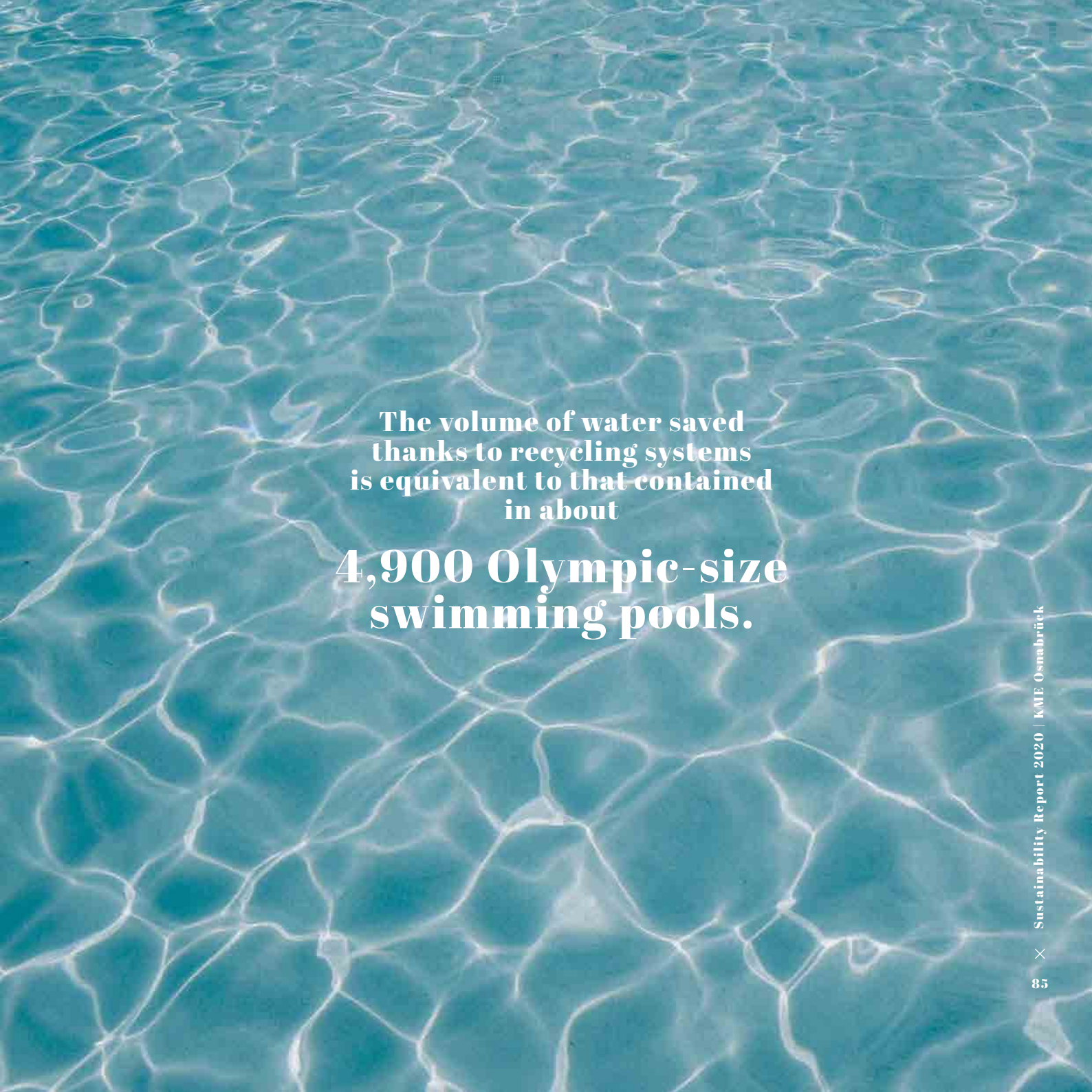


FIG 3.21 Water used



The volume of water saved thanks to recycling systems is equivalent to that contained in about

4,900 Olympic-size swimming pools.

SPECIFIC CONSUMPTION

For every ton of products, 1.99 m^3 of water was consumed in 2020.

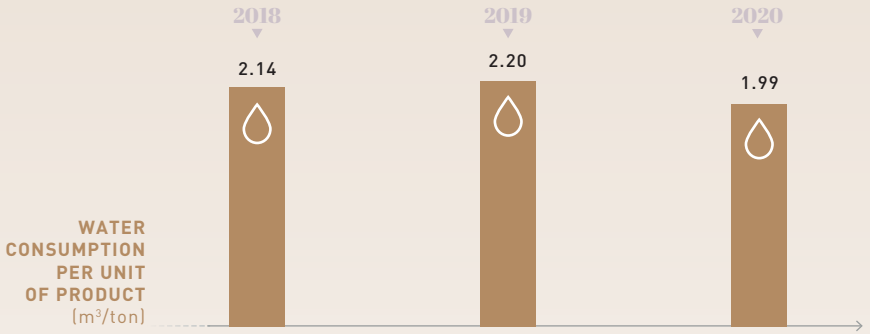


FIG 3.22 Water consumption per unit of product

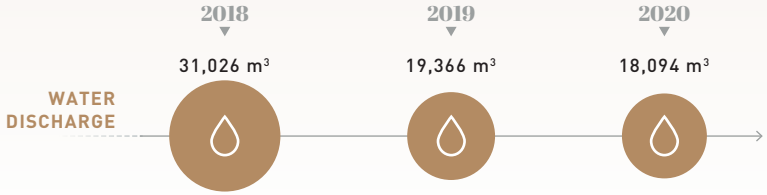
3.8 Purification and water discharge

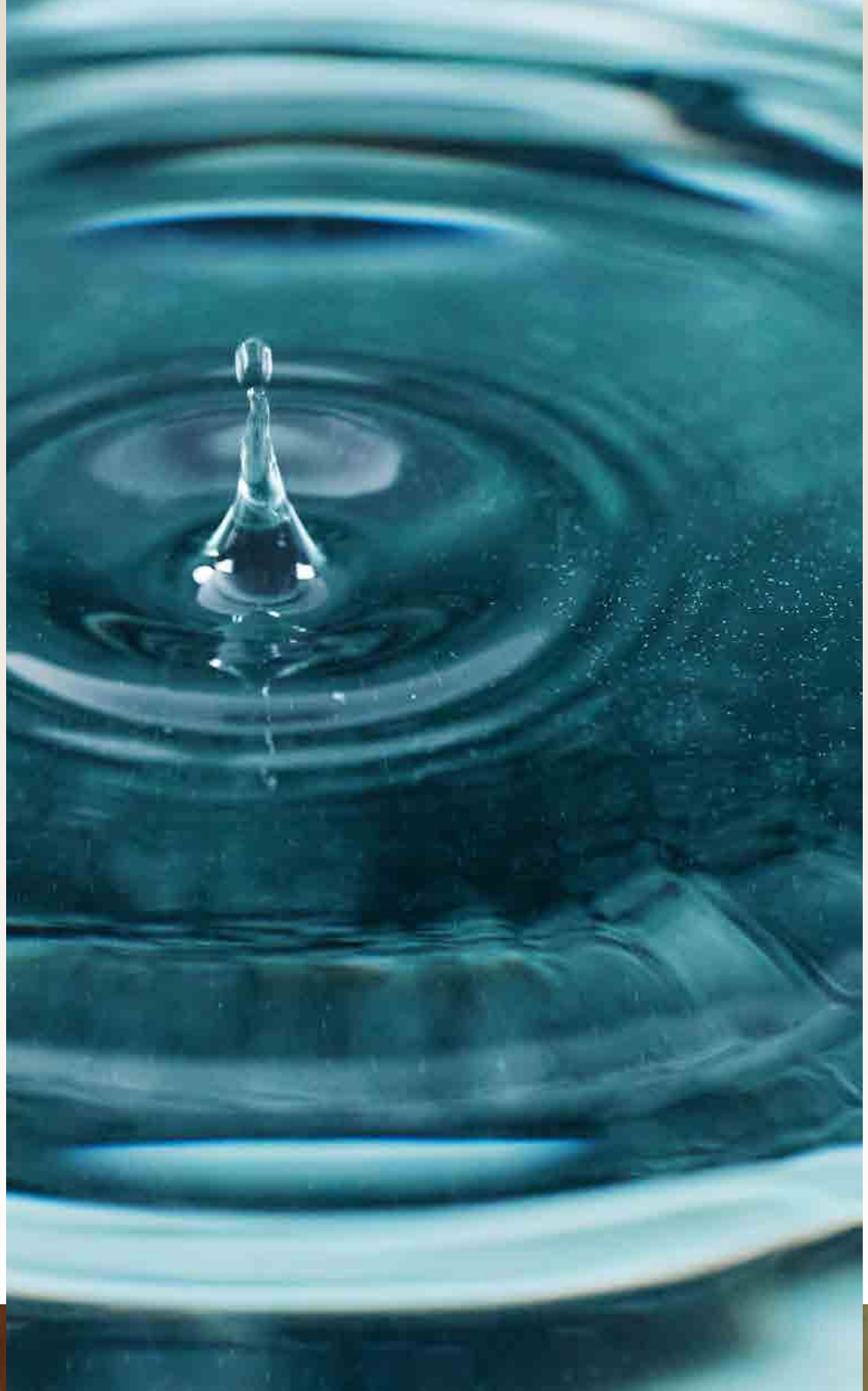
18,094 m^3 of water were discharged into the river.

