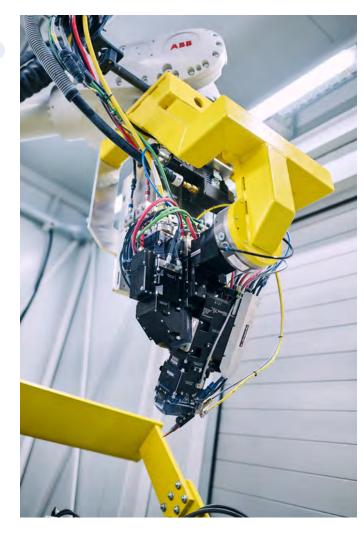
## **NEUMAN** ALUMINIUM

# THE SUSTAINABILITY REPORT





# Al ways in our element.



1	PREFACE BY THE EXECUTIVE MANAGEMENT	4
2	NEUMAN ALUMINIUM INDUSTRIES	10
3	OUR KEY TOPICS	26
4	ABOUT THE REPORT	58
5	TABLES	62
6	GRI CONTENT INDEX	76
7	IMPRINT	78



1

# Preface by the Executive Management



## Preface by the Executive Management

Neuman's surveyed stakeholders name energy consumption and  $\mathrm{CO}_2$  emissions as the two crucial issues of our time. We must be economically successful in order to meet the challenges of the energy transition away from nuclear and fossil-fuel energy. In coordination with our suppliers, our customers, our staff and our owner, we will work towards this success. This success will allow us to make the necessary investments to manufacture our high-quality aluminium products in an energy-efficient, low-emission and socially sustainable manner.

Since the latest Sustainability Report in 2016, Neuman Aluminium Industries sites have been established in Slovakia, in Mexico, and in China. The markets for our products have changed, and our customers are wording sustainability criteria more specifically. Every day, we face the challenge of turning this change into an opportunity and meeting the ever-increasing expectations. Assuming responsibility for our customers, our staff and our environment is what drives us and keeps us innovative. Always in our element.

Even before the political framework is adapted to the proposals of the Intergovernmental Panel on Climate Change and  $CO_2$  emission is priced, we will internally assign a cost to these emissions. This tool will allow us to make the right decisions in terms of  $CO_2$  emissions when investing and doing business at our sites in Europe, America and Asia.

We are well aware of the multiple impacts of bauxite mining, the high-risk waste of the manufacturing process, and the high energy demands of the electrolysis method used to produce aluminium. Our own energy consumption for the shaping of our material is comparatively low. It becomes a core task and a challenge to select those partners in the supply chain that are capable of delivering resource-saving primary material and process secondary material economically.

With this approach, we will gradually and consistently reduce the CO<sub>2</sub> footprint of our products.

Our staff cite the safety of the working environment and a good ratio of workload to leisure time as the key factors. Even today, parts of our continuous improvement process are already helping to optimize workplace ergonomics and reduce noise pollution. With the vision of having zero workplace accidents in 2025, we are launching a broad-based training series at all sites to make every management level aware of their responsibility for occupational health and safety.

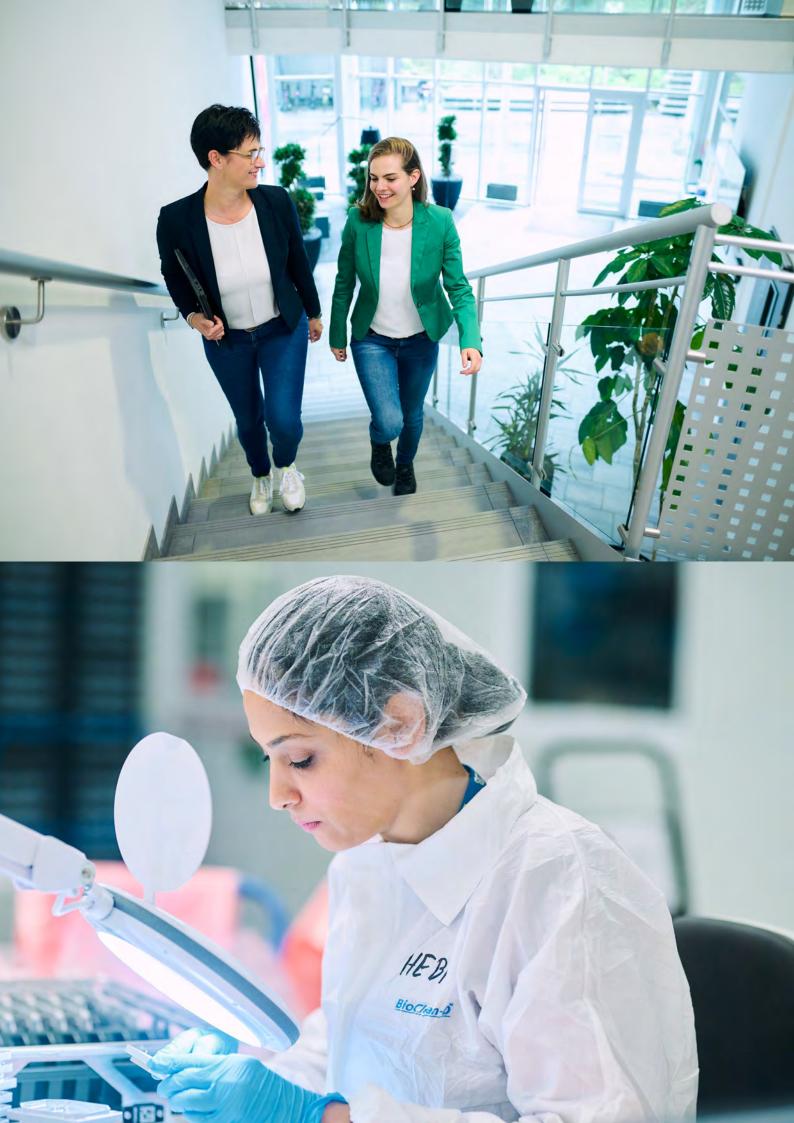
Through conversations at career fairs, presentations on social media platforms, in print media, internal training and other channels, we communicate our opportunities as an employer and convey our values as a family business. In this way, we want to remain attractive to our staff and attract new talent.

We will inform our stakeholders annually about our actions and achievements in the area of sustainability.

The basic prerequisite for success with our customers is the quality of our products. Assessing these with the "caliper gage" ceased to be sufficient a long time ago. Fine-tuned alloys, perfectly matching strengths and surface properties, technical cleanliness appropriate to the application, and on-time delivery are the things that make the difference for us.

Dr. Cornelius Grupp MBA
Matthias Benz

Executive Management NEUMAN ALUMINIUM INDUSTRIES





# Neuman Aluminium Industries

The Group	12
Economic key figures of Neuman Aluminium Industries	15
Management structure of Neuman Aluminium Industries	16
Our sustainable responsibility	19
Supply chain	22

# 3100 Employees

17
Plants
in 8
countries

© 600 M€ in sales

#### The Group

At the Austrian headquarters of the Group in Marktl near Lilienfeld, there has been a metalworking industry since 1780. In 1880, Fried. v. Neuman GmbH was founded at this location. In 1981, the family of the current owner, Dr. Cornelius Alexander Grupp, acquired the then Fried. v. Neuman GmbH. Dr. Grupp subsequently developed the company into an international and rapidly expanding group.

The company "Neuman Aluminium Industries" (registered as Fried. v. Neuman Gesellschaft m.b.H., abbreviated FvN) is part of CAG Holding GmbH, whose owner is Dr. Cornelius Alexander Grupp.

CAG Holding GmbH owns further companies in addition to Neuman Aluminium Industries.



#### GRI 102-01, 102-02, 102-03, 102-05

Neuman Aluminium Industries specialize in the development and production of high-quality aluminium parts. The company consolidates many years of experience with a wide variety of aluminium processing technologies, from melting and casting through stamping, extrusion, impact extrusion, forging and heat treatment to profile shaping.

Products by Neuman Aluminium Industries are sold worldwide to the automotive, mechanical engineering, construction, electrical engineering, and packaging industries. The Group operates at ten production sites in Europe, North America, and Asia.

Neuman Aluminium Industries are structured into five divisions, each of which focuses on one processing technology. Each of the individual locations is an individual limited liability company. The entire Group is managed by FvN, supported by the managing directors of the individual divisions and plants.

The Sustainability Report relates to the following eight of the total of 17 plants that are assigned to the scope of the integrated management system. Fried. v. Neuman is included in the Group as the parent company of Neuman Aluminium Industries.





In the company, essential tasks are organized through the implemented management systems and their integration into a common system. The management systems serve to maintain and further develop a legally compliant, process-oriented organization. Since the last report, PWG has started production at the site in Mexico

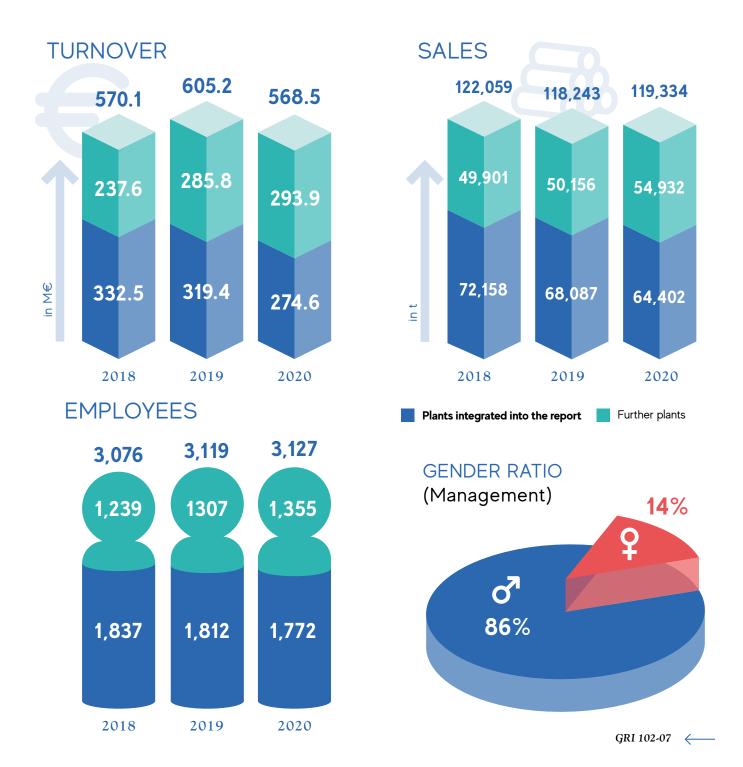
The companies of Neuman Aluminium Industries are in regular and close contact with the most important **stakeholder groups**, which include customers, suppliers, staff, the owner, and neighbors. Our stakeholders are informed annually about the steps and achievements in the field of sustainability.

#### Memberships of Neuman Aluminium Industries

- → AC2T research GmbH
- → Aluminium Deutschland e. V.
- → Automotive Cluster
- → Business Upper Austria OÖ Wirtschaftsagentur GmbH
- → CEST Kompetenzzentrum für elektrochemische Oberflächentechnologie GmbH
- → ecoplus. Niederösterreichs Wirtschaftsagentur GmbH
- → Trade Association Mines and Steel
- → Trade Association of the Non-Ferrous Metal Industry
- → Trade Association of the Metalworking Industry
- **→ FH Wiener Neustadt**
- → Federation of Lower Austrian Industrialists
- → Logistics Cluster Lower Austria
- → University of Leoben
- → Norwegian University of Science and Technology
- → SINTEF Manufacturing
- → TU Graz
- → TU Wien
- → Unternehmensverband Südwest e. V.
- → Verband der Automobilindustrie e. V. (VDA)
- → Lower Austria Chamber of Commerce | Industry Division
- → Federal Economic Chamber of Austria

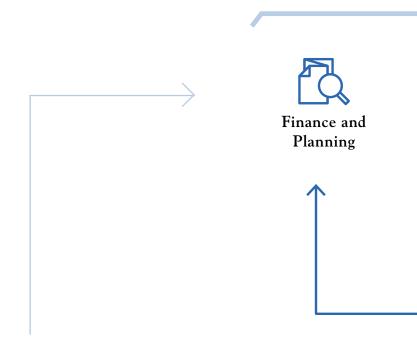
## **Economic key figures**of Neuman Aluminium Industries

The reporting scope of the present Sustainability Report covers eight of the 17 plants (referred to as: plants integrated into the report) of Neuman Aluminium Industries.

