

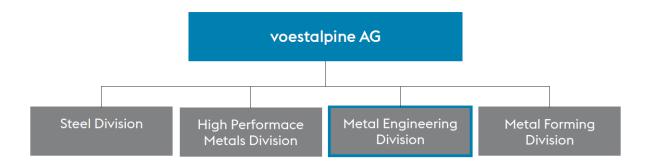
# ENVIRONMENTAL STATEMENT 2023





## EMAS Ceprüftes Umweltmanagement 1802.00.8.76-060410

#### The company

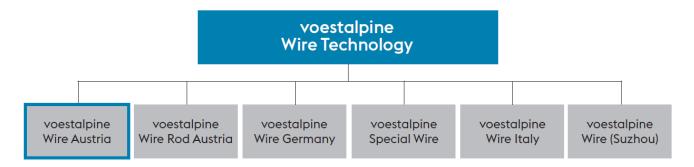


voestalpine AG is a leading global steel and technology group with combined materials and processing expertise. With top-quality product and system solutions, voestalpine AG is one of the leading partners to the automotive and household appliance industries, as well as to the aviation and oil and gas industries, and is also the global market leader in railroad infrastructure systems, tool steel, and special profiles. voestalpine AG is committed to global climate goals and is working intensively on technologies for decarbonization and long-term reduction of CO2 emissions.





#### voestalpine Wire Technology



voestalpine Wire Technology is the holding company for the individual wire-processing companies of the voestalpine Group. voestalpine AG. This is part of the Metal Engineering Division and includes the 6 production sites voestalpine Wire Austria GmbH (Bruck an der Mur site; Austria), voestalpine Wire Rod Austria GmbH (St. Peter Freienstein site; Austria), voestalpine Special Wire GmbH (Fürstenfeld site; Austria), voestalpine Wire Germany GmbH (site Finsterwalde, Germany), voestalpine Wire Italy (Nervesa della Battaglia site, Italy) and voestalpine Wire (Suzhou). (Suzhou site, China).





#### Plant park

- » 1 pickling plant (IPPC plant);
  - » Capacity approx. 220,000 to/year
- » 2 Annealing units
  - » Capacity approx. 80,000 t/year
- » 26 Wire drawing plants
- » 1 Prestressing steel stranding lines
- » 3 Thread rolling systems
- » 1 thread rolling and bending machine
- » 7 Small profile rolling mills
- » 4 drag rolling mills
- » 1 Lead patenting plant
- » 1 Hot dip galvanizing line







#### Integrated management system

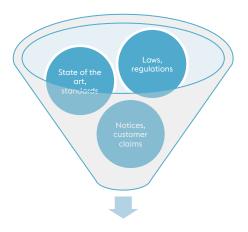
- » voestalpine Wire Austria GmbH has been implementing an integrated management system for several years now. The aim of this overarching management system is to combine the positive characteristics of individual management systems in order to achieve the best possible synergy effect.
- » The following management systems form the basis of the integrated management system.
- » The environmental management system of voestalpine Wire Austria GmbH is embedded in the integrated management system. The management annually drafts and evaluates the environmental policy with regard to the topics of occupational safety, health promotion, energy and the environment.
- » The environmental policy is in accordance with the legal requirements, the requirements of ISO 14001, ISO 50001, the guidelines of EMAS Regulation and with the requirements of ISO 45001.





## Ensuring compliance with environmentally relevant regulations





Binding commitments

#### Typical commitments:

- Compliance with limit values (noise, air, water, soil, radiation)
- Prohibition or restriction of substances
- Measurement obligations
- Documentation requirements
- Organizational requirements
- Markina specifications
- Information requirements
- Orientation to the state of the art

#### The fulfillment of the binding obligations takes place via:

- » SAP database for administration of notices incl. partially automated request for execution of required activities
- » Legal register with assigned responsibilities
- » Determination of responsibilities within the company (partly in the job profiles)
- Drafting internal instructions for processing/fulfilling obligations.





### **Environmental policy**

- » We ensure compliance with all relevant legal and administrative regulations. Likewise, we assure conformity with relevant standards, directives and customer specifications.
- » We establish periodic energy and environmental programs to continuously improve environmental performance.
- » We optimize our processes to minimize the use of raw materials as well as waste and close material cycles within the scope of technical possibilities.
- » We keep energy consumption as low as possible through optimal design and careful operation of our plants.
- » We minimize our emissions that have a negative impact on air, water, soil, noise and odor.
- » We promote a sense of environmental responsibility among our employees.