9,662 m^3 of water were purified through a chemical-physical treatment with selective resins for heavy metals, sand filter and carbon filter.

The values of pollutants in the wastewater are well within the permission, according to federal acts.

FIG 3.23 Water recycling





4
Social sustainability

4.1 Employees

As of December 31, 2020, KME Osnabrück had 1,661 employees.
During the year, 22 new employees were hired.

PLANT PERSONNEL STRUCTURE AND DUTIES

- 1,140 blue collar
- 439 white collar
- 69 management level 2
- 13 management level 1

FIG 4.1 Employees

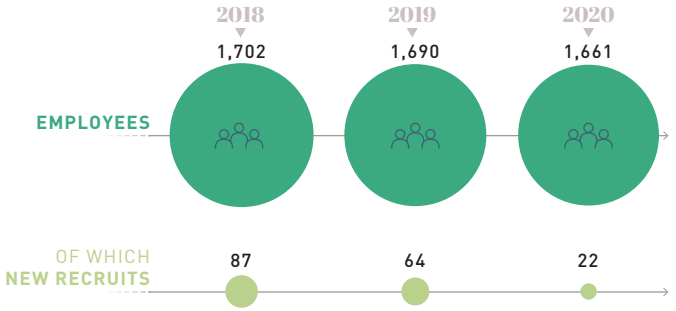


FIG 4.2 Staff structure

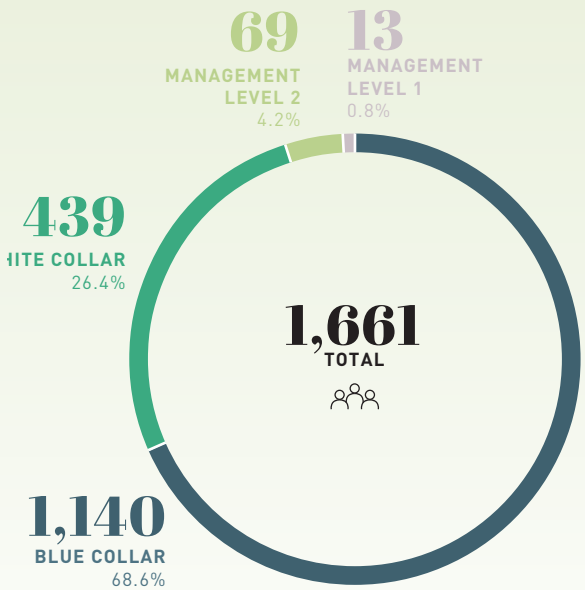
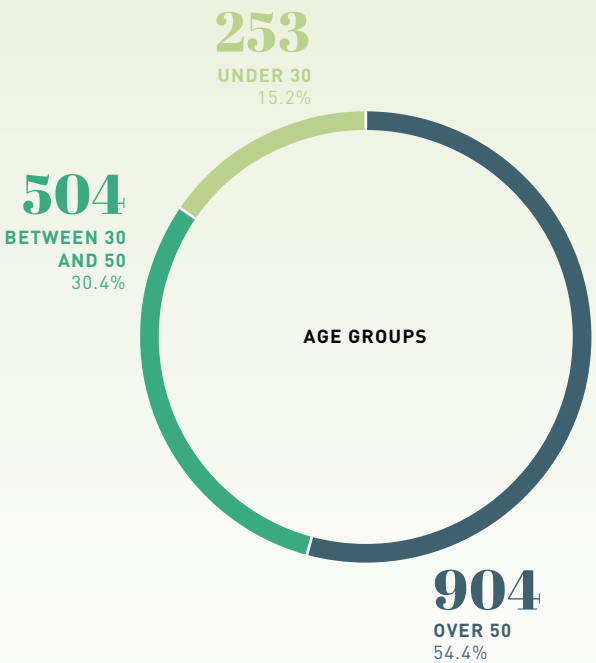


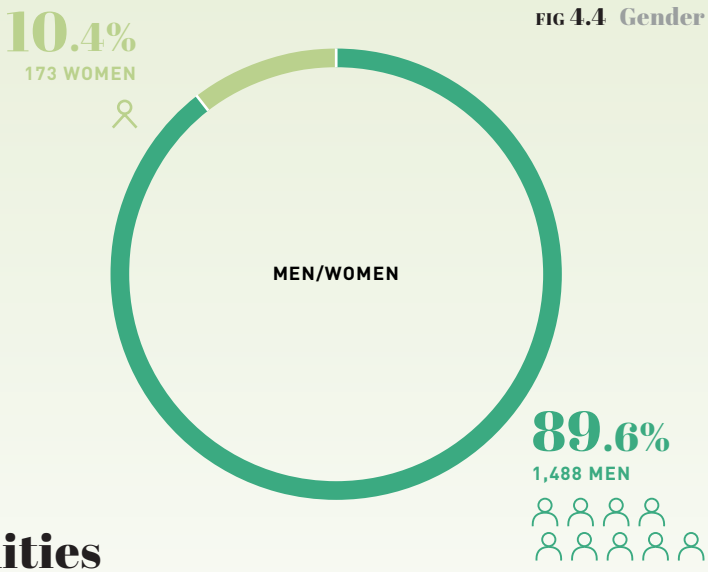
FIG 4.3 Age groups



AGE GROUPS

- 253 employees (15.2%) are under 30;
- 504 employees (30.4%) are between 30 and 50;
- 904 employees (54.4%) are over 50.

FIG 4.4 Gender



4.2 Equal opportunities

1,488 men (89.6%) and 173 women (10.4%) work at the factory.

- Of 13 first level managers, there are 2 women (15.4%)
- Of 69 second level managers, there are 8 women (11.6%)
- Among the 439 white collar there are 142 women (32.3%)
- Among the 1,140 blue collars, there are 21 women (1.8%).

No incidents of discrimination were detected or reported during the period examined.
According to the metal industry collective labor agreement, there is no difference in payment between men and women. Within the pay group, the basic salary is the same for all employees, regardless of gender.

During the last year 44 employees (35 men and 9 women) took parental leave, as provided for by law and the collective labor agreement.

4.3 Health and safety

Employees' health and safety are key priorities. The main goal is to prevent accidents, work-related illnesses and inappropriate physical and mental injuries.

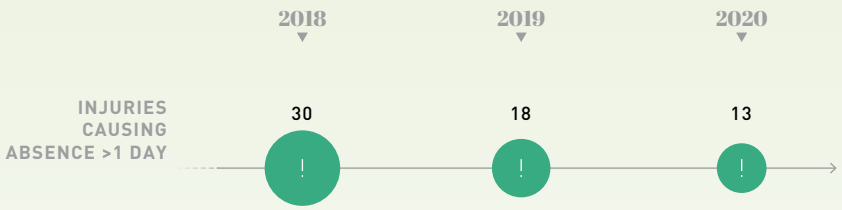
The occupational health and safety management system is certified according to BS OHSAS 18001.

KME Germany and KME Specials are subject to the rules of the German Occupational Health and Safety Act (ArbSchG).

At least 4 times a year, the occupational safety committee meeting with the management, workers' council, production managers, employee representatives, occupational physician and safety officers takes place.

There is a company medical service with daily consultation hours on site.
There are regular health examinations for workers.
There are pre-employment examinations for new hires, including verification of working health fitness.

FIG 4.5 Injuries



INJURIES

There were 13 injuries causing absence >1 day during 2020 (-27.8% compared to 2019 and -56.7% compared to 2018). All the accidents involved male workers.

In 2020, the plant recorded:

- an *Injury Rate* (Number of injuries × 200,000 / number of hours worked) of 1.2;
- a *Lost Day Rate* (Number of workdays lost due to injuries x 200,000 / number of hours worked) of 53.41.

FIG 4.6 Injury rate

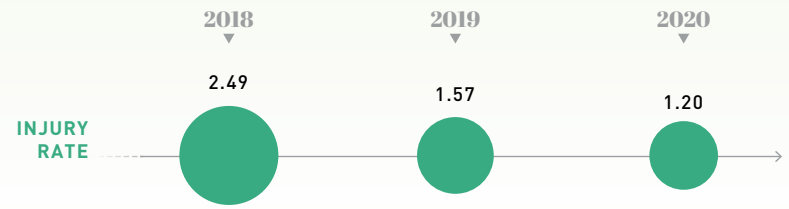
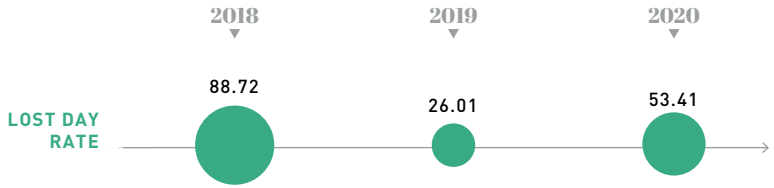


FIG 4.7 Lost day rate



4.4 Training

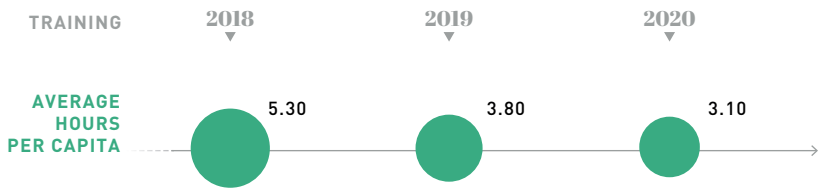
In 2020, hours dedicated to training averaged 3.10 per employee. More specifically:

- men: 3.30 hours per head;
- women: 1.40 hours per head;

- blue collars: 3.60 hours per head;
- white collars: 1.90 per head.