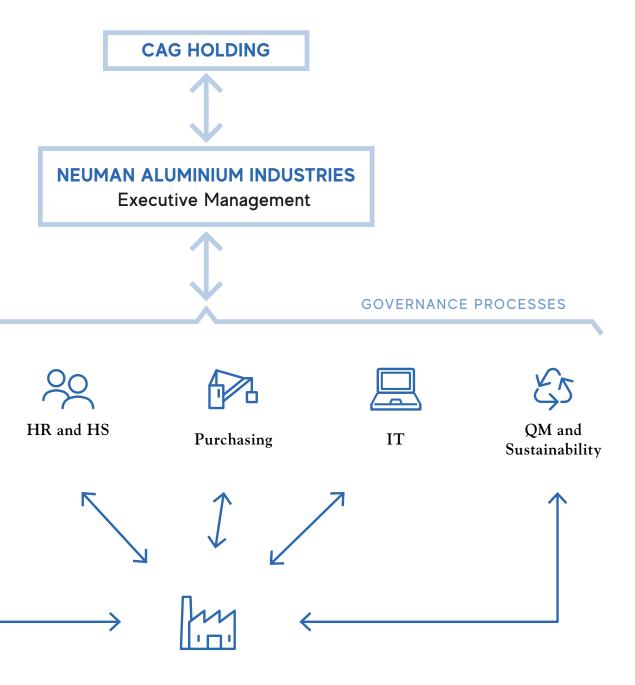


### Management structure of Neuman Aluminium Industries

All management levels report regularly and as required to the executive management of the plants. On a consolidated basis, the managements of the divisions report to the Management Board at the Global Management Meeting with the objective of communicating and making decisions on economic, environmental and social issues.



The cross-divisional functions of Business Planning, Human Resources, Purchasing, IT, and Quality Management and Sustainability are handled by FvN. Requirements and processes are controlled and coordinated centrally. Sustainability issues are collected centrally and focused in the individual departments, including across plants.





The executive management of Neuman Aluminium Industries consists of two managing directors. The Group's executive management maintains a regular and close exchange with the managing directors of all Neuman companies.



#### **Executive Management**



0	
Owner and Top Management	Board meetings, conferences, stakeholder survey
Management and Sister Companies	Monthly management meeting and other online meetings
Employees	Newsletters, Neuman Report, appraisal interview, stakeholder survey, internal company events
Customer	Regular exchange and meetings, stakeholder survey, fairs, events, social media, print media
Suppliers	Usual dialog, stakeholder survey, audits
Neighbors	Official and casual exchange of information
Science and Technology	Cooperation, conferences and congresses
Public Authorities	Authorisation processes, events
Media	Press releases, interviews, casual exchange
Networks and Confederations	Participation and memberships see p. 14

### Our sustainable responsibility

In the Code of Conduct of all companies belonging to the CAG Group, which also includes the companies of Neuman Aluminium Industries, our sustainable responsibility is defined as follows:

- → At CAG, we take our responsibility seriously for ourselves, our companies and the regions in which we work.
- → We strive not only for continuous improvement in our companies, but also for better living standards in the regions where we operate.
- As a privately held company, we take a long-term view of the market and the market segments in which we want to operate. This includes in particular the circular economy in which our raw materials can be frequently reused and recycled This is demonstrated, among other things, by our use of aluminium and glass, and our biofuel production.

Our understanding of regulatory compliance spans the entire Group with locations in Europe, Asia and the Americas. The Supplier Code of Conduct applies to our suppliers and business partners.

#### Dr. Cornelius Grupp:

Our core values – honesty and integrity, leadership, respect, clarity and straightforwardness, innovation, passion and responsibility – are the foundation of our success as a Group. They guide our business actions and ensure that we maintain the highest standards of business ethics in all our dealings with all our stakeholders, wherever we operate. As a privately held company, we strive for long-term thinking in all our decisions. Therefore, we position ourselves mainly in the circular economy, where many of our raw materials (such as aluminium and glass) can be reused and recycled.



Our sustainability program is reflected in our business policy. This is derived from the owner's vision and combines quality, safety, environmental, energy and social policies, which are implemented and lived by means of an integrated management system. The combination of risk analysis and the certified management systems provide the solid basis for the company's precautionary principle. The function and significance of the management systems are explained to all staffers when hired. The staff are informed about the manners established by the company as well as the business policy.

### Management systems

In order to ensure the consistent quality of our products through a smooth process and continuously improve the impact of our actions, management systems have been implemented in accordance with ISO 9001, IATF 16949, ISO 14001 and ISO 45001. We meet all standards voluntarily. The management systems are continuously being certified by an accredited body. In order to make optimum use of these, they have been standardized where possible for all the plants covered by this Sustainability Report. A central office has also been set up for this purpose.

The results in the areas of quality, environment and occupational health and safety are measurable by means of specific key figures and can thus be presented transparently. The goal is continuation of the ISO 14001 and ISO 45001 certificates without major deviations in the external audit. The measures for achievement are implementation of measures from evaluations, previous audits, suggestions for improvement, etc.

→ GRI 403-01

## United Nations Goals for Sustainable Development (SDGs)

The 17 SDGs (Sustainable Development Goals) were adopted with the 2030 Agenda in September 2015 by heads of state and government at a historic UN summit, and entered into force on January 1, 2016. The goals are unique in that they call on all countries – rich, poor, and middle-income – to act to promote prosperity while protecting the planet. The goals are intended to serve as a framework for companies to contribute to an environmentally responsible future by addressing global challenges such as poverty, inequality, and global warming.





































Step by step, we will substantiate the concerns and intentions related to these global development goals for Neuman Aluminium Industries and turn them into corporate goals. For example, for these three areas, we have been acting in line with the SDGs for a long time.



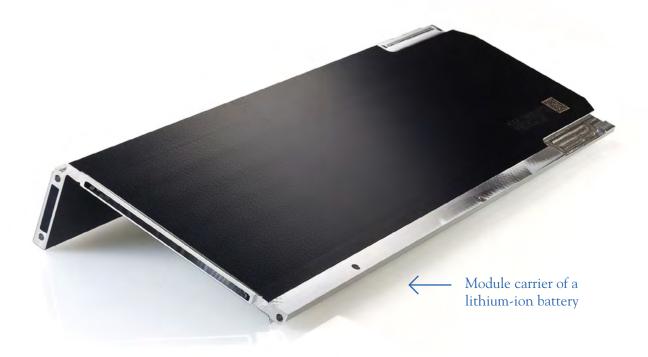
Well-structured and clean work areas matter to us. Health risks and dangers in the handling of hazardous substances are thus minimized.



Years ago, the Group already built hydropower plants and biomass power plants, thus investing into sustainable generation of energy. The electricity from the power plants in Marktl is used internally in the company's production. This year, a large roof was equipped with solar panels, and next year another 5,000 m² will be utilized.



One of the objectives in setting up the continuous casting plant at the Marktl site was to reuse the large volume of process waste from the neighboring plants right on site. A key feature of our material is its excellent recyclability.



## Supply chain

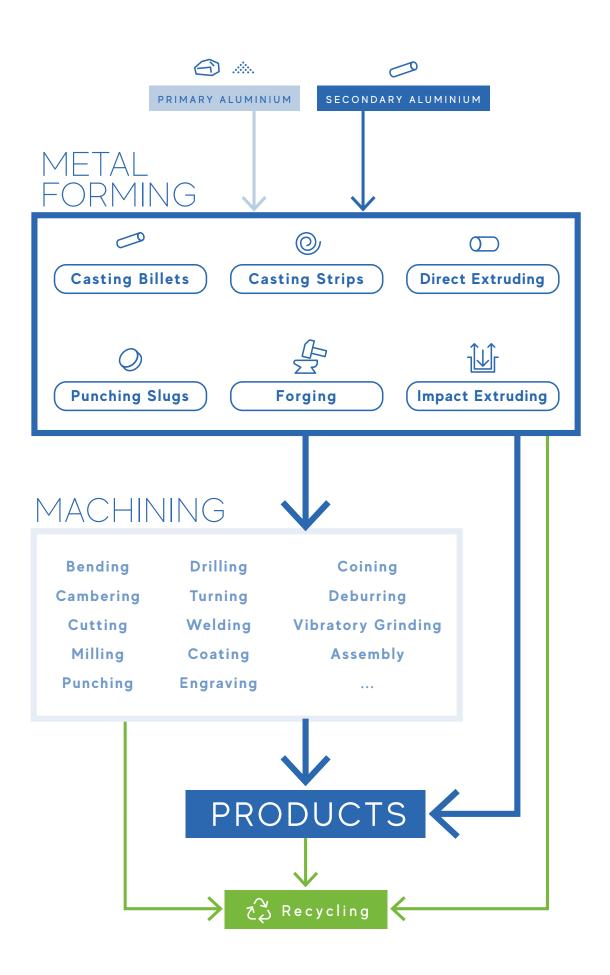
Neuman Aluminium excels by deep integration of its value creation across the supply chain. Here, the casting of aluminium strips, rolling of the strips, punching of slugs from these strips, casting of extrusion billets and bars, extrusion of these bolts, impact extrusion of slugs, forging of the pressed and cast bars and shaping of the hollow sections are mapped within the organization. Despite this deep integration of manufacturing, significant parts of these materials are additionally purchased from selected suppliers. Primary aluminium in the form of ingots and extrusion billets, which are largely made of secondary material, are the main components.

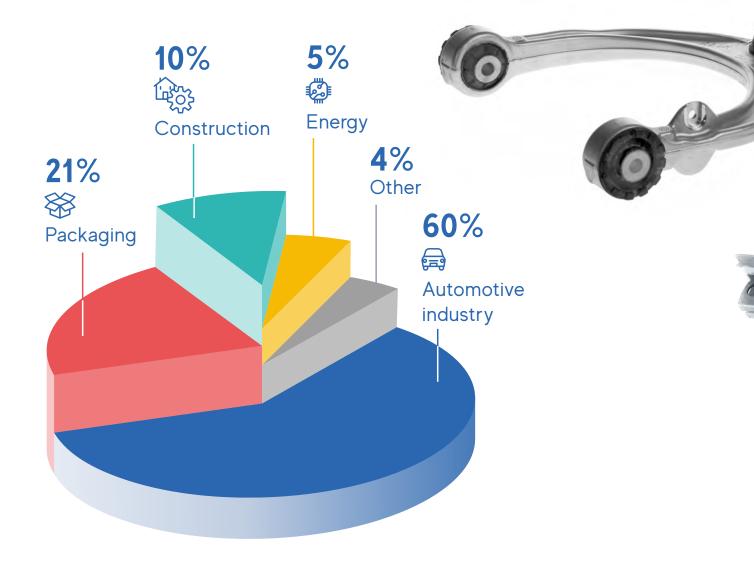
Prioritizing the awarding of volumes with a holistic approach and expanding suppliers who have also recognized sustainability in all its facets as a decisive criterion is the challenge of the coming years. For example, we are also working with our business partners on metallurgical adjustments to our products to reduce the  $CO_2$  footprint. In the materials sector, Neuman is currently being supplied by some 30 selected vendors. In the future, availability, quality, costs and responsible interaction with their environment will be the decisive criteria for selection of suppliers. We will specifically pay attention to the greenhouse gas emissions they cause.

Neuman Aluminium Industries operates in a highly competitive market for demanding customers; quality is therefore of particular importance for sustainable corporate success.

Strategically, the company is striving to continue positioning itself as a competent, reliable partner to its customers in its core markets – both geographically and with a view to important industries in the future –, and to position its competitiveness through innovative products and consistently increased efficiency.

There are no significant changes in the supply chain compared with the reporting period of the previous Sustainability Report.





Sold Products	PCF t/t Al	Unit	2018	2019	2020
Slugs	9.72	t	20,993	20,482	19,028
Rods and bolts	0.92	t	10,554	13,800	14,975
Profiles and pressed bars	6.76	t	31,815	30,986	29,084
PIR Scrap	0	t	10,103	11,181	9,609
PIR Scrap	0	t	6,367	5,079	4,563
Machined profiles	7.50	t	9,901	8,845	7,665
Impact extrusion parts	9.50	t	3,277	3,115	3,134
Parts sale to other plants*	10	t	1,031	897	815
Total quantities sold			72 158	68 087	64 402

<sup>\*</sup> internal, therefore not in the total









This can was pressed from a higher-strength Neucan alloy that allows for even lower wall thicknesses. Our customer TUBEX was awarded the German Packaging Prize in 2021 for this idea.

Neuman is a reporting member of the NQC, a joint technical platform for sustainability in the automotive supply chain. The automotive industry has thus formulated a long-term goal of jointly improving sustainability performance in the supply chain. In responding to the NQC questionnaire, we were able to achieve excellent ratings for our plants that are suppliers to the automotive industry.

# 3 Our Key Topics

Health and safety at the workplace	28
Job satisfaction	36
Energy consumption and CO <sub>2</sub> emissions	42
The use of aluminium	50

The stakeholder survey and subsequent assessment of the impact of Neuman's business activities on the environment and society revealed the following:

4
crucial
topics\*

Health and safety at the workplace

Job satisfaction

Energy consumption and CO<sub>2</sub> emissions

The use of aluminium

A detailed description of the selection of these four topics can be found starting on page 60 of this report.

# Health and safety at the workplace

The prevention of workplace accidents, and preventive measures to protect the health of jobholders are a key issue in the manufacturing industry. This includes both physical and mental aspects of health. Through targeted occupational health and safety management, companies can have a positive impact on society.

Intensive consideration of the defined workplace health and safety programs and the occupational health and safety and health protection management system is an effective approach to managing and continuously eliminating dangers and minimizing risks. All staffers at all levels of the organization – workers, employees and leased employees – are covered by the management system and occupational health and safety programs; no-one is excluded.

Through regular training, staff are instructed in the topics of occupational health and safety and health protection, environment and energy, as well as quality and work practices. Awareness in these areas is thus continuously renewed and improved.

## Going home unharmed every day!

Of course, a workplace right next to a furnace from which molten metal is flowing poses very different risks than a desk job in an air-conditioned office does. Both are a reality for us. With the support of the occupational health and safety and health protection management system, workplace safety can be maintained at a high standard and continuously improved.

Evaluation committee meetings are held regularly to examine the performance achieved, analyze conspicuous developments or incidents, and develop possible measures for improvement. To ensure safety of the staff, regular workplace assessments and substance evaluations are carried out, also in consultation with occupational physicians or medical specialists.

Staff are also involved into the process of continuous development of workplace safety and welcome to make suggestions for improvement. Ideas are contributed in various ways at the plants - quite informally in discussions with supervisors or confidentially with safety specialists or safety confidants, by means of cards for suggestions for improvement, or via the maintenance software. Measures such as regular training, discussions between the safety specialist and the employees at the workplace, internal communication in the form of notices or via screens have reduced the frequency of accidents in recent years and increased awareness in dealing with hazards. The staff now have a very positive attitude towards the personal protective equipment. The managers regularly looking at operations from this vantage point of occupational health and safety gives staffers at their workplace a feeling of care and encourages ideas for further improvement.

More than 60% of the staff work in production. In terms of occupational health and safety, there are no differences between our own staffers and temporary workers.

Notes concerning the table: No consideration of commuting accidents. Applicable to all jobholders of FvN and the eight plants within the scope of the report.

#### Work-related injuries

The numerous efforts and management systems have shown some success in recent years, but have not yet achieved their goal.

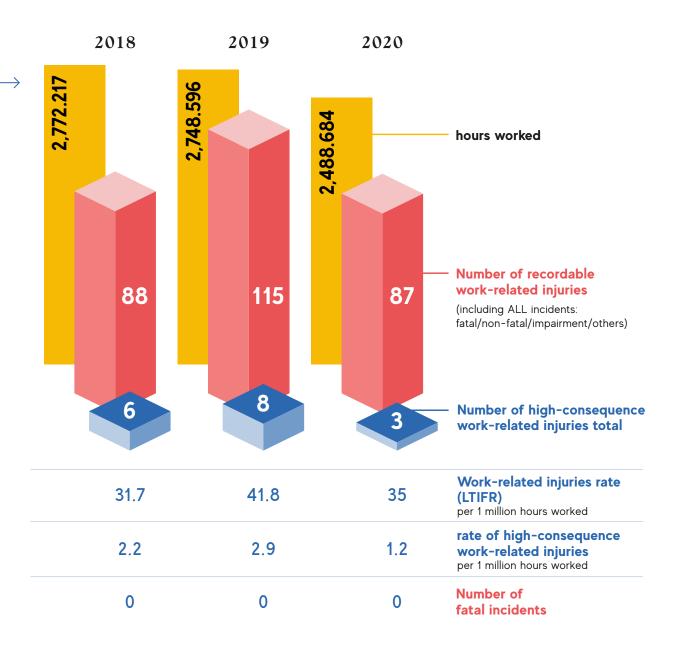
New staff, as well as temporary workers, need to develop awareness of the dangers in their field. In addition to training sessions at their respective workplaces in production, these people receive a T-shirt in a different color to encourage everyone to be more careful.

The protective clothing and work procedures at the potentially hazardous workplaces in the found-ry effectively prevent serious injuries. Despite a wide range of protective devices, the greatest hazards in all plants are posed by mechanical presses, processing machines and moving machine parts that can cause crushing, cutting or impact. A smaller number of injuries happen during the handling of hazardous materials. Injuries resulting from accidents happening between the workplace and the place of residence play a minor role.

Accidents are properly reported and recorded. The causes of any accidents are investigated and corrected. Root cause analysis is performed using the 5 Whys method. Neuman attaches utmost importance to the prevention of fatal and serious occupational accidents and diseases. Preventive measures take place in the form of instruction, training, but also, if necessary, as modifications to equipment or buildings.

Work-related hazards, dangerous situations or suggestions for improvement can be submitted by staff at any time. The company-wide Code of Conduct protects everyone from retaliation.

One part of this prevention culture is the precise analysis of accidents, a derivation of measures at affected and similar workplaces in order to mitigate or completely avoid the hazardous situations in the future.



GRI 403-02, 403-03, 403-07, 403-09

Health protection documents and risk assessments, respectively, were prepared for the various workplaces. During quarterly inspections, these documents are checked, scrutinized and adjusted if necessary. In the process, existing and new risks are assessed. Regarding fire protection, the workplaces are inspected twice a year by staff of the company fire department. After these tours, in many cases changes are made to ensure safety of the workers and the environment.

In the period under review, successes were achieved in particular with continuously improved personal protective equipment for individual employees. Ear-adapted hearing protection and corrective optical safety glasses are very well received. This has effectively prevented eye injuries when workers have to handle hazardous substances such as caustic soda.

#### Work-related ill health

Among the achievements of industrial manufacturing in the European Union there are the numerous legal regulations designed to protect against hazards such as dust, noise and hazardous liquids. Labor inspectors perform their duties very thoroughly and mandate actions whenever necessary.

However, the manufacturing processes require lubricants and cause heat and noise. Installations that selectively extracts dust, shield noise sources, and reduce skin contact with emulsions and oils are limited in their effectiveness.

Still all too often, skin conditions among staff are caused by contact with these hazardous substances. Relentlessly, awareness must be raised about how critical it is to wear appropriate gloves. Damage to hearing may occur only after many years of exposure to noise. It is only in recent years that customized hearing protection has become widely accepted. Inexperienced staff in particular underestimate the danger posed by noise.

Since 2011, the health program has succeeded in demonstrating the correct way to lift loads and improving desk workplaces with simple means to relieve the musculoskeletal system and especially the spine through personal consultation as well as ergonomically trained staff. Numerous workplaces in the office sector have been equipped with height-adjustable desks in recent years.

—→ GRI 403-10

#### Occupational medicine and health

#### Occupational health service

Two safety specialists are employed at the Austrian site, as are in Slovakia. In Germany, there is a safety officer at the Neuhaus site (NPW), and an external company has been commissioned for occupational health and safety management at the Rottenburg impact extrusion plant (NFR).

In addition, safety confidants, meetings of the occupational health and safety committee and comparable structures are enshrined. Decisions are documented, and measures decided upon are planned and implemented across departments. Generally applicable measures and improvements are implemented across all sites.



A specially trained group of first responders is available in the event of accidents and for medical emergencies at the company. They are supported by the even larger group of first aiders in all plants. The immediate alerting of emergency services and the care of injured persons are among the most important tasks of these specially trained staff.















GRI 103-01, 103-02, 103-03,403-03, 403-04, 403-05



All staff participate in the annual safety briefings and fire safety training. Depending on the area of application, special instruction is given at the workplace. Supervisors assess the training needs of their staff at least once a year, organize personal or group training sessions, and analyze their effectiveness using feedback and knowledge transfer forms.

In a location-specific manner, Neuman provides company physicians or medical specialists who hold recognized qualifications and licenses in accordance with the applicable legal requirements. Staff have the opportunity to consult the physicians at specified times. The right of staff to data protection and privacy is respected.

Depending on the location, regular medical consultations and vaccinations against influenza, tetanus (DTP) and tick-borne encephalitis (TBE) are offered free of charge. Currently, of course, also against COVID-19. Preventive care also includes hearing and vision tests, which are performed on a regular basis.

#### THE COVID-19 PANDEMIC



During the COVID-19 pandemic, occupational health and safety is a particular challenge for everyone. To protect everyone, an epidemic emergency plan, a prevention concept and various action plans were drawn up very quickly at the beginning of the pandemic. Adapted to the respective specifications of the countries, consistent wearing of mouth-nose protection and adherence to the minimum distance very quickly became a binding requirement. As hygiene measures, the disinfection cycle in the premises was increased. Where possible, efforts were made to shift work to the home office, and virtual meetings were promoted.

Furthermore, free masks were distributed, and in-house antigen testing was offered as a preventive measure and to keep the work going.

Depending on the site, COVID-19 vaccination was offered either directly on site by a team of physicians or vaccination buses at the company premises, and vaccination campaigns near the company were also pointed out.

#### Health promotion

The company management supports in-house events such as bike rides and hikes as well as cross-company sporting events such as soccer tournaments or company races.

Since 2011, Neuman in Austria has commissioned an occupational therapist to conduct regular audits at the site. Improvements and preventive measures are then proposed on the basis of the audit results. In the COVID year 2020, this preventive measure had to be suspended for several months.

Country-specific healthy offerings include fresh fruit sourced regionally from local farmers.





GRI 403-06

The psychological stresses of working life are often still a taboo area of occupational medicine. If the company physician notices such stress during his/her regular rounds or learns of it or of bullying by colleagues, Works Council members or superiors, he/she immediately consults with HR management. Among other things, the help of external experts is organized. The Code of Conduct, which was only published in July 2021, particularly emphasizes the importance of taking consistent and effective action against abuses of this kind. Any concern brought to the attention of the compliance officer of Neuman Aluminium Industries is treated discreetly and professionally, and also confidentially, unless this conflicts with applicable law.



#### The path ahead for the next years

The aim of our occupational health and safety and health management system is to create safe workplaces and maintain the health of our staff. The first step involves, among other things, a series of training courses to raise awareness of the issue of occupational health and safety, particularly among middle managers, so that they can take responsibility for the staff in their areas – Safety Leadership!

With this and with other initiatives, we will continue to reduce the frequency of accidents, halving the accident rate year after year to bring the accident rate close to zero. For this to happen, the importance of occupational health and safety must become even more visible and really get into the heads of the staff. Managers have it in their power to bring the issues even more to the forefront and to maintain a monthly exchange within the entire Group in order to learn from the experiences of others. Safety awareness must be deeply anchored in the Neuman corporate culture – our vision of "zero accidents" is achievable by the end of 2025!

#### Job satisfaction

To be successful on the market in the long term, the company Neuman relies on motivated, gualified and healthy staff. We therefore strive to offer attractive jobs. At the same time, the company is a regionally important employer at all its sites. Therefore, Neuman attaches great importance to its in-house apprenticeship training, which provides both the company and the region with welltrained skilled workers.

As a privately held company, we strive for long-term thinking in all our decisions. This applies in particular to the selection of staff and to all measures designed to ensure that the people selected are retained by the company in the long term. The key factors here are the right level of challenge, an open climate in the companies, and enabling of further development.