Training activities are specifically designed to raise professional skills and safety.
Two training activities are highlighted: High Potentials development program and OPEX-methods-training program

FIG 4.8 Training



4.5 Suppliers

The company's procurement model is based on transparent processes and precise criteria, in accordance with the KME Group's compliance regulations, to ensure ethical and legal standards.

We obtain all materials exclusively from well-known suppliers who have confirmed compliance with the Dodd-Frank Wall Street Reform and the Consumer Protection Act (Wall Street Reform Act). To this end, we conduct surveys on the origin of the materials at regular intervals.

Since all of the declarations made by KME are based on statements from material suppliers, we can guarantee the liability for this. We are currently participating in MARS - Metal Alliance for Responsible Sourcing initiative.

DEEPENING

Business process sustainability

KME is committed to pursuing a sustainable strategy in the organization of its business processes, in particular with regard to:

- transparent customer orientation during product and process design;
- observance of a corporate code of conduct;
- a healthy and safe working environment for workers and contractors;
- continuous risk assessment;
- adherence to current regulations;
- implementation of best available techniques and procedures for continuous process improvement;
- developing preventive strategies to reduce environmental impacts;
- efficient use of materials and energy in the manufacture and supply of products;
- manufacture of products with safety, energy efficiency and recyclability requirements.

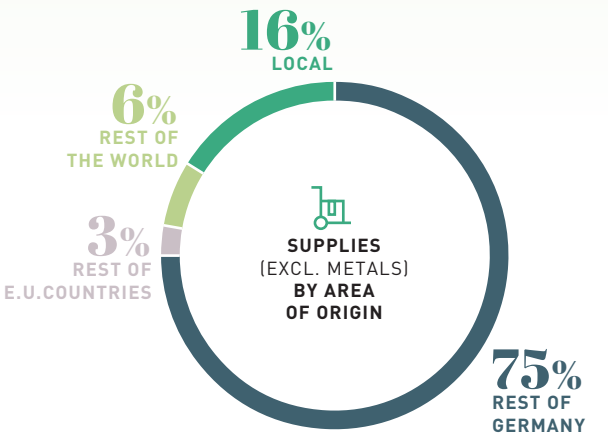
- Economic value of supplies of goods and services net of metal and taxes: **€ 81,910,151**

- Total number of suppliers (net of metal): 2,028
  — of which 371 **regional suppliers** (Lower Saxony)

- Economic value of supplies (excl. metal and taxes) by area of origin:
  — local (Lower Saxony): € 13,469,042 (16%);
  — rest of Germany: € 61,398,451 (75%);
  — rest of the E.U. countries: € 2,271,047 (3%);
  — rest of the world: € 4,771,611 (6%).

- Total economic value of supplies of goods and services including metals (excl. taxes) : € 647,682,151

FIG 4.9 Supplies by area of origin



4.6 Relations with the local community

The companies promote many social and cultural activities in favor of the local community. The following initiatives implemented during the period 2018-2020 can be highlighted:

- offer apprentice education and trainees for refugees and support for school leavers with learning difficulties;
- implementation of "Future Day" for pupils in years 5-8;
- initiative "Pro Ausbildung", e.g. "RoboTec" school competitions;
- support for initiative "Generations Workshop" of the Cause Foundation -Fostering Good Causes;
- refurbishment of the David's star at the "Old Synagogue" memorial by KME trainees;
- production and donation of a Felix Nussbaum Bronze memorial plaque to the Felix Nussbaum Society;
- cooperation with local colleges and universities (Bachelor's and Master's theses);
- joint project with the city of Osnabrück on "Strengthening cycling in the "Gartlage" redevelopment area, sub-project on commuters;
- participation in charity events, e.g. Osnabrück company run to support the campaign "JedeOmazählt"; Help Age Deutschland e.V.;
- support of the OsnabrückerTafel e.V.;
- public lunch offered by the KME company canteen;
- inclusion / participation in economic life for severely disabled people.

5
Economic sustainability

FIG 5.1 Sales and turnover

910.7
MILLION EURO
Total turnover

226.5
MILLION EURO
Turnover net of raw materials

107,449
TONS
Sales

Economic, financial and balance sheet data are published in the accounting documents and financial statements, which are drawn up in accordance with the law. Please refer to these for all detailed information. The sustainability report merely highlights some essential data and some information that is particularly relevant from the point of view of social sustainability, including the economic value provided to employees and the public administration. Particular attention is referred to investments related to ecological transition and safety at work.

5.1 Results

In 2020, turnover amounted to 910.7 million of euro.

Turnover net of the cost of raw materials is 226.5 million euro.

This is particularly significant in order to measure the company performance without the effect of raw material price variability.

The economic value paid to workers as direct remuneration is 95.4 million euro.

The economic value paid to the public administration (direct and indirect taxes) is 36.9 million euro.

5.2 Investments

The economic value of investments aimed at enviromental protection and ecological innovation, together with health and safety was in 2020 overall 1,205,595 euro, of which:

- KME Germany 1,080,948 euro;
- KME Special 124,647 euro.

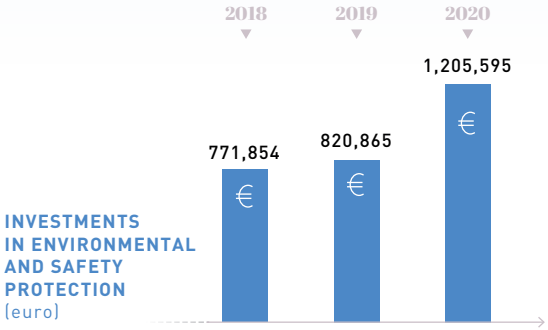


FIG 5.2 Investments

KME GERMANY

- Waste prevention 567,189 euro
- Water protection 15,764 euro
- Noise protection 157,638 euro
- Energy saving 126,562 euro
- Environmental authorisations 13,044 euro
- Safety 199,085 euro
- Fire protection 1,666 euro

KME SPECIAL

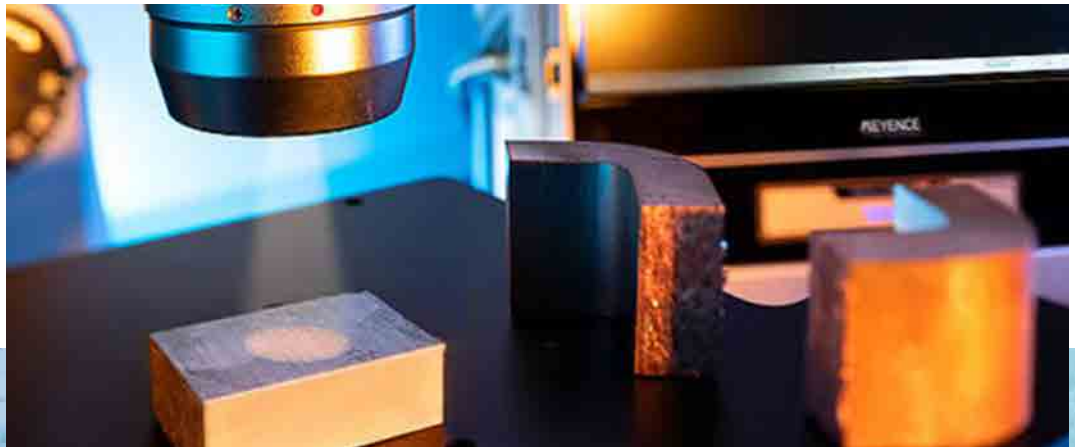
- Air protection 17,206 euro
- Water protection 5,628 euro
- Noise protection 4,039 euro
- Energy saving 50,538 euro
- Safety 47,416 euro

5.3 Research & development




Resolute market and customer orientation promotes visions and growth. In order to ensure Innovation, Efficiency and Quality as core values of KME, Research & Development takes utmost priority.

- Treatment & recycling of materials
- Metallurgy & casting technology
- Production technology
- Numerical simulation
- Material science
- Surface technology
- Material testing & Application engineering
- Process development
- 3D-Printing Processing



DEEPENING

“Leader in innovation” award

KME is one of “Germany's Leader in Innovation”.

The F.A.Z. Institute - a subsidiary of the "Frankfurter Allgemeine Zeitung" - has awarded KME with the certificate "Germany's Leader in Innovation".

On behalf of the F.A.Z. Institute, Prognos analyzed the patent applications of 150,000 companies operating in Germany for the study "Germany's innovation leader". Not only was the number of patents evaluated, but also their relevance.