Recruitment, an onboarding program, training and development of staff are important steps at Neuman, which are anchored in the HR strategy with guidelines. The HR management reports directly to the CEO of Neuman Aluminium Industries.

The Group companies comply with the provisions of collective agreements, country-specific regulations and legal requirements. The minimum notification periods are taken into account to inform their staff of significant operational changes.

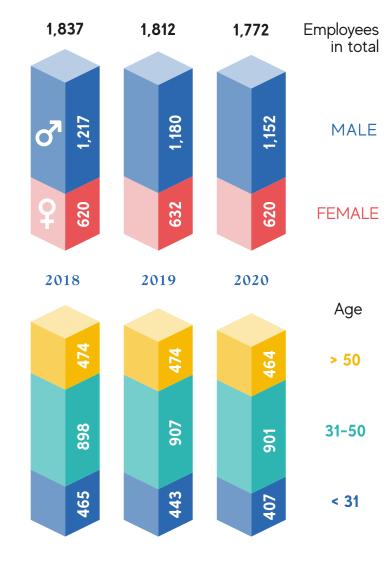
All staff contribute to our economic success. They shall receive the appropriate remuneration and recognition for this. Informing about changes in the company, about developments, plans, goals and successes are essential elements of communication. This should result in a feeling of satisfaction.

# Number of jobholders, age brackets, fluctuation

The following data and figures of staff refer to the eight plants of Neuman Aluminium Industries within the scope of the report at the locations in Austria, Slovakia and Germany.

On average, two thirds of the jobholders are male and one-third are female. The majority of executives are in the 31-50 years age bracket.

If good, long-term staffers decide to leave the company, this is the last opportunity to understand their reasons for this step.



Respectful dealings and a correspondingly detailed discussion give the employer, above all, the opportunity to learn from this situation and to prevent the loss of further staff. We are able to retain our staff by providing a safe working environment, family-friendly arrangements, and the opportunity to work from home even after the COVID-19 pandemic.

In terms of fluctuation figures, the main focus is on the Žarnovica site in Slovakia. Every year, one third of staff leave the company. The following reasons were identified: stressful work environments, inadequate personnel selection, poor onboarding, and poor compensation. Measures have already been taken by the Group's HR manager, such as new processes for onboarding, internal trainers, feedback loops, and competent backfilling of open positions. The measures taken are already having an effect, and staff turnover is beginning to decrease.

## The interaction of employers and employees



The plants of Neuman Aluminium Industries in Austria are party to the industrial collective agreements of the metalworking industry or non-ferrous industry, respectively. In addition, compensation above the collective wage agreement is paid to many in order to be an attractive employer. Even at the companies in Slovakia or Germany, where there are no collective agreements or no commitment to such, the aim is to offer remuneration in line with the market.

Works councils are established at all sites except PWG. The Works Council is responsible for representing the concerns of the workforce. In all plants, staffers' concerns are brought to the attention of the company management via their supervisors. The owner, Dr. Cornelius Grupp, is actively involved in the management of the company as co-managing director of Fried. v. Neuman GmbH. Through his presence in all plants, he is also personally aware of the staffers' concerns.

For information of the staff, regular notices are available on the information boards and information screens, also in production. The company magazine Neuman-Report informs about the economic development of the company as well as about events in the plants. The report provides insight into the locations of Neuman Aluminium Industries in Austria, Germany, Slovakia, Mexico or China and reports on highlights from other companies of the CAG Holding. Starting in 2020, the cycle was changed from semi-annual to annual.

The Neuman App was selected as the new information and communication tool and introduced at Neuman Austria in 2021. The app will be rolled out to all remaining Neuman Aluminium Industries plants by the end of the first quarter of 2022. The app is used to intensify internal communication for workers and employees, e.g. for company-related information, job vacancies, success stories, messages from the CEO, training and much more.

Staff satisfaction goes hand in hand with a sense of security. In numerous areas of manufacturing, our jobholders are exposed to great heat, high noise levels and hazardous environmental conditions. We assume responsibility as a safe employer by providing safely designed workplaces and the necessary personal protective equipment.

Staff surveys are conducted at the sites at different intervals. A comprehensive survey at all sites is planned for 2022.

## Elements of increasing satisfaction of the staff



#### → Familyfriendliness

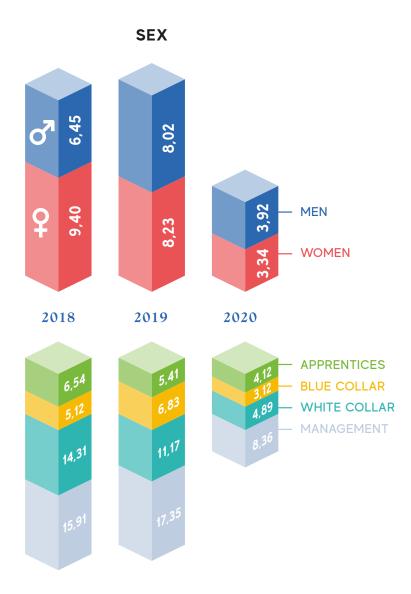
Family friendliness is an important issue at Neuman. For example, we grant our workforce the option of extended maternity leave, as well as paternity leave, which is slowly becoming established.

Part-time or home office solutions are agreed individually with the HR department and department management. There are various shift compensation models at the individual locations.

#### → From onboarding up to targeted further training

We consider the targeted personal development of our staff to be a key aspect of satisfaction. All new staff and apprentices pass through the Neuman onboarding program. Skills matrix, mandatory training and an annual needs assessment complete the employee training and development program. The goal here is to implement a uniform approach at all sites.

In 2020, numerous internal and external training sessions were canceled or postponed due to the COVID-19 pandemic. As a complement, the new Click & Learn learning management software is designed to simplify training administration. Annually recurring trainings can be taken by the staff online and temporally independently of a lecturer. The pilot will start in the Austrian plants first in 2022 and will then be rolled out to the remaining sites.



TRAINING HOURS ON AVERAGE

### → Scholarship for engineering students

Well-trained technicians are an important prerequisite for the long-term successful economic development of manufacturing companies in particular. The "Cornelius Grupp Scholarship" was established in 2008 to enthuse future staff for the company at an early stage. Each year, three students are accepted into the scholarship program and supported for the duration of their studies.

#### → Targeted search for interns

In the selection of our interns, our focus is, on the one hand, on the qualification of the persons and, on the other hand, on the goal to meet them again regularly at Neuman. Long-term interns are the best prerequisite for future employees.

#### → Awards as an employer

Neuman Aluminium Industries proudly reports having received various awards. Trend honored us with the Top Employer 2021 award in cooperation with kununu and statista. A lot has been invested into a good training facility. The professional management of apprenticeship training earned the first and the fourth place in the 2020 National Apprenticeship Competition, and in 2018 the Austrian Apprenticeship Company Award. PWG in Neuhaus received an award as an apprenticeship company.

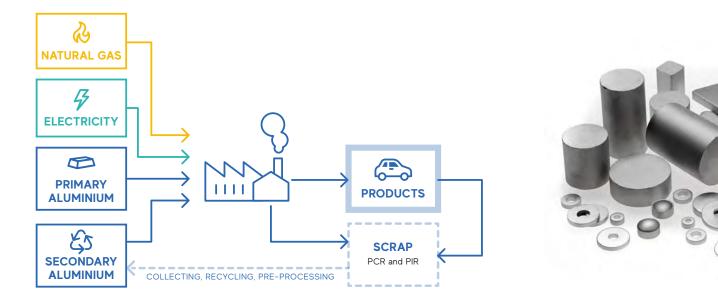






## Key points of the Neuman Human Resources Strategy

- → Support of skilled workers and talent strengthening the training of apprentices and skilled workers; creating an environment where the occupational profiles of skilled workers and apprentices are valued and promoted. Identification and development of our talent, and ensuring of succession through talent development.
- → Neuman as an employer of choice in the region increasing attractiveness as an employer through framework conditions which, on the one hand, enable professional, technical development, challenging and promotion of the individual staffer and, on the other hand, rationally reconcile aspects of the job with personal, family-related issues.
- → **Increasing satisfaction** creating a positive, inspiring work environment with opportunities to deliver outstanding performance and unleash creativity, innovation and personality.



## **Energy consumption and CO<sub>2</sub> emissions**

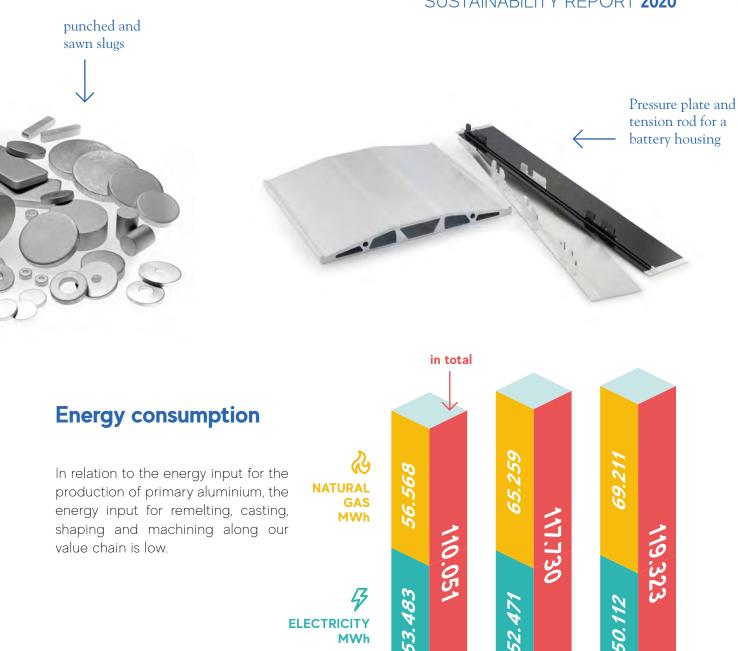
The Marktl site is located in a wooded valley on a clear river that is home to many trout. The Žarnovica site is also located on a river. The Rottenburg and Neuhaus sites were also built in small industrial estates. Environments that are definitely close to nature, offer a certain recreational value, and allow clean air to be breathed.

The greenhouse gases that threaten the world's climate are imperceptible to us. They come into our consciousness only through discussions about global warming, climate protection agreements, the EU's Green Deal. Within Neuman we are still at the beginning of this discussion; we inform the staff with the help of the internal company newspaper and more and more also via an app about the topic of emissions, their causes and effects, and show possibilities as to how everyone can make a contribution with small steps.

As a manufacturing company, we depend on the use of large amounts of an energy, mainly in the form of gas and electricity. Efficient use of energy is absolutely necessary from a economic point of view. We owe avoidance of emissions to society and the next generation.

The limits for particulate emissions are defined and complied with or even significantly undercut. Such limits do not exist for  $CO_2$  emissions yet. Unlike electricity producers or the cement or glass industries, Neuman does not fall within the scope of the Emissions Trading Directive (ETS). So far, only Germany has introduced a general  $CO_2$  pricing.

The Group is preparing for a change in the political framework by introducing an internal  $CO_2$  price, and is assuming its responsibility for the environment.



We have not yet found an economically viable alternative to natural gas for our smelting furnaces. All the more reason for us to document energy consumption in great detail in this process step in particular, and for many years we have been paying a great deal of attention to it, if only for cost reasons. Regular energy audits take place, most recently in November 2019.

2018

2019

2020

The graph shows the energy consumption

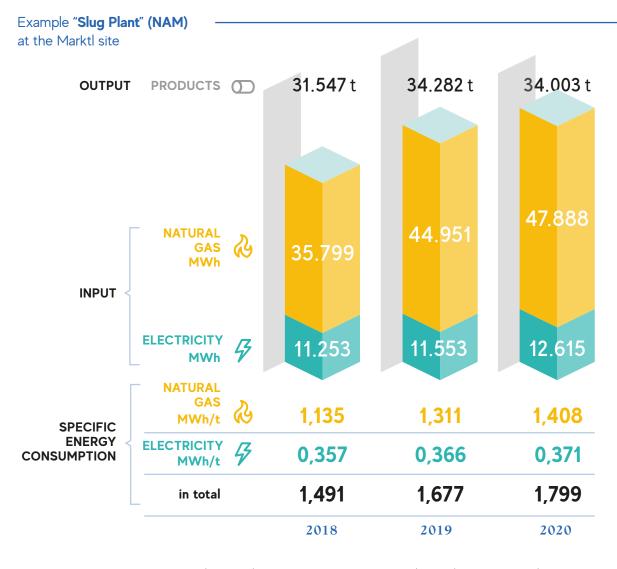
of the eight plants:

Suggestions for improvement and small projects are often implemented informally and quickly. The processes for making far-reaching decisions are currently being realigned and restructured. There are clear structures and guidelines for investments.

### Our most important topics

The eight plants differ markedly. The "Slug Plant" was chosen as one example. In this plant (NAM) at the Marktl site, strips of pure aluminium are cast and rolled, and slugs are punched from these strips and from purchased alloy strips, heat-treated, surface-treated and packaged. A second division of NAM produces continuous cast shapes such as extrusion billets and forged bars from process waste and other scrap.

With its large smelting and homogenizing furnaces or furnaces for the heat treatment of slugs, NAM accounts for about 65% of the natural gas consumption of the eight new plants.

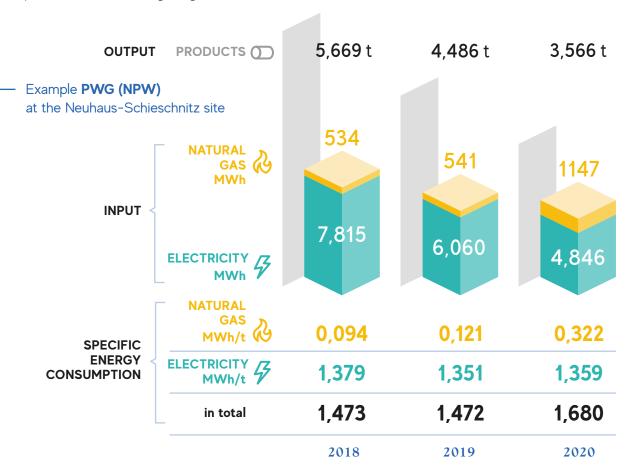


This is not surprising, since only this plant has furnaces for remelting aluminium. Only ten percent of the energy required for the electrolysis of the primary aluminium is needed by NAM to melt down the valuable material and cast high-quality strips and bars. Energy utilization in these furnaces has long been our focus for efficiency improvement measures.



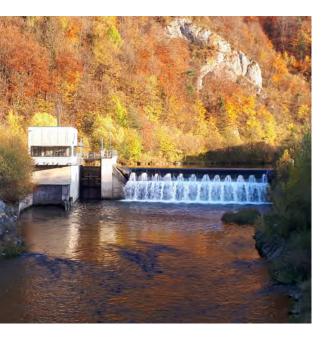
The second example, PWG Profilrollen-Werkzeugbau in Neuhaus-Schierschnitz (NPW), manufactures innovative products for car roof opening systems from extruded profiles. Machines for cambering, embossing, punching, milling, deburring, welding and assembly of components run on electric energy.

The small amount of natural gas consumed is used only for heating the buildings. The electrical energy flows into the heat treatment furnaces, the profile processing machines, the supply of compressed air and the lighting.



Our own facility for electricity generation at the Marktl site







# Self-supply with electrical energy

For the Marktl site, three run-of-river power plants on the Traisen river generate around 3,700 MWh per year. The construction of solar collectors has started with 1,000  $\text{m}^2$  and will be extended by 5,000  $\text{m}^2$  in the next step.

### Improvements and projects

At the Slug Plant (NAM), 95% of the energy consumers in production are equipped for remote reading. In this way, the load profiles of the individual plants are known very precisely and can be optimized in a targeted manner. The conversion of the horizontal casting plant was completed in the summer of 2021. Now it is possible to cast and homogenize almost twice as many bars in parallel. This increases the throughput of the plant and shortens the residence time of the melt in the furnace. The consumption of gas is significantly reduced. Comparative figures will not be available until later.

In 2022 and 2023, a project will be worked on with the aim of using the waste heat from the afterburners of the heat treatment furnaces at the Slug Plant to preheat the volume of air supplied to these furnaces.

In the next step, we will examine our personnel and financial possibilities in order to be able to implement these and other projects quickly. We will build capacity accordingly.

Photovoltaics system at the Marktl site

## **Emissions related to energy consumption**

The emissions caused are perceived as very important by our customers. The  $CO_2$  footprint of our products is becoming an increasingly decisive sales criterion.

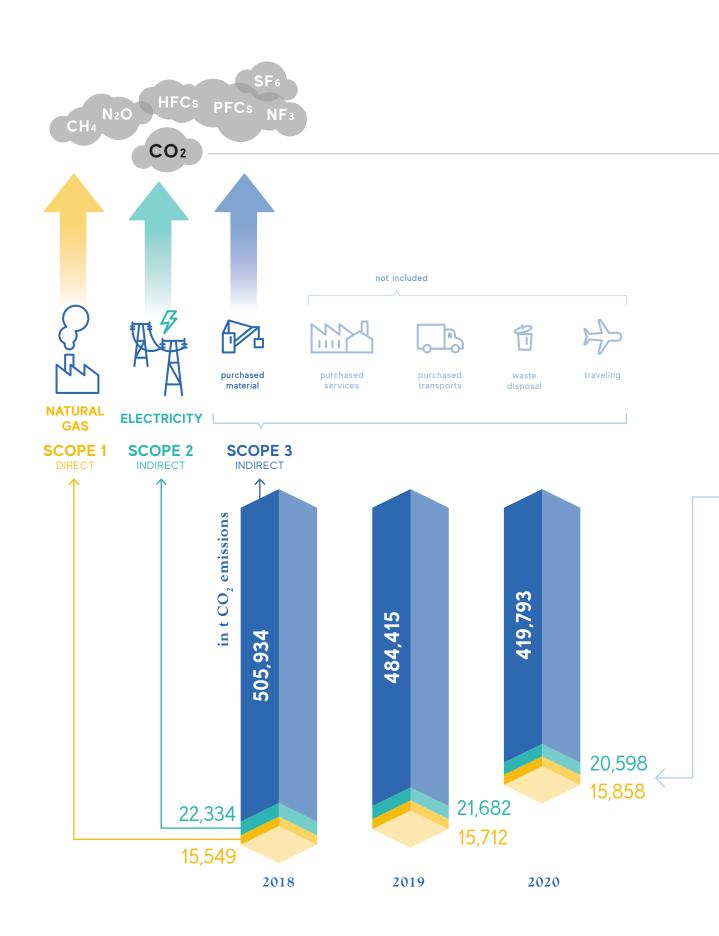
Natural gas is burned during the operation of the melting and heat treatment furnaces. We can keep the associated  ${\rm CO_2}$  emissions as low as possible, above all by operating the plants efficiently. The recurring shutdowns in the "corona year" 2020, where the furnaces had to be kept warm during the downtimes, increased the consumption of natural gas without matching the operating performance of the previous year.

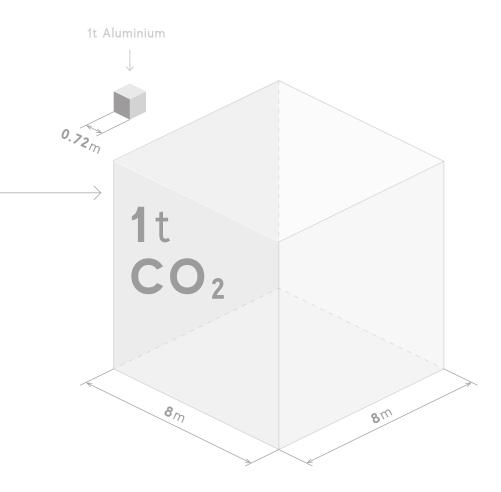
A major improvement was the installation of a dust filtration system. As a result, emissions of heavy metals, nitrogen oxides, dioxins and furans have been significantly reduced. Dust emissions are limited by this system to less than 20% of the permissible value.





Dust filter system





The approximately 37,000 tons of  $CO_2$  that Neuman emits by burning natural gas and procuring electricity are not insignificant compared to the half a million tons of  $CO_2$  emissions, but rather minor.

By obtaining certificates of origin for electricity from renewable sources, the Marktl and Žarnovica sites are making an important contribution to the expansion of these forms of energy generation. When calculating product-related footprints, this green power significantly reduces the Scope 2 shares shown. Emissions generated during electricity generation may be set to near zero.

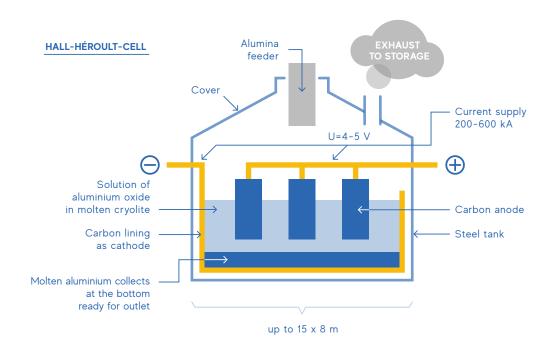
The calculations of greenhouse gas emissions are based on the emission factors according to ecoinvent for Austria, Germany and Slovakia and take into account direct and indirect shares of gas and electricity supply.



## The use of aluminium

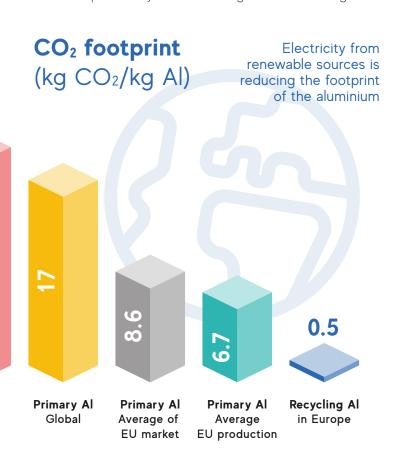
The material aluminium involves a lot of energy and correspondingly many emissions. Around 70,000 tons pass through our eight plants every year. The 17 plants of Neuman Aluminium Industries process about 120,000 tons per year. The great advantage of aluminium is its excellent reusability. Neuman Aluminium Industries purchase about 30,000 tons of aluminium per year from primary production. With the corresponding responsibility for the associated environmental impact caused by the extraction of the raw materials and for the emissions caused by the generation of electricity for the electrolysis, we use the valuable material with great care.

Around 500,000 tons of  $\mathrm{CO}_2$  emissions generated during the production of the aluminium purchased and processed by the eight plants under review. Over the past five years, there has been a significant increase in awareness that this number can be reduced through targeted supplier selection. In the competition with manufacturers who pay less attention to these emissions, often compromises between economy and ecology need to be found.