As an award-winning company in the field of 'alloys', KME belongs to the top group of innovative companies in Germany.

DEEPENING

Cell connectors

KME has developed an innovative, sustainable and efficient technology for connections in energy storage systems. This is a key technology for electric vehicles.

KME's cell connectors have already been tested according to LV 214 (Test Specification for German Automotive OEM Connectors) with very good results. The connectors are made of two different alloys. Thanks to the manufacturing process, it is also a very resource-efficient solution that allows process waste to be fed back into the recycling loop.

Due to its versatile and attractive properties, such as high mechanical strength, good forming behavior and excellent electrical conductivity, copper is one of the most widely used base metals in innovative applications, such as e-mobility. The KME product range also includes a wide spectrum of high-tech copper alloys for this application area.

Research and development activities in the KME group

- Research and development activities are of fundamental importance to KME in order to guarantee innovation, efficiency and quality. Research is focused in particular on developing innovative materials, but also on innovating production processes and applications of copper and copper alloy products. With 49 registered patents and 64 trademarks, research and development activities have top priority for KME.

- KME's laboratories are equipped and certified in accordance with ISO 9001:2015 and IATF 16949:2016. It is here that qualified teams of scientists and engineers address the issues concerning the added value of copper, from the raw material to the realization of alloys up to semi-finished copper products and finished products. In the test benches it is possible to carry out the realization of alloys and casting techniques with in-depth scientific expertise. Experimental and test castings provide fast and effective results. It is possible to carry out all the necessary tests and analyses: material analysis, corrosion research, material tests (to determine mechanical and physical properties), chemical analysis.

- KME manages cooperation projects with companies, universities and research centers around the world and actively supports national and international research projects. It also participates in product and process standardization and is committed to support training.

- A team of 83 researchers and developers is working on:

— material treatment and recycling (tin and copper scrap separation);
— metallurgy and casting technology (improvement of conductivity and corrosion resistance);
— manufacturing technology (energy efficiency and process redesign);
— numerical simulation (design simulation and geometric design based on customer's manufacturing process);
— materials science (basic research and development on replacement trends and application of materials such as 3D metal design);
— surface technology (coating improvements for extreme temperature conditions and high casting speed);
— material testing (100% traceability and continuous quality improvement);
— applications engineering (research of new application fields for copper and brass alloys);
— industry 4.0 and digital development;
— 3D printing for copper parts.

DEEPENING

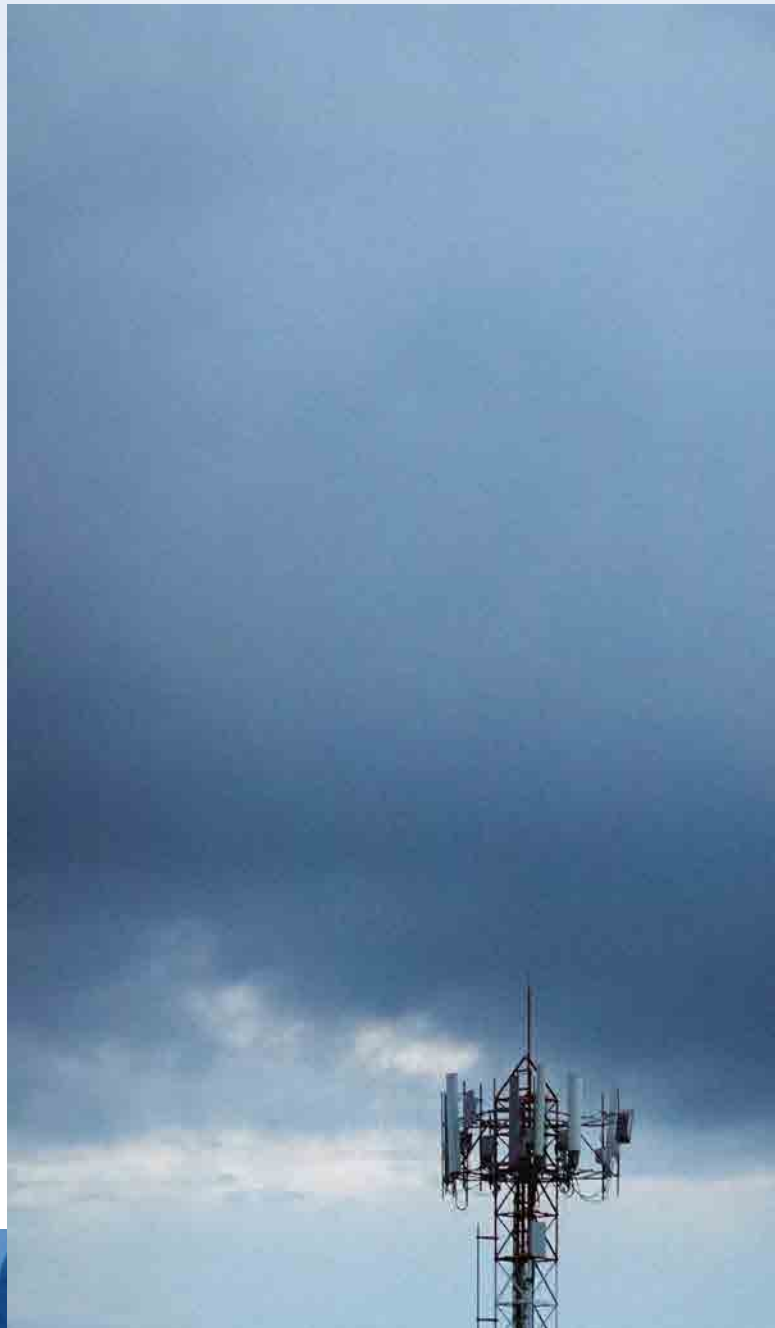
KME engineering for e-mobility

With new and reliable engineering performance, KME is a dependable and powerful partner of the subcontractors of the automotive industry, mastering the challenges of the increasing demand for e-mobility.

5G technology solutions

5G is essential for applications that require high throughput of large amounts of data, such as artificial intelligence (AI), smart home applications, and autonomous driving.

This requires special, high-performance solutions from a materials perspective. KME manufactures perforated strips for the production of radiant cables used in the 5G network. Radiant cables are basically coaxial cables in which slots are drilled into the outer conductor, allowing controlled amounts of electromagnetic energy to be radiated and absorbed by the cable.



DEEPENING

KME shapes the digital future of moulds

Significant progress has been made in recent years towards the implementation of "Industry 4.0," with the development of digitized, automated and connected manufacturing processes. KME is supporting this progress with the introduction of the *MouldOrganiser*, an innovative sensor system that automatically records important mold operating parameters such as identification number, service time and copper thickness. In addition, the *MouldOrganiser simplify* the organization of data for monitoring mould performance, maintenance and procurement.

The basis of this new system is a custom sensor built into the copper plate that automatically records key statistics during casting and rework operations. This data is then transmitted via Bluetooth to a smartphone app that allows additional information, such as comments and photos, to be added. The data can then be transferred to a cloud portal where it is synchronized, encrypted and made accessible to authorized users. Integration with the cloud portal gives customers access to an automated assessment of their operational data, taking another step toward a "*Smart Mould*" solution. In addition, use of the cloud portal allows customers to download corresponding engineering drawings, inspection certificates and dimensional protocols for each mould.

By combining the *MouldOrganiser* with the cloud portal, registration is simplified with key information readily available to both the primary user and those in other departments, such as maintenance. This allows the potential for big data analytics and a much better view of mould performance.

6
Circular economy

The European Union's Action **Plan for the Circular Economy** aims to change production and consumption systems, for both environmental and economic purposes. The main objective is to increasingly improve efficiency in the **use of resources** – through changes in the design of goods, production processes, technologies, the life cycle of products, waste management - to build environmentally sustainable development, while promoting economic competitiveness and employment. In this context, KME Germany and KME Special aims to help accelerate the transition to a circular economy through the efficient use of materials and energy.

6.1 The transition to the circular economy

Some people mistakenly think that the circular economy is only about waste management and recycling. This is not the case. It is a challenge that concerns the entire economic system, from production to consumption. It is a transition on which the productivity and competitiveness of German and European industry depend. It is a strategy that requires a strong commitment from businesses and an incisive industrial policy, as the European Parliament recently reiterated when it stressed that the circular economy must be "*the central element of European industrial policy and of the national recovery and resilience plans of the Member States*".

Accelerating the transition to the circular economy requires action in four directions:

- **Reducing resource consumption**. Reduce the amount of materials used to make a product or provide a service by slowing the consumption of virgin raw materials.
- **Extend the life cycle of products**. Optimize the use of resources by extending the useful life of products; develop a design aimed at their durability and reparability (ecodesign); counteract planned obsolescence.
- **Use of renewable raw materials**. Replacing non-renewable materials and fossil fuels as much as possible with regenerative materials and renewable energy.
- **Reuse and Recycle**. Reuse end-of-life products and recycle waste; develop as much as possible a circular flow of resources; increase the use of recycled materials (secondary raw materials) to replace virgin raw materials.