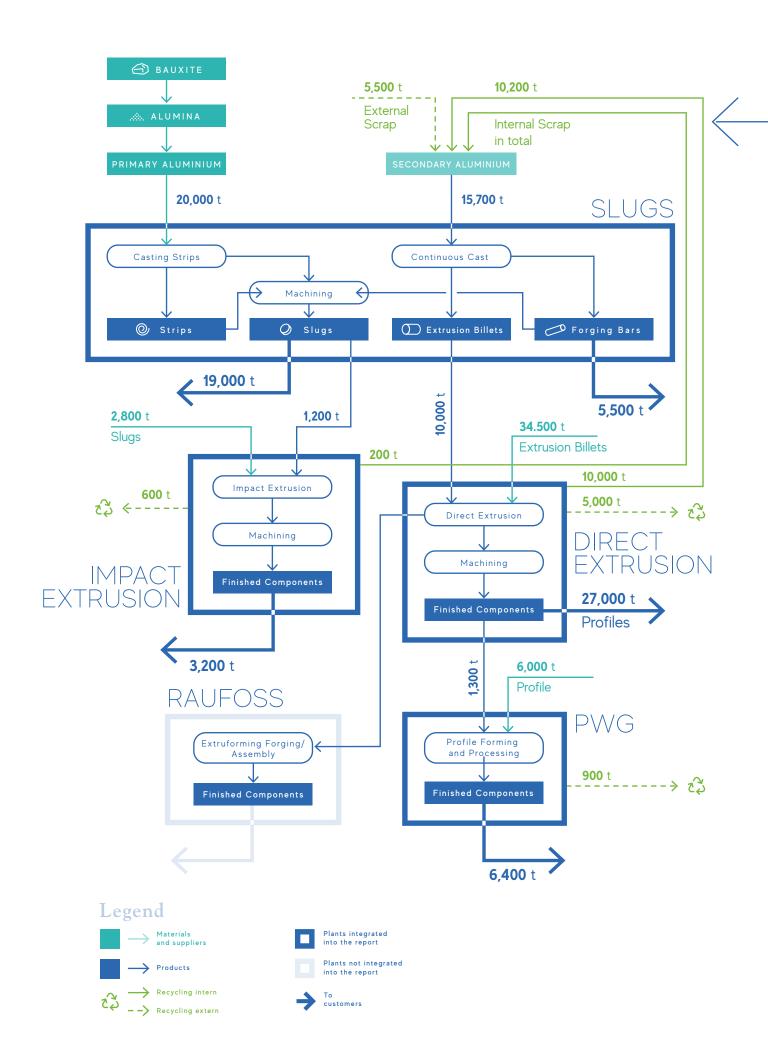


## Use of primary aluminium and recycled material

Bauxite is extracted by open-pit mining, altering large areas in a wide belt around the equator that can be reforested only after many years of use. Further processing into alumina requires about 2.5 MWh/t of energy and entails formation of red mud landfills. Up to 16 MWh/t of electrical energy is required for the electrolysis of the aluminium. The selected suppliers are aware of their responsibility for the changes in the mining areas and are rising to the challenge. Availability,



price and, increasingly, the energy used for electrolysis are the criteria. Our suppliers in Africa, Canada, and Russia in particular succeed in keeping emissions associated with fused-salt electrolysis relatively low by using electricity from renewable sources, mainly hydropower and geothermal energy. Our supplier in Saudi Arabia uses electricity from gasfired power plants. The choice of suppliers and the form of electricity generation are by far the biggest levers for reducing the CO<sub>2</sub> footprint of our products.



## The material flow from

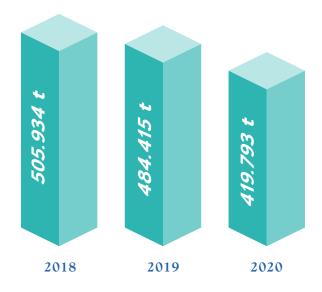
## **Neuman Aluminium Industries**

The electrolysis technologies commonly used today differ in terms of the electricity consumed and the associated direct  $\rm CO_2$  emissions. Electricity consumption ranges from 13.5 MWh/t to 15.6 MWh/t. For each ton of primary aluminium, 0.42 to 0.45 tons of anode material is burned, resulting in about 1.6 tons of  $\rm CO_2$  per ton of aluminium. Advanced aluminium smelters do not allow this gas to escape.

The suppliers' challenge is to use more green energy in the processes used to extract the alumina and, in particular, to promote use of inert anodes in fused-salt electrolysis. Partnering with innovative suppliers early enough will be a key to success.

The diagram clearly illustrates the large effect on emissions when material can be recycled from the cycle back into the process. The melting down of scrap requires only 5% of the energy that was necessary for the electrolysis of the primary material. Only around 0.8 to 1.7 MWh/t of energy in the form of gas or electricity is required for remelting scrap and casting it into new semi-finished products. Even if cleaning and sorting processes are necessary beforehand, recycling used materials is worthwhile. The better the separation by alloy, the purer grades can be cast with the secondary aluminium.

# Total CO<sub>2</sub> footprint of the purchase (Scope 3) aluminium



# Purchase of primary material, secondary material, and recycling

Neuman's material purchasing department in Marktl and at the other sites has to strike the balance between inexpensive and low-emission material and thus meet our customers' demands.

The primary aluminium purchased is responsible for around 10 tons of CO<sub>2</sub> emissions per ton of aluminium. This is well below the global average of

around 17 tons of  $CO_2$  emissions per ton of aluminium. The cast bolts for profile production, which use an average of 70% scrap, can be sourced with significantly lower  $CO_2$  emissions.

Numerous discussions with our raw material suppliers about their manufacturing and their use of energy and scrap allows us to estimate a  $\rm CO_2$  footprint. The main suppliers were able to provide us with their detailed calculations of the emissions caused. Material purchased by the eight plants from 2018 to 2020 in the form of ingots, extrusion billets, alloy strip, profiles and slugs generated  $\rm CO_2$  emissions in the range of 0.8 to 31 kg of  $\rm CO_2$  per kg of aluminium. In the Tables section, an overview of a  $\rm CO_2$  footprint for each product group is presented. Multiplying these values by the respective quantities purchased and adding them up results in the overall footprint of our material. Depending on the mix of materials purchased, the volume of  $\rm CO_2$  emissions varies considerably from year to year.

Dividing these total Scope 3 emissions of the material by the total purchased quantity results in average values of 6.6 to 7.0 kg of CO<sub>2</sub> per kg of aluminium for 2018 to 2020.



On the basis of these discussions with suppliers, we were also able to assume values for the average proportion of scrap used and, weighted by the volumes supplied in each case that year, calculate an average value across all materials purchased. The share of secondary material was 56% in 2020.

Material flow globally			
	2020	2025	2030
Primary Aluminium 📁	<b>64</b> M t	<b>63,8</b> M t	<b>71,1</b> M t
- I I I I I I I I I I I I I I I I I I I			

Recycled Aluminium (PCR) 33,7 M t **19** M t **28,3** M t دک Process scrap (PIR) **14** M t **15.9** M t **18,4** M t Percentage of 52% 69% **73**% **Secondary Aluminium** 

This puts Neuman above the scrap percentage that can be calculated by looking at the global material flow. The International Aluminium Institute expects rising demand for primary aluminium and a significant increase in secondary material.

The increasing demand can be explained by the use in lightweight construction for vehicles, in the packaging sector as a readily recyclable alternative to plastic packaging, and the increased use of aluminium products in the construction of buildings and energy generation plants. Pure-grade process waste (PIR, Post Industrial Recycling) will be less readily available in the future, as the cycles for such "emission-free" materials will become tighter, and the material will be reused in in-house manufacturing. Prices will rise. It is becoming increasingly attractive to bring as much aluminium waste as possible into the cycle and to make those alloys from it that are needed for new applications with significantly less energy input. It is expected that the total demand for aluminium will continue to increase for several years. For applications made of pure aluminium and low-alloy material grades, it would be energetically expedient and sustainable to use the primary aluminium that has to be added to the global material stream anyway. Mixed scrap (PCR, e.g. from the "yellow bag" waste system) could be used for casting alloys that allow iron contents of 1% and high silicon contents.

#### 56

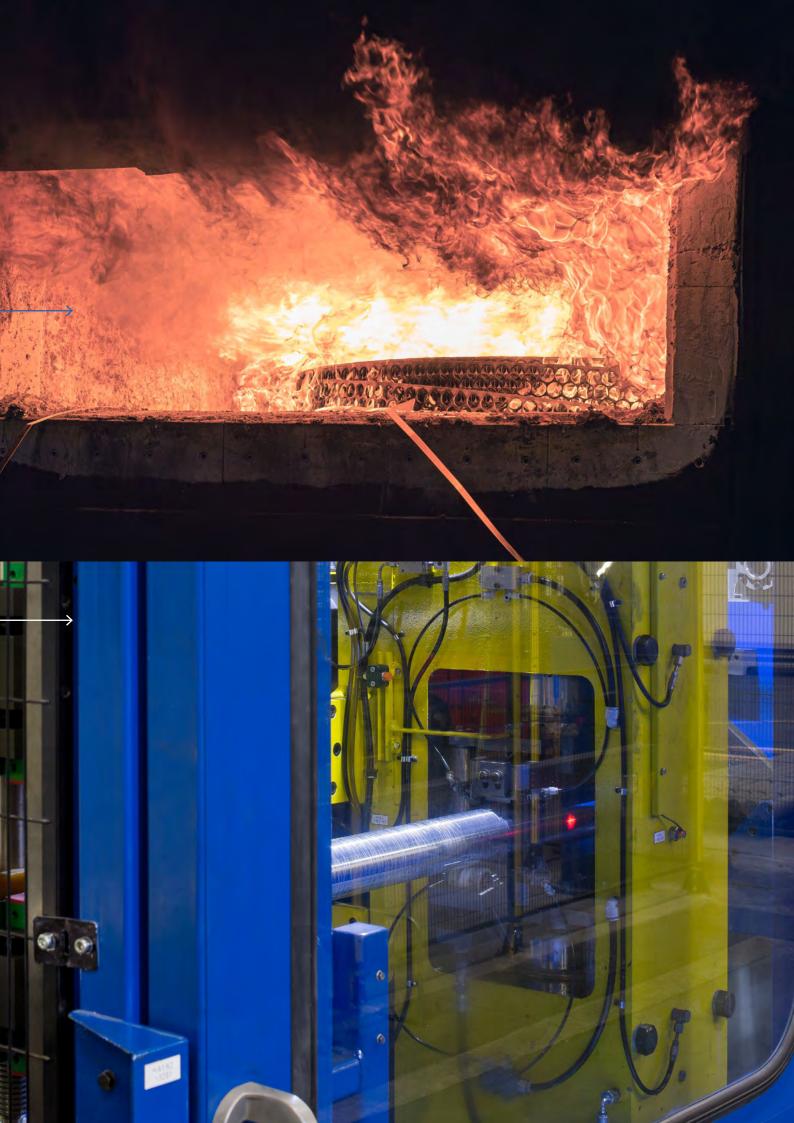
Smelting furnace

Skinning machine

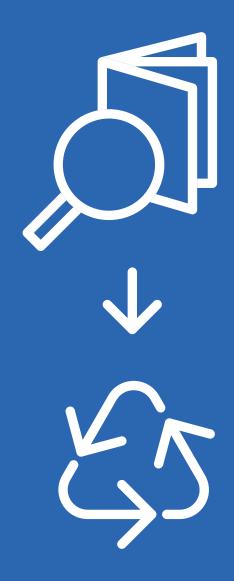
Pure aluminium is used in the packaging sector in particular, and manufacturers of tubes, coffee capsules and cans have to justify their use to buyers and consumers of metal packaging. Therefore, these customers want utilization of recycled material. It is necessary to contemplate whether the cleaning and sorting effort, the amount of energy to be used and the associated emissions, are reasonably invested, or whether this quantity should be taken from the roughly 70 million tons of primary aluminium which must flow into the global material pot anyway in order to cover the currently still rising demand.

For the extrusion billets and forged bars cast in Marktl, 95% scrap is used. For the most part, this process waste comes from the neighboring extrusion plant.

Year after year, around 10,000 tons of waste from the plants flow back into the cycle at the Marktl site. About 5,000 tons are sold to third parties to be remelted. Measured against the total of 70,000 tons of products supplied, 23% are reused as process waste (PIR).



# 4 About the report



## Only together will we become sustainable

In order to achieve the necessary transformation and change, all staff will have to participate in this day by day.

Following 2013 and 2016, this is Neuman Aluminium Industries' third Sustainability Report. In the spring of 2021, we started to design a new form of the report in accordance with the GRI standard in order to deal with the key issues in a more focused way than we had done in the 2016 report. In the years to come, reports will be issued annually.

In this report, we consider eight of the 17 plants. The European plants are leading the way in this respect. As soon as the structures in the other plants are established, we will report on other plants and their participation in the sustainable development of the Neuman Group. The Raufoss Division has already gained some experience in the area of product footprint determination, and has been participating in the CDP (Carbon Disclosure Project) initiative for two years.

The 2013 and 2016 reports were based on the reporting principles of the Global Reporting Initiative (GRI) - G4 Guidelines Option Core. The present report covers the years 2018 to 2020. This report has been prepared in accordance with the GRI Standards, "Core" option.

You can reach the sustainability team at sustainability.fvn@neuman.at.