CONTEXT

The new Action Plan for the Circular Economy

In March 2020, the European Commission completed the European industrial strategy framework with the publication of a new Circular Economy Action Plan, which contains measures to accelerate the transition path.
The Commission will propose specific measures so that:

- The design and trade of sustainable products becomes the norm;
- Products are designed to last longer, are easier to reuse, repair and recycle, and incorporate as much recycled material as possible rather than virgin raw material.

Actions will focus on sectors that use the most resources and where the potential for circularity is highest. Priority objective is also to reduce waste generation and transform it through recycling into quality resources for reuse.

CONTEXT

Copper recycling in Europe

According to the International Copper Study Group, around 50% of the copper used in Europe comes from **recycling**. This helps to meet the growing demand for this metal (+250% since the 1960s) and, at the same time, to reduce the environmental impact of its production and ensure availability for future generations.

Recycling saves energy and reduces CO_2 emissions. It requires up to 85% less energy than primary production. Worldwide, it saves 100 million MWh of electricity and 40 million tons of CO_2 per year.

More than **2 million tons of copper** are reused in Europe, from end-of-life products and directly recycled production scrap. The increase in recycling is due to technologies from European companies that enable greater efficiency in refining secondary scrap and processing for direct smelting of high-purity copper scrap.

DEEPENING

The circular economy is essential for Europe's future

A recent European Parliament resolution reiterates that achieving the Green Deal goals will only be possible if the European Union develops a circular economy model.
This is because "*the transition to a circular economy plays a key role in reducing the EU's greenhouse gas emissions and achieving the 2030 climate target and the goal of zero net greenhouse gas emissions by 2050 at the latest*". Indeed, it is estimated that "*half of total greenhouse gas emissions and over 90 percent of biodiversity loss and water stress depend on resource extraction and processing*".

For this reason, the European Parliament draws attention to the need for circular economy principles to be "the central element of European industrial policy and the national recovery and resilience plans of the Member States," with the conviction that European businesses and economies will be able to be at the forefront "in the global race towards circularity, thanks to well-developed business models, circular knowledge and recycling skills."

To date, however, only "**12% of the materials used by EU industry come from recycling**". It is therefore necessary to "reduce the consumption footprint and double the percentage of use of circular materials in the next decade," because "the circular economy is the path that European companies must follow to remain innovative and **competitive in the global market**."

“ **We need to embrace the idea of a circular economy**.

As things stand, we are taking more from our planet than it can afford to give us, and the effects of this overshoot will become more dramatic and destructive with each passing year.

We urgently need to reduce the environmental and carbon footprint of the goods we consume. To do so, we must ***invest in circular technologies that reuse resources****, rather than constantly producing or importing new goods and extracting more and more raw materials.*

The circular economy holds ***enormous potential*** *not only to reduce our dependence on scarce resources, but also to create jobs. The* ***Green Deal is not just an environmental policy****; it is an* ***economic and geopolitical necessity***. ”

URSULA VON DER LEYEN
President of the European Commission

6.2 Circularity indicators

Accelerating the transition from linear economic models to a circular economy requires every company to be fully aware of its own positioning. Companies need to be able to measure their circularity performance at each stage of their production process and along the entire value chain, from design to procurement, from production to sales, from logistics to maintenance, to end-of-life management of products.

To this end, increasingly sophisticated tools for the detection and analysis of the main indicators of circularity are starting to spread, with the aim of providing companies not only with analytical tools, but also with information and solutions to improve the efficiency in the use of resources and the circularity of the production cycle.

How to measure "circularity"? To date, there are still no standardized and shared criteria and parameters. There are some examples of methods developed in recent years at international level, but a standardized monitoring methodology is still being defined by the European Union, with reference to the "Action Plan for the Circular Economy".

Using the methodology developed by Greening Marketing Italia, a number of circularity indicators relating to KME Osnabrück activities are reported in the sustainability report. In this way, the company, which is readily committed to the circular economy, intends to set out on a path of even more careful evaluation of its efficiency in the use of resources and to monitor progress year after year.

Circularity rate

A first important indicator is the circularity rate, i.e. the percentage of recycled material compared to the total materials used.

Recycled materials (mostly copper scrap, together with wooden packaging) are 37.9% of total materials used in 2020.

Calculating the percentage of metals coming from recycling in relation to the metals used, the rate of circularity is 43.5%.

But the circularity rate does not end with these numbers. Adding to the use of recycled materials outside the plant is the fact that within the plant's production process a high amount of materials (47,466 tons in 2020) is recycled and returned to the production cycle.
This increases the efficiency rate in the use of materials and reduces the consumption of raw materials.
Overall, compared to the total metals processed within the plant, the share of metals from external recycling and internal reuse in 2020 is 60.5% (51.4% in 2018 and 56.2% in 2019).

37.9% OF THE MATERIALS USED COME FROM RECYCLING

43.5% OF THE METALS USED COME FROM RECYCLING

THANKS TO INTERNAL RECYCLING THE RATE OF CIRCULARITY OF PROCESSED METALS INCREASES TO **60.5%**

FIG 6.1 Recycled materials (%)

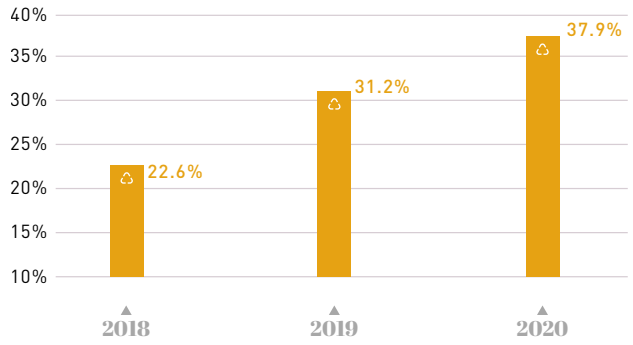
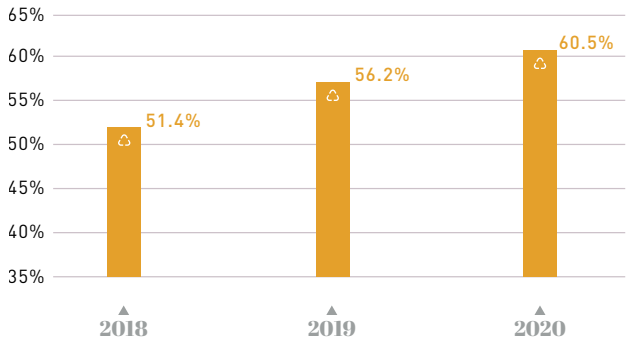


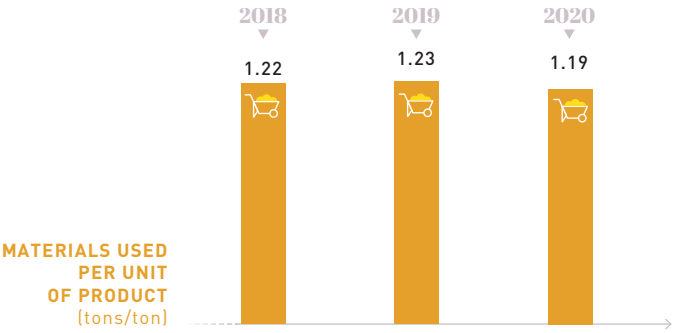
FIG 6.2 Recycled metals (%)



Resource productivity

In order to measure the efficiency in the use of resources, an important indicator is the ratio between the amount of materials used and the production output from the plant. In 2020 it is equal to 1.19 tons/ton.

FIG 6.3 Materials used per unit of product



Waste reduction

A circular economic model requires a progressive reduction of waste and an increase in material recovery, both within the production cycle and downstream of production.

Waste generation is lower compared to 2018 but increasing compared to 2019.

Equally significant is the figure for the amount of waste per unit of product. 0.052 tons of waste were generated per unit of product (ton) in 2020.

Another important indicator is the percentage of waste sent for recovery instead of disposal. In 2020 it reached 48.4%.

FIG 6.4 Waste (tons)

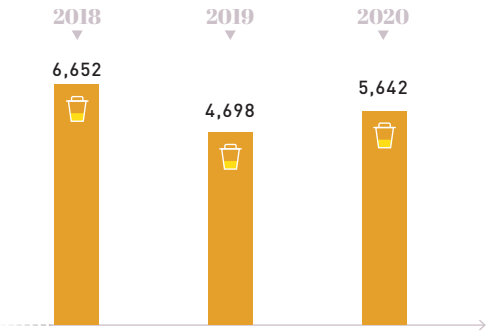
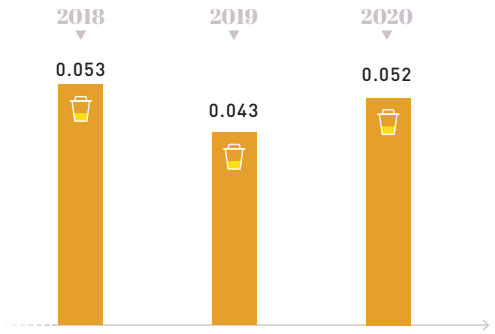


FIG 6.5 Waste per unit of product (tons/ton)



Efficient use of water resources

Even water, in acircular economy scenario, should be used as efficiently as possible, reducing consumption and increasing reuse within production cycles.

The data show a progressive improvement, from 297,876 m^3 of water withdrawn in 2018 to 260,447 m^3 in 2019 and to 232,830 m^3 in 2020 .

The plant houses a water recycling system that processed 12,030,579 m^3 in 2020, thus significantly reducing the volume of water withdrawal required. Again, this is a principle of circular economy applied to an element, water, whose importance, also due to climate change, has grown and will grow in the future.

Recycled water is 98.1% of water used.

For every ton of product 1.99 m^3 of water were consumed in 2020.

FIG 6.6 Water used

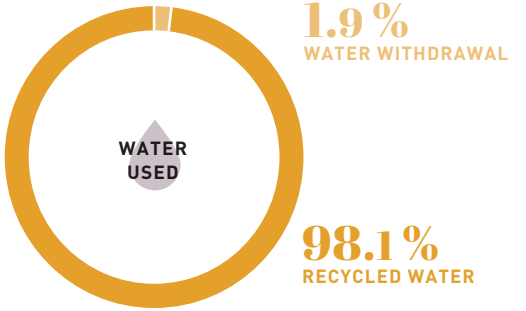


FIG 6.7 Water withdrawal

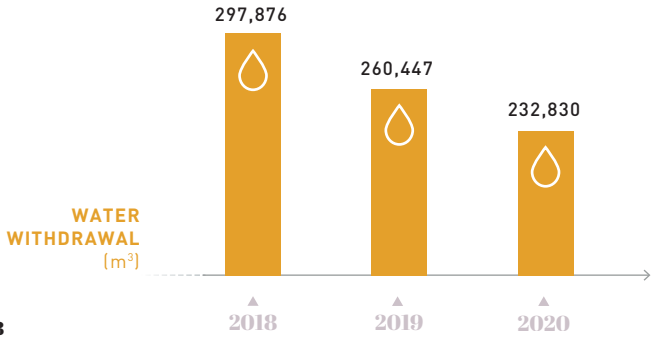
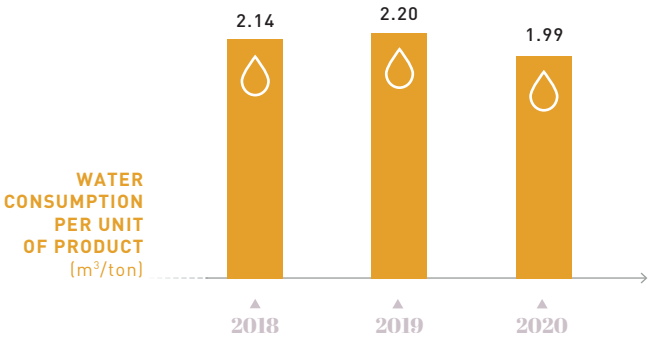


FIG 6.8 Water consumption



Energy efficiency

In a circular economy model, energy, like matter, must be used efficiently and possible. All the more so in energy-intensive facilities such as metal working plants. As mentioned in another chapter, the factory has already taken important steps to improve energy efficiency.
In percentage there is a 3.2% reduction of energy consumption compared to 2019 and a 17.8% reduction compared to 2018

In terms of **specific consumption**, 2,510 kWh eq. were consumed per ton of products, a reduction of 1.7% compared to the previous year.

FIG 6.9 Energy intensity

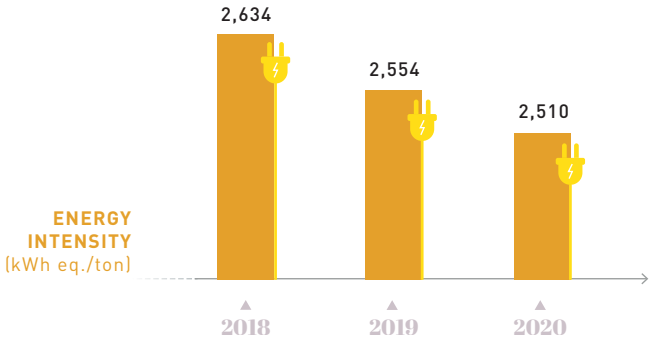
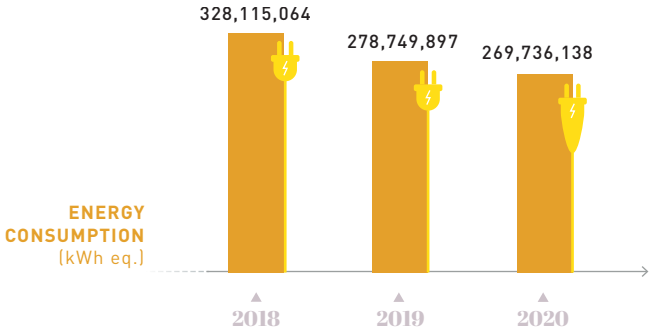


FIG 6.10 Energy consumption



Reducing greenhouse gas emissions

The increase in efficiency in the use of natural resources and the transition towards a circular economy model are closely related to the need to reduce greenhouse gas emissions in order to combat global warming. This is also among the main objectives that a company must pursue on the path toward circularity.

The data show an improvement over the period evaluated.
In percentage, total GHG emissions (direct plus indirect) decreased 9.3% compared to 2019 and 37.7% compared to 2018.

Specific emissions, as measured in relation to output, were also down 7% from the previous year and 27.4% compared to 2018.

FIG 6.11 Emissions

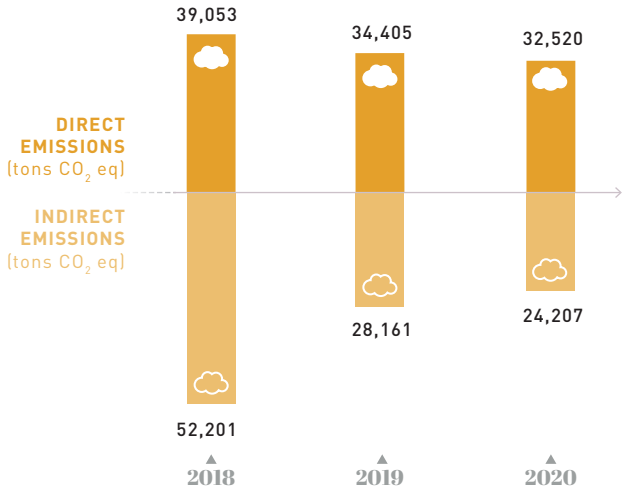
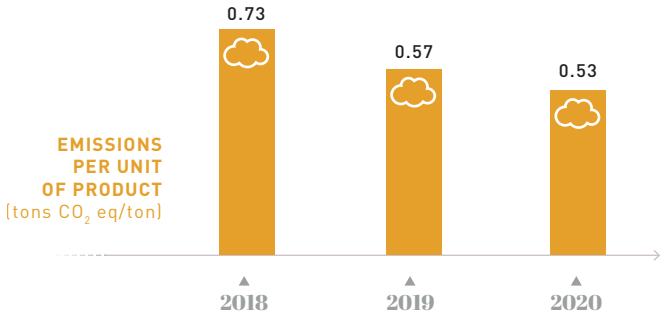


FIG 6.12 Emissions per unit of product



Eco-innovation

The promotion of a circular economy requires investments in process and product eco-innovation, new business models, technological innovations, industrial symbiosis projects and research and development activities.

As part of the research and development activities of the companies, particular attention is due to two topics closely related to the circular economy: efficiency in the use of materials and energy efficiency.

7
Appendix

7.1 Copper: history, facts, curiosities

It was the first metal to be used by man since prehistoric times. The axe of Ötzi, the man who lived 5,000 years ago in the Alps, was made of copper. The Statue of Liberty, inaugurated in 1886, the symbol of New York, is made of copper. It is copper that makes the superconductors at CERN in Geneva, the world center of physics, work.

Copper is everywhere around us: inside TVs, lamps, cell phones, cars, pots, pipes, vases, electrical circuits, household appliances, sanitary equipment, architectural furnishings. And it can give life to alloys, such as bronze (with tin) and brass (with zinc).

How much do we know, however, about this valuable material? Perhaps very little. For this reason we want to close this report with some information and curiosities related to the history of copper and its uses.

Some historical notes

- Copper was already known to some of the most ancient civilizations. It is estimated that its use began at least 10,000 years ago.
- A native copper pendant dated to around 9500 BC was found in Šhanidar Cave in the Zagros Mountains (Iraq).
- More copper objects dating back to 7000 BC have been found in Turkey.
- Signs of activity in the refining of copper from its mineral oxides (malachite and azurite) date back to 5000 BC, a thousand years before those related to the use of gold.
- Copper and bronze artifacts of Sumerian origin have been found in city sites dating back to 3000 BC, and pieces produced with copper and tin alloy by the ancient Egyptians date to the same era.
- A pyramid houses an approximately 5,000-year-old copper alloy drain pipe system. The first copper water pipe dating back to 2750 BC can be seen at the Berlin State Museum. The use of copper in ancient China dates back to 2000 BC, whose bronze production reaches excellence around 1200 BC.
- In Europe, the use of copper is confirmed by the discovery of the Similaun Man (also known as Ötzi), the mummified body of a man dating back to 3200 BC found in the Alps, whose axe has a tip made of 99.7% pure copper. The high arsenic content found in his hair suggests that man's activities included producing copper.
- Towards the end of the 3rd millennium BC, at Saint-Véran (France) a technique was known for detaching a piece of ore, beating it and heating it at a copper mine at an altitude of 2,500 meters. The recovered historical artifacts, dating from an advanced phase of the Bronze Age (early 2nd millennium BC), include ceramic nozzles and dry stone structures that can be interpreted as a prehistoric metallurgical furnace.