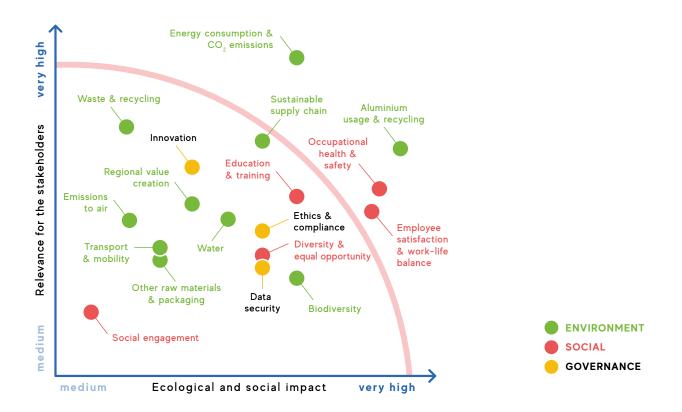


## The way to the key topics

The aim of the stakeholder survey was to involve all groups that have claims on Neuman Aluminium in the preparation of this report. Customers, suppliers, staff and managers, the owner and neighbors were given a voice. 31% of the approximately 600 online questionnaires were returned completed, giving us confidence that the opinions expressed are representative.

To achieve the following materiality analysis, we have included data on our material use, energy consumption, many key figures on occupational health and safety and human resources, and some other metrics on environmentally as well as socially relevant topics. A key consideration was the environmental and social impact caused by Neuman.

In the management circle of the selected eight companies, the result was discussed, and the four key topics for Neuman were determined.



5	Tables	64
6	GRI Content Index	76
7	Imprint	78

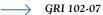


## **Company key figures**

Key figure	Scope	2018	2019	2020
Sales	Plants integrated into the report	M€ 332.5	M€ 319.4	M€ 274.6
	Other plants	M€ 237.6	M€ 285.8	M€ 293.9
Sales	Plants integrated into the report	72,158 t	68,087 t	64,402 t
	Other plants	49,901 t	50,156 t	54,932 t
Staff	Plants integrated into the report	1,837	1,812	1,772
	Other plants	1,239	1,307	1,355

#### **Allocation**

8 plants integrated into the report: (FVN), NAM, NSM, NSZ, NFM, NFR, NFS, NPW, NPS 9 further plants: NRC, NRM, NRN, NRX, NPX, NPM, NFW, NFX, NCX/NCH



## Information on staff Number of jobholders, age brackets, fluctuation

Sex	2018	2019	2020
Female	620	632	620
Male	1,217	1,180	1,152
Total	1,837	1,812	1,772
Age bracket			
< 31	465	443	407
31-50	898	907	901
> 50	474	462	464
Total	1,837	1,812	1,772

2018	2019	2020
591	599	594
1,155	1,146	1,131
1,746	1,745	1,725
29	33	26
62	34	21
91	67	47
1,837	1,812	1,772
	591 1,155 1,746 29 62 91	591 599 1,155 1,146 1,746 1,745  29 33 62 34 91 67

## Employment contract + Region

#### → PERMANENT

Austria	667	694	682
Germany	453	397	404
Slovakia	639	684	666

#### → FIXED-TERM

Austria	8	4	3
Germany	62	28	12
Slovakia	8	5	5
Total	1,837	1,812	1,772

Employment relationship + Sex	2018	2019	2020
→ FULL-TIME			
Female	564	575	564
Male	1,168	1,134	1,105
<b>Total</b> Full-time	1,732	1,709	1,669
→ PART-TIME			
Female	57	57	56
Male	48	46	47
Total Part-time	105	103	103
<b>Total</b> Full-time + part-time	1,837	1,812	1,772
Level			
Management	38	40	43
Employees	383	373	376
Workers	1,416	1,399	1,353
Total	1,837	1,812	1,772
Number of managers			
Female	5	6	6
Male	33	35	37
Total	38	41	43
Portion (%)			
Female	13%	15%	14%
Male	87%	85%	86%

Total	56	57	77
Male	47	51	69
Female	9	6	8
Number of trainees (apprentices)			
Number of leased employees	73	56	165
Temporary workers	2018	2019	2020

Percentage of all temporary workers whose work and/or workplace is however controlled by the organization	3.8%	3.0%	8.5%
Percentage of all excluded temporary workers, whose work and/or workplace is however controlled by the organization.	0%	0%	0%

## New jobholders

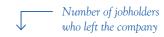
→ Sex	2018	2019	2020
Female	136	124	116
Male	278	202	187
Total	414	326	303
Female	21.94%	19.62%	18.71%
Male	22.84%	17.12%	16.23%
%	22.54%	17.99%	17.10%

### → Age bracket

< 31	192	134	116
31-50	159	160	153
> 50	63	32	34
Total	414	326	303
< 31	41.29%	30.25%	28.50%
31-50	17.71%	17.64%	16.98%
> 50	13.29%	6.93%	7.33%

#### → Country

Austria	74	67	64
Germany	82	22	40
Slovakia	258	237	199
Total	414	326	303
Austria	11%	10%	9%
Germany	16%	5%	10%
Slovakia	40%	34%	30%



## Fluctuation

→ Sex	2018	2019	2020
Female	112	121	106
Male	235	250	204
Total	347	371	310
Female	18.06%	19.15%	17.10%
Male	19.31%	21.19%	17.71%
%	18.89%	20.47%	17.49%

#### → Age bracket

< 31	138	136	108
31–50	145	159	127
> 50	64	76	75
Total	347	371	310
< 31	29.68%	30.70%	26.54%
31-50	16.15%	17.53%	14.10%
> 50	13.50%	16.45%	16.16%

#### → Country

Austria	65	78	66
Germany	106	103	50
Slovakia	176	190	194
Total	347	371	310
Austria	9.63%	11.17%	9.64%
Germany	20.58%	24.24%	12.02%
Slovakia	27.20%	27.58%	28.91%

Average number of training hours completed by staff, by Sex

## Training hours

→ By Sex	2018	2019	2020
Training hours (Female)	5,828	5,202	2,161
Training hours (Male)	7,845	9,465	4,519
Total	13,673	14,667	6,680
Average number of hours (Female)	9.40	8.23	3.48
Average number of hours (Male)	6.45	8.02	3.92
Ø	7.44	8.09	3.77

#### → Level

Management	605	694	360
Employees	5,482	4,168	1,840
Workers	7,248	9,556	4,220
Trainees	366	273	283
Total	13,700	14,691	6,703
	,	,	
	10,700	1.1,001	
Management	15.91	17.35	8.36
Management	15.91	17.35	8.36

## Overview aluminum use - inflow and outflow of material

Purchased material	Portion Secondary material	PCF t/t of Al	Unit	2018	2019	2020
Primary aluminium ingots	0%	10.00	t	20,739	21,348	18,226
Master alloys (Ingot with high contents of Mn, Si, Mg, AlCr, Cu, Be,)	10%	15.00	t	327	433	350
Purchased alloy strips	40%	8.00	t	348	108	-
Purchase of bars external	30%	6.50	t	36	19	13
Purchase of bars from NSM	50%	6.76	t	430	430	436
Extrusion billets from mainly primary material from external sources	<b>30%</b>	5.90	t	12,756	12,377	11,084
<b>Extrusion billets</b> with secondary material from external	<b>70%</b> sources	4.26	t	27,397	22,874	19,128
Extrusion billets from NAM (HSG) to NSM	95%	0.92	t	5,404	8,953	9,373
PIR scrap mixed from external sources to NAM	100%	-	t	1,000	3,179	5,850
PIR profile waste from Neuman plants to NAM (NSM)	100%	-	t	10,091	11,164	9,589
PIR scrap (chips, punching waste,) to NAM	100%	-	t	12	330	27
PCR scrap (offset print plates, Pyral scrap,)	100%	-	t	-	17	192
PCR material in ingot form – externally "remelted"	100%	0.3	t	-	74	372
Purchase of profiles from NSM (NPW, NPS, NFS, NSZ)	50%	6.76	t	4,490	4,252	3,422
Purchase of profiles from external sources (NSM, NPW, N	<b>70%</b> PS, NFS,NSZ	<b>5.00</b>	t	7,344	6,377	6,210
<b>Additional purchase of slugs</b> from NAM (NFM, NFR, NFS)	10%	8.00	t	856	1,014	1,251
Purchase of slugs from external sources (NFM, NFR, NF	<b>40%</b> S)	8.50	t	2,835	2,838	2,473
<b>Additional purchase of parts</b> from other plants (NFM)	40%	10.00	t	60	9	8
Percentage of secondary material			%	51%	53%	56%
Total quantity of aluminium purchase	d		t	72,794	69,974	63,926

Sold materials	PCF t/t Al	Unit	2018	2019	2020
Slugs	9,72	t	20,137	19,468	17,777
Rods and bolts from HSG	0.92	t	5,150	4,847	5,602
Profiles and pressed bars (NSM) excluding internal sales	6.76	t	27,325	26,734	25,662
PIR scrap sold to NAM (NSM, NFM)	0.00	t	10,103	11,181	9,609
PIR scrap sold to external customers (NSM, NFM, NFR, NFS, NPS, NPW, NSZ)	0.00	t	6,367	5,079	4,563
Machined profiles PWG (NPW, NPS) & NSZ	7.50	t	9,901	8,845	7,665
Impact extrusion parts (NFM, NFR, NFS)	9.50	t	3,277	3,115	3,134
Parts sale to other plants (NSC to NSM, NPS to NPW)	10.00	t	1,031	897	815
Total quantities sold		t	72,158	68,087	64,402

CO<sub>2</sub> emissions through use of electricity and gas

of electricity and gas		2018	2019	2020
CO <sub>2</sub> emissions of the natural gas consumed	Scope 1	15,549 t	15,712 t	15,858 t
CO <sub>2</sub> emissions from procurement of electricity without taking into account the certificates of origin for green electricity	Scope 2	22,334 t	21,682 t	20,598 t

## Key figures of the eight plants

NAM	Purchase of aluminium	32,984 t	37,103 t	35,056 t
	Sale of products	31,547 t	34,282 t	34,003 t
	Gas consumption	35,799 MWh	44,951 MWh	47,888 MWh
	Electricity consumption	11,253 MWh	12,553 MWh	12,615 MWh
	Volume-specific energy consumption	1.49 MWh/t	1.68 MWh/t	1.78 MWh/t
	CO <sub>2</sub> emissions gas	9,845 t	12,362 t	13,169 t
	CO <sub>2</sub> emissions electricity	3,871 t	4,318 t	4,340 t
	Volume-specific CO <sub>2</sub> emissions	0.43 t CO <sub>2</sub> /t	0.49 t CO <sub>2</sub> /t	0.51 t CO <sub>2</sub> /t
NSM	Purchase of aluminium	46,032 t	44,637 t	40,397 t
	Sale of products	32,245 t	31,416 t	29,520 t
	Gas consumption	14,813 MWh	13,765 MWh	13,989 MWh
	Electricity consumption	15,852 MWh	15,586 MWh	14,494 MWh
	Volume-specific energy consumption	0.95 MWh/t	0.93 MWh/t	0.96 MWh/t
	CO <sub>2</sub> emissions gas	4,074 t	3,785 t	3,847 t
	CO <sub>2</sub> emissions electricity	5,453 t	5,362 t	4,986 t
	Volume-specific CO <sub>2</sub> emissions	0.30 t CO <sub>2</sub> /t	0.29 t CO <sub>2</sub> /t	0.30 t CO <sub>2</sub> /t
NSZ	Purchase of aluminium	2,600 t	2,600 t	2,400 t
	Sale of products	3,292 t	3,104 t	2,973 t
	Gas consumption	697 MWh	846 MWh	1,137 MWh
	Electricity consumption	3,879 MWh	4,040 MWh	3,790 MWh
	Volume-specific energy consumption	1.39 MWh/t	1.57 MWh/t	1.66 MWh/t
	CO <sub>2</sub> emissions gas	200 t	243 t	326 t
	CO <sub>2</sub> emissions electricity	1,975 t	2,057 t	1,929 t
	Volume-specific CO <sub>2</sub> emissions	0.66 t CO <sub>2</sub> /t	0.74 t CO <sub>2</sub> /t	0.76 t CO <sub>2</sub> /t
NFM	Purchase of aluminium	1,947 t	2,070 t	2,204 t
	Sale of products	1,742 t	1,701 t	1,826 t
	Gas consumption	2,710 MWh	2,721 MWh	2,927 MWh
	Electricity consumption	6,863 MWh	5,839 MWh	6,468 MWh
	Volume-specific energy consumption	5.50 MWh/t	5.03 MWh/t	5.15 MWh/t
	CO <sub>2</sub> emissions gas	745 t	748 t	805 t
	CO, emissions electricity	2,361 t	2,009 t	2,225 t