Features

- The use of bronze, an alloy of copper and tin, was so widespread in history that it gave its name to a stage in the evolution of human civilization: the Bronze Age. The transitional period between the previous Neolithic and the Bronze Age is called Chalcolithic or Copper Age and is characterized by the coexistence of stone tools and copper tools.

Copper is the chemical element of atomic number 29 and its symbol is Cu. It is called "red gold" because of its coloring.
It is a metal of very high electrical and thermal conductivity, surpassed only by silver.
It is very resistant to corrosion due to a patina that forms spontaneously on the surface, first brown in color and then green or greenish-blue.
It is easily machined, as it is extremely ductile and malleable. It can be easily recycled and its scrap has a high salvage value.
It combines with other metals giving rise to numerous metal alloys (there are at least 400): the most common are bronze and brass, respectively, with tin and zinc; among others, cupronickel and aluminum bronzes.
In addition, copper is bacteriostatic, that is, it fights the proliferation of bacteria on its surface.

Did you know?

- The Latin word for copper is cuprum: this is the origin of the name in most modern European languages (copper in English, cuivre in French, koppar in Swedish, cupru in Romanian, Kupfer in German, cobre in Spanish...).

- The ancient Egyptians used the ankh symbol to indicate copper in hieroglyphics. It also represented eternal life.

- Copper has been associated to the goddess Venus in mythology and alchemy because of its shiny appearance, its use in the production of mirrors and because of its main mining area, the island of Cyprus. The symbol used by alchemists to represent copper is identical to that used by astrologers to represent the planet Venus.

- The oldest evidence of copper being used in plants is the pipe that carried water to the temple near the pyramid at Abusir, Egypt, and dates back to 2750 BC. It is currently preserved in excellent condition at the State Museum in Berlin, confirming the material's resistance to the test of time.

- The main mines are located along the Andes Mountains and the Rocky Mountains: the main mining countries are Chile, Peru, China, United States, Congo, Australia; other important mines are located in Indonesia, Papua New Guinea, Zambia, Canada, ex-USSR countries, Poland and Finland.

- The Statue of Liberty in New York is clad in over 80 tons of copper. Copper was an almost obvious choice: it is a material that can withstand New York's extremely aggressive and corrosive marine and industrial atmosphere.

- In automobiles, copper serves in the wires and windings that generate motion and transmit impulses. A Tesla Model S contains 50 kg of copper in the rotor of its electric motor, as well as other copper in the batteries.

- Copper is an excellent conductor of heat (about 30 times more than stainless steel and 1.5 times better than aluminum). This is why it is required in applications where fast and efficient heat transfer is needed, such as in heat exchangers, air conditioning, radiators, heat sinks in computers, radiant heating, solar collectors, etc.

- In the kitchen, copper pots and pans are valued for their ability to spread heat evenly, without creating hot spots or thermal inertia.

- The excellent conductivity of copper is also exploited in surgery. Copper coatings on medical scalpels conduct electricity to heat the blade, making it self-cauterizing. This is important for controlling bleeding during operations and removing damaged tissue.

- Copper protects millions of buildings around the world through a network of lightning rods: the electricity is then discharged through an earth ground, also made of copper.

KME

- Copper is a naturally occurring material in the earth's crust and in the fresh waters and oceans. Life on earth evolved in its presence, which is why organisms incorporate it and use it for their vital functions. Humans have about 1 mg per kg of body weight.

- One of the most spectacular and futuristic applications of copper is in the superconductors of the Large Hadron Collider at CERN in Geneva, the largest particle accelerator in the world (525 million km of copper wire!).

- Most printed circuit boards for electronic applications are made by laminating a thin sheet of copper to a flexible film and etching away the copper to leave thin lines that will carry the current. A new technology involves an ink to deposit only the copper lines on the circuit board, thus eliminating waste and lowering manufacturing costs.

- The workability and availability of brass makes it suitable for the production of musical instruments: although it is strong, it is bendable and workable at the same time: it can be hammered, cut, rolled, polished and spliced. It has considerable resistance to corrosion, although it is generally polished and lacquered to maintain its characteristic bright yellow color.

- Copper can be shaped even in complex forms and it transfers heat in a very efficient way: for this reason it is used to build stills and boilers, for the production of beverages and food. For this reason it is used in the production of beer and in distillation in general.

- Copper and its alloys are necessary materials for efficient energy generation, storage, transport and consumption. This is also true in renewable energy production. For example, a 1 MW wind turbine contains 3 to 4 tons of copper.

- The colors of the fireworks depend on the ingredients, and the blue comes from copper salts, introduced as an extremely fine powder. When the gunpowder explodes, the metal particles oxidize, creating the heat needed to excite the powders, which emit light.

- The Pantheon in Rome (dating back to the 2nd century A.D.), had gilded bronze coverings for the dome and the gallery, which were removed after 1,500 years to make the columns of Bernini's canopy in St. Peter's and the cannons of Castel Sant'Angelo: an example of historical recycling!

- Copper and its alloys are ideal for making coins, thanks to their resistance to abrasion, impact and corrosion. In addition, they are perfectly recyclable and assume - depending on the percentage content of other metals - different colors and extremely precise electrical and magnetic properties.

- The Euro was minted in copper alloys: CuAl5Zn5Sn1 for the 10, 20 and 50 cent coins, CuNi25 and CuZn20Ni5 for the white and yellow parts of the 1 and 2 Euro coins respectively.

- For many industrial applications, the performance of copper can be improved by the addition of one or more different metals. The best-known copper alloys are brass (copper-zinc), bronze (copper-tin) and copper-nickel. It is estimated that there are more than 400 copper alloys on the world market today.

- The furthest copper artifact in space is the (gold-plated) disk aboard Voyager 1, now in interstellar space more than 21 billion km from Earth.

- Bronze was even used by the ancient Romans as a material for valves in the water distribution network.

- Numerous scientific studies have shown that in the presence of copper piping there are fewer colonies of bacteria such as Legionella, responsible for serious and sometimes fatal pneumonia.

- According to the U.S. Geological Survey, since 1950 reports have regularly indicated that an average of 40 years of copper reserves and 200 years of available resources were available. Reserves are defined as deposits that have already been discovered, determined, and evaluated as economically viable; resources are defined as reserves, discovered and potentially viable deposits, and other deposits not discovered but predicted by preliminary geologic analyses.

(source: European Copper Institute)

7.2 Methodological note

The sustainability report was prepared in accordance with the Global Reporting Initiative GRI-G4 guidelines. GRI promotes the use of sustainability reporting as a tool to enable businesses and organizations to contribute to the sustainability of the global economy.
The report was prepared with the consultancy of Greening Marketing Italia (GMI).

REPORTING PERIOD

The reporting period for this sustainability report is January 1 through December 31, 2020.
The report contains not only 2020 data but also data from the previous two years (2018 and 2019) in order to provide a more complete picture of the ongoing trends in the company's performance.

PRINCIPLES OF DEFINING REPORT CONTENT

- **Materiality**: The information contained in the report and its level of detail take into account all significant impacts (economic, environmental and social) and all aspects that could substantially influence stakeholders' assessments and decisions.
- **Stakeholder inclusiveness**: the report addresses all stakeholders, internal and external, who are involved or may be affected by the activities of the facility and the companies.
- **Sustainability context**: the report describes the company's performance with respect to the objectives of sustainable development, taking into account both significant global impacts (such as climate change) and the specific characteristics of the territorial context in which the significant impacts of the industrial activity occur.
- **Completeness**: the report describes the environmental, economic and social performance of the company using a system of indicators that describes all the main impacts of the activities carried out, and highlighting their evolution in the reference period.

PRINCIPLES OF RELATIONSHIP QUALITY ASSURANCE

- **Balance**: The report describes both the positive and negative aspects of the company's environmental, social and economic performance, providing qualitative information and quantitative data that allow the reader to make an independent and balanced judgment.

- **Comparability**: the indicators developed in the report follow the methodologies indicated in the GRI guidelines, thus making it possible to compare the company's performance with that of other industries, as well as to assess its evolution over the reporting period.

- **Accuracy**: each indicator developed in the report is developed according to a consistent pattern, reporting numerical data in tables, accompanying them with explanatory graphical representations and illustrating with a synthetic text the main evidence found. Tables and graphs indicate the units of measurement used.

- **Clarity**: The report is drafted using language that is as simple as possible, avoiding overly detailed technical information. The structuring of the index and the table of correspondence with the GRI index help stakeholders identify issues of specific interest to them in the report. Graphics facilitate understanding of the data.

- **Verifiability**: Information is provided in such a way that it can be verified over the years and possibly become the subject of external scrutiny.