NFS	Purchase of aluminium	789 t	828 t	1,103 t
	Sale of products	541 t	556 t	641 t
	Gas consumption	374 MWh	351 MWh	476 MWh
	Electricity consumption	2,769 MWh	3,007 MWh	3,080 MWh
	Volume-specific energy consumption	5.81 MWh/t	6.04 MWh/t	5.55 MWh/t
	CO <sub>2</sub> emissions gas	107 t	101 t	137 t
	CO <sub>2</sub> emissions electricity	1,409 t	1,531 t	1,568 t
	Volume-specific CO <sub>2</sub> emissions	2.80 t CO <sub>2</sub> /t	2.93 t CO <sub>2</sub> /t	2.66 t CO <sub>2</sub> /t
NFR	Purchase of aluminium	1,294 t	1,123 t	961 t
	Sale of products	994 t	858 t	667 t
	Gas consumption	753 MWh	810 MWh	792 MWh
	Electricity consumption	1,995 MWh	1,936 MWh	1,958 MWh
	Volume-specific energy consumption	2.76 MWh/t	3.20 MWh/t	4.12 MWh/t
	CO <sub>2</sub> emissions gas	189 t	203 t	199 t
	CO <sub>2</sub> emissions electricity	1,161 t	1,127 t	1,140 t
	Volume-specific CO <sub>2</sub> emissions	1.36 t CO <sub>2</sub> /t	1.55 t CO <sub>2</sub> /t	2.01 t CO <sub>2</sub> /t
NPW	Purchase of aluminium	6,396 t	5,111 t	4,208 t
	Sale of products	5,669 t	4,486 t	3,566 t
	Gas consumption	534 MWh	541 MWh	1,147 MWh
	Electricity consumption	7,815 MWh	6,060 MWh	4,846 MWh
	Volume-specific energy consumption	1.47 MWh/t	1.47 MWh/t	1.68 MWh/t
	CO <sub>2</sub> emissions gas	134 t	136 t	288 t
	CO <sub>2</sub> emissions electricity	4,549 t	3,527 t	2,820 t
	Volume-specific CO <sub>2</sub> emissions	0.83 t CO <sub>2</sub> /t	0.82 t CO <sub>2</sub> /t	0.87 t CO <sub>2</sub> /t
NPS	Purchase of aluminium	2,254 t	2,436 t	2,148 t
	Sale of products	1,971 t	2,152 t	1,941 t
	Gas consumption	888 MWh	1,274 MWh	854 MWh
	Electricity consumption	3,056 MWh	3,450 MWh	2,861 MWh
	Volume-specific energy consumption	2.00 MWh/t	2.20 MWh/t	1.91 MWh/t
	CO <sub>2</sub> emissions gas	255 t	366 t	245 t
	CO <sub>2</sub> emissions electricity	1,555 t	1,756 t	1,456 t
	Volume-specific CO <sub>2</sub> emissions	0.92 t CO <sub>2</sub> /t	0.99 t CO <sub>2</sub> /t	0.88 t CO <sub>2</sub> /t

## **GRI Content index**

**GRI 102: General information 2016** 

Code	Brief designation for the respective indication	Notes and omissions	Page in the SR
	ORGANIZATIONAL PROFILE		
GRI 102-1	Name of the organization		12
GRI 102-2	Activities, brands, products and services		12
GRI 102-3	Location of headquarters		12
GRI 102-4	Location of operations		14
GRI 102-5	Ownership and legal form		12
GRI 102-6	Markets served		23, 25
GRI 102-7	Scale of the organization		14, 15, 23, 25 64, 73
GRI 102-8	Information on employees and other workers		65, 67, 69, 7
GRI 102-9	Supply chain		23, 25
GRI 102-10	Significant changes to the organization and its supply chain		14, 23, 25
GRI 102-11	Precautionary principle or approach		19
GRI 102-12	External initiatives		21
GRI 102-13	Membership of associations		14
	STRATEGY		
GRI 102-14	Statement from senior decision-maker		7
	ETHICS AND INTEGRITY		
GRI 102-16	Values, principles, standards and norms of behavior		19
	GOVERNANCE		
GRI 102-18	Governance structure		17, 18
	STAKEHOLDER ENGAGEMENT		
GRI 102-40	List of stakeholder groups		14
GRI 102-41	Collective bargaining agreements		38
GRI 102-42	Identifying and selecting stakeholders		61
GRI 102-43	Approach to stakeholder engagement		14
GRI 102-44	Key topics and concerns raised		14, 34, 38, 49, 56, 61
	REPORTING PRACTICE		
GRI 102-45	Entities included in the consolidated financial statements		14
GRI 102-46	Defining report content and topic boundaries		61
GRI 102-47	List of material topics		27
GRI 102-48	Restatement of information		61
GRI 102-49	Changes in reporting		60
GRI 102-50	Reporting period		60
GRI 102-51	Date of most recent report		60
GRI 102-52	Reporting cycle		14, 60
GRI 102-53	Contact point for questions regarding the report		60
GRI 102-54	Claims of reporting in accordance with the GRI standards		60
GRI 102-55	GRI content index		76, 77
GRI 102-56	External audit	The present Sustainability Report was not subjected to an external audit.	

Code	Brief designation for the respective indication	Notes	Page
		and omissions	in the SR
	HEALTH AND SAFETY AT WORK		
GRI 103-1	Explanation of the material topic and its boundary		33
GRI 103-2	The management approach and its components		33
GRI 103-3	Evaluation of the management approach		33
GRI 403-1	Occupational health and safety management system		20, 28, 35
GRI 403-2	Hazard identification, risk assessment, and incident investigation		31, 34, 35
GRI 403-3	Occupational health services		29, 31, 33, 35
GRI 403-4	Worker participation, consultation, and communication on occupational health and safety		29, 33, 35
GRI 403-5	Worker training on occupational health and safety		29, 33, 35
GRI 403-6	Promotion of worker health		33, 34, 35,
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		29, 31
GRI 403-8	Workers covered by an occupational health and safety management system		28
GRI 403-9	Work-related injuries		31
GRI 403-10	Work-related ill health		32
Code	Brief designation for the respective indication	Notes and omissions	Page in the SR
	JOB SATISFACTION		
GRI 103-1	Explanation of the material topic and its boundary		36
GRI 103-2	The management approach and its components		36
GRI 103-3	Evaluation of the management approach		36
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		41
GRI 402-1	Minimum notice periods regarding operational changes		36
GRI 404-1	Average hours of training per year per employee		71
GRI 404-2	Programs for upgrading employee skills and transition assistance programs		36
Code	Brief designation for the respective indication	Notes and omissions	Page in the SR
	ENERGY CONSUMPTION AND CO <sub>2</sub> EMISSIONS		
GRI 103-1	Explanation of the material topic and its boundary		42
GRI 103-2	The management approach and its components		42
GRI 103-3	Evaluation of the management approach		42, 46
GRI 302-1	Energy consumption within the organization		46
GRI 302-3	Energy intensity		46
GRI 302-4	Reduction of energy consumption		46
GRI 305-1	Direct (Scope 1) GHG emissions		49, 75
GRI 305-2	Energy indirect (Scope 2) GHG emissions		49, 75
GRI 305-3	Other indirect (Scope 3) GHG emissions		49, 53, 56
GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		49
Code	Brief designation for the respective indication	Notes and omissions	Page in the SR
	THE USE OF ALUMINIUM		
GRI 103-1	Explanation of the material topic and its boundary		50
GRI 103-2	The management approach and its components		50
GRI 103-3	Evaluation of the management approach		53
GRI 301-1	Materials used by weight or volume		53, 56, 72
GRI 301-2	Recycled input materials used		53, 56, 72
GRI 301-3	Reclaimed products and their packaging materials		53, 56

## **Imprint**

#### **PUBLISHER**

Fried. v. Neuman GmbH Werkstraße 1, A-3182 Marktl www.neuman.at





#### **AUTHORS**

DI Patricia Vogel MSc and DI Thomas Höpler You can reach the sustainability team at sustainability.fvn@neuman.at

## SUPPORT WITH THE CONCEPTION AND THE REPORT

denkstatt GmbH Hietzinger Hauptstraße 28, A-1130 Vienna

#### **EDITORIAL**

Prof. Dr. Ing. Helmut Hubeny

#### **GRAPHIC DESIGN**

Michael Tripolt

#### **PHOTOS**

Photos by Helge Wöll, Sebastian Wegerbauer, Thomas Höpler and from the archive of Neuman Aluminium Industries

#### **TRANSLATION**

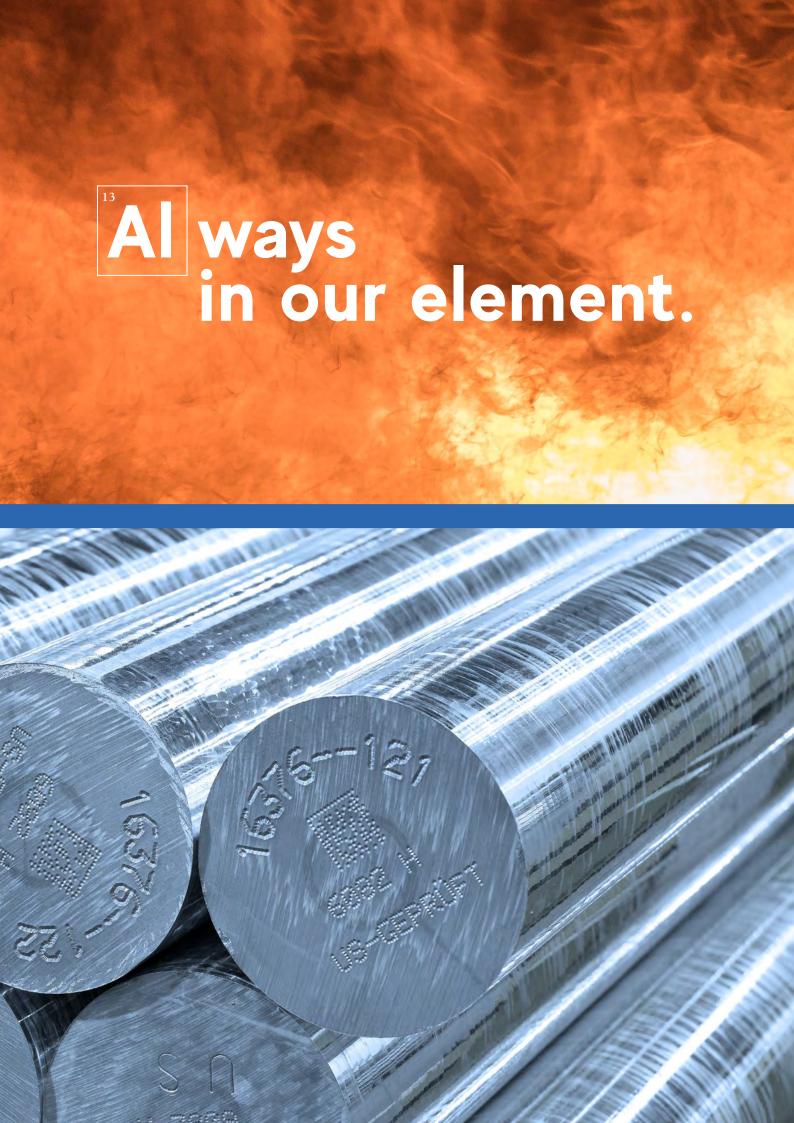
Cruz Communications GmbH

#### **YEAR OF PUBLICATION**

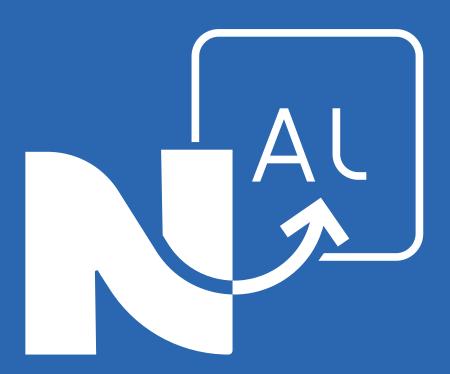
2022













neuman.at