PRODUCTION DATA

The figure relating to the company's production is to be understood as the quantity of products leaving the plant (output) during the year, while the figure relating to materials used refers to the quantity of materials entering (input) in the same period. The production figure may therefore include some quantities not actually produced during the year but already in stock.

7.3 GRI correspondence table

* Where this is an indicator deemed not relevant or not available, no reference paragraph is given

Profile

GRI INDICATOR	DESCRIPTION	PARAGRAPH *
Organization Profile		
102 - 1	Name of organization	2.2
102 - 2	Activities, brands, products and services	2.3
102 - 3	Location of management offices	2.2
102 - 4	Location of existing activities	2.2
102 - 5	Ownership and legal status	2.1-2.2
102 - 7	Order of magnitude of the organization	2.2-2.3
102 - 8	Information about employees and other workers	4.2
102 - 9	Supply chain	4.6-5.6
102 - 10	Significant changes in relations between the entity and its supply chain	-
102 - 11	Precautionary principle	2.4-2.5
102 - 12	External initiatives	4.7
102 - 13	Membership in associations	-
Strategy		
102 – 14	Declaration of top decision makers	Letter to stakeholder
102 – 15	Main effects, risks and opportunities	5.1
102 – 16	Values, principles, standards and rules of conduct	2.5
102 – 17	Ethics Advisory Mechanisms	-
102 – 18	Governance structure	2.4
102 – 19	Delegating process	2.4

GRI INDICATOR	DESCRIPTION	PARAGRAPH
102 – 20	Executive level for economic, environmental and social topics	2.4
102 – 21	Consultation with stakeholders on economic, environmental and social topics	-
102 – 22	Composition of governance at the highest levels	2.4
102 – 23	Chairing the highest level of governance	2.4
102 – 24	Apex nomination and selection	2.4
102 – 25	Conflict of interest mechanisms	2.5
102 – 26	Role of senior governance figures in setting values and intentions	2.4
102 – 27	Cognition of senior governance figures on individual topics	2.4
102 – 28	Assessing the performance of senior governance	-
102 – 29	Identification and management of economic, environmental and social impacts	-
102 – 30	Effectiveness of risk management processes	2.4
102 – 31	Monitoring of economic, environmental and social topics	2.4
102 – 32	Role of senior governance on the sustainability report	2.4
102 – 33	Communication of critical issues	2.4
102 – 34	Nature and number of critical aspects	5.1
102 – 35	Remuneration policies	4.2
102 – 36	Compensation Determination Process	As per national collective agreement
102 – 37	Level of stakeholder involvement in the remuneration process	-

GRI INDICATOR	DESCRIPTION	PARAGRAPH
102 – 38	Annual total compensation ratio	-
102 – 39	Percentage increase in compensation ratio	-
102 – 40	List of stakeholders involved	1.4
102 – 41	Collective bargaining agreements	4.2
102 – 42	Identification and selection of stakeholders	1.4
102 – 43	Approach to stakeholder engagement	Presentation
102 – 44	Key themes	1.4
Reporting		
102 - 45	Entities included in the financial statements	5.2
102 - 46	Defining report content and topic boundaries	7.2
102 - 47	List of topics materials	-
102 - 48	Information review	-
102 - 49	Changes in reporting	-
102 - 50	Reference period	2020
102 - 51	Date of most recent report	-
102 - 52	Reporting cycle	Annual
Management approach		
103 - 1	Explanation of the topic and its boundaries	-
103 - 2	Reporting requirements	-

Economic performance

GRI INDICATOR	DESCRIPTION	PARAGRAPH
201 - 1	Direct economic value generated and distributed	5.3
201 - 2	Financial implications and other risks and opportunities due to climate change	6.2-6.3
201 - 3	Significant financing received from the public administration	-
Market presence		
202 - 1	Ratio of local minimum wage to average entry level wage	-
202 - 2	Proportions of senior management hired from within the local community	-
Indirect economic impacts		
203 - 1	Investments in infrastructure and services	4.7
203 - 2	Significant indirect economic impacts	5.6-5.7
Procurement practices		
204 - 1	Proportion of spending with local suppliers	5.6
Anti-corruption		
205 - 1	Operations planned for corruption risks	2.5
205 - 2	Communication and training on anti-corruption procedures	2.5
205 - 3	Evidence of corruption and responses	-
Conduct detrimental to competition		
206 - 1	Legal action for anti-competitive behavior, anti-trust and monopolistic practices	-

Environmental performance

GRI INDICATOR	DESCRIPTION	PARAGRAPH
Materials		
301 - 1	Materials used, by weight or volume	3.3
301 - 2	Recycled materials used	3.3
301 - 3	Reused products and their packaging materials	3.3
Energy		
302 - 1	Energy Consumption	3.2
302 - 2	Energy consumption outside the organization	-
302 - 3	Energy intensity	3.2
302 - 4	Reduced energy consumption	3.2
302 - 5	Reductions in energy requirements for products and services	3.2
Water		
303 - 1	Water withdrawal	3.7
303 - 2	Water sources significantly affected by the withdrawal	3.7
303 - 3	Recycled and reused water	3.7
Biodiversity		
304 - 1	Operational sites owned, leased, managed in, or adjacent to protected areas	-
304 - 2	Significant impacts of activities, products and services	-
304 - 3	Protected or restored habitats	-
304 - 4	Species on the IUCN red list	-

GRI INDICATOR	DESCRIPTION	PARAGRAPH
Emissions		
305 - 1	Direct greenhouse gas emissions (scope 1)	3.5
305 - 2	Indirect greenhouse gas emissions (scope 2)	3.5
305 - 3	Other indirect greenhouse gas emissions (scope 3)	-
305 - 4	Greenhouse gas emission intensity	3.5
305 - 5	Reduction of greenhouse gas emissions	3.5
305 - 6	Emissions of ozone-depleting substances	-
305 - 7	Nitrogen oxides, sulfur oxides, and other significant air emissions	3.6
Waste and discharge		
306 - 1	Final water discharge	3.8
306 - 2	Waste and disposal methodology	3.4
306 - 3	Spills	-
306 - 4	Transport of hazardous waste	-
306 - 5	Water bodies affected by discharges and/or outflows	3.8
Environmental Compliance		
307 - 1	Non-compliance with environmental laws and regulations	no
Supplier environmental assessment		
308 - 1	Reporting obligations	4.6
308 - 2	Negative environmental impacts in the supply chain	-

Social performance

GRI INDICATOR	DESCRIPTION	PARAGRAPH
Employees		
401 - 1	Hiring new employees and employee turnover	4.1
401 - 2	Benefits reserved exclusively for full-time employees	-
401 - 3	Parental leave	4.2
Corporate Labor Relation		
402 - 1	Minimum notice periods for operational changes	as per contract national collective of work
Health and Safety		
403 - 1	Employee representation on joint management/employee health care committees	4.3
403 - 2	Injury types and percentage of injuries, work-related illnesses, absences, and work-related deaths	4.3
403 - 3	Workers with a high degree of injury or high risk of occupational disease	4.3
403 - 4	Health and safety issues covered by formal agreements with labor organizations	as per contract national workforce
Training		
404 - 1	Average annual hours dedicated to training	4.4
404 - 2	Skills implementation and transition assistance programs	-
404 - 3	Percentage of performance and review	-
Equal opportunities		
405 - 1	Diversity of management bodies	4.2
405 - 2	Salary ratio man/woman	4.2

GRI INDICATOR	DESCRIPTION	PARAGRAPH
Non-discrimination		
406 - 1	Incidents of discrimination and actions taken	4.2
Freedom of association and collective bargaining		
407 - 1	Transactions and suppliers where there are association risks	-
Child labor		
408 - 1	Operations and suppliers subject to child labour risk	2.5
Forced labor		
409 - 1	Operations and suppliers at risk for forced labor	2.5
Security practices		
410 - 1	Security personnel trained in human rights	2.5
Rights of indigenous peoples		
411 - 1	Incidents involving violations of indigenous peoples' rights	2.6
Human rights assessment		
412 - 1	Operations subject to human rights controls	2.5
412 - 2	Human rights policy training	2.5
412 - 3	Investment agreements for the protection of human rights	2.5
Local communities		
413 - 1	Activities involving local communities	4.6

GRI INDICATOR	DESCRIPTION	PARAGRAPH
413 - 2	Operations with significant impacts on communities	4.6
Social evaluation of suppliers		
414 - 1	New suppliers screened using social criteria	4.5
414 - 2	Negative social impacts in the supply chain	4.5
Public policies		
415 - 1	Public Contributions	-
Consumer health and safety		
416 - 1	Assessment of safety and health impacts	2.6-3.1
416 - 2	Incidents of service and product non-compliance	no
Marketing and labeling		
417 - 1	Product disclosure and labeling requirements	2.6
417 - 2	Incidents related to non-compliance	-
417 - 3	Incidents related to failure to communicate	-
Consumer Privacy		
418 - 1	Reasoned complaints about invasion of privacy	-
Socio-economic compliance		
419 - 1	Failure to comply with laws of socio-economic area	-

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GREENING MARKETING ITALIA S.R.L.

GRAPHICS AND LAYOUT
BIANCO TANGERINE

Sustainability report

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2020