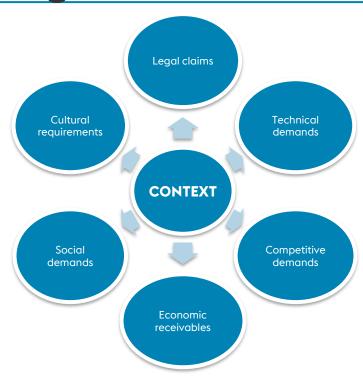








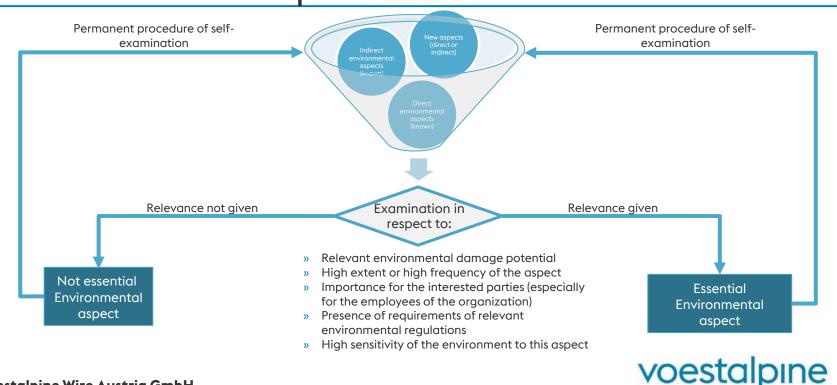
## Context of the organization





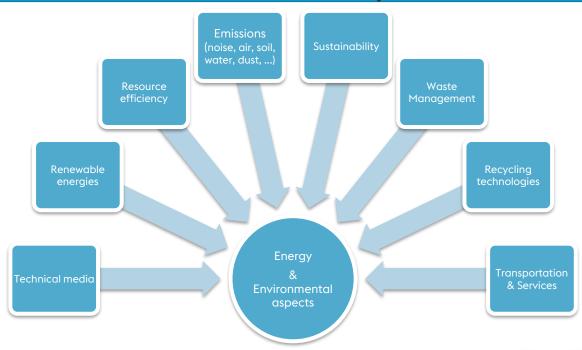
## Identification of the main energy and environmental aspects





## EMAS Ceprüftes Umweltmänagement 1805.180.187-60411

### Energy and environmental aspects





## Police School Grand School Gran



## Interested parties







#### Production processes

























#### Environmental performance evaluation

- » voestalpine Wire Austria GmbH has a process-oriented data monitoring system. In addition to key process figures, energy and environmentally relevant data are also recorded. Input-output balances have been drawn up to show the environmental impact of the site.
- » In addition to a surface treatment plant, voestalpine Wire Austria GmbH also operates 10 annealing bases and 26 drawing units. These plants are major consumers of natural gas, hydrogen and electricity. In the area of "energy", there are three decisive influencing variables. These are the temperature level in the winter months (gas consumption in the boiler house for heating), the production volume at the power-intensive aggregates, such as the multiple drawing unit GA12 in the area of prestressing steel, and the processing depth (quality) of the manufactured products.
- » The processing depth can be estimated with the information on the drawing portion (here basically all cold forming operations are meant), pickling portion, annealing portion, patenting portion and galvanizing portion.
- » In the "Waste" area, the volumes are mainly driven by 3 fractions. These are the waste acid, the phosphate sludge and the iron hydroxide.





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#### **INPUT - OUTPUT**

	INPUT	2020	2021	2022	Unit
1	Raw materials used				
1.1	Wire rod	68.947	88.063	94.238	t
II.	Auxiliary and operating materials				
11.1	Consumables and supplies*	1.642	2.017	2.158	t
11.4	Packaging material*	677	831	889	t
III	Energy source				
111.1	Natural gas	35.720	42.449	<i>37.003</i>	MWh
111.2	Diesel	119	189	155	MWh
111.3	Electric current	14.081	16.620	16.846	MWh
111.4	Hydrogen	1.082.636	1.018.271	758.791	m³
IV	Water				
IV.1	City water drinking water	5.057	2.882	2.882	$m^3$
IV.2	Well water	1.080.001	977.210	1.030.453	$m^3$

<sup>\*</sup> partially estimated





#### **INPUT - OUTPUT**

	OUTPUT	2020	2021	2022	Unit
V	Products				
V.1	Finished products	68. <i>7</i> 63	84.440	91.406	t
VI	Waste				
VI.1	Hazardous waste	3.027	2.684	2.926	t
VI.2	Non-hazardous waste	480	532	489	t
V1.3	Waste materials	2.963	3.034	3.483	t
VII	Waste water				
VII.1	Process water	<i>7</i> 5.918	80.376	64.577	$m^3$
VII.2	Cooling water	918.001	830.629	875.885	m³
VII.3	Sanitary water	5.05 <i>7</i>	2.882	2.882	$m^3$
VIII	Emissions to the atmosphere (direct)				
VIII.1	CO2	6.178	<i>7</i> .368	6.523	t
VIII.2	NOx (as NO2)	3.413	3.413	6.167	kg
VIII.3	Particle	200	261	80	kg
IX	Indirect emissions (indirect)*				
IX.1	CO2	5.390	6.618	7.164	t
IX.2	NOx (as NO2)	333	531	5 <i>7</i> 5	kg
IX.3	Particle	147	46	49	kg

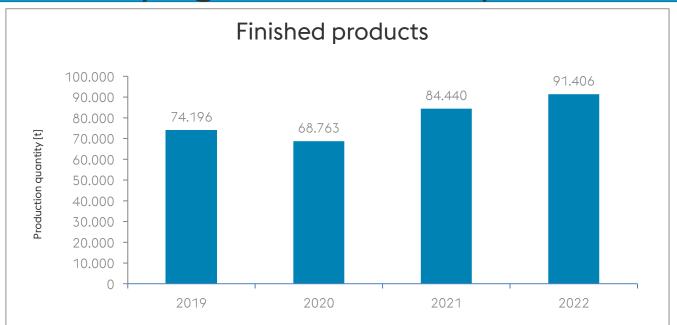
<sup>\*</sup> partially estimated

#### voestalpine Wire Austria GmbH





### Production key figures - finished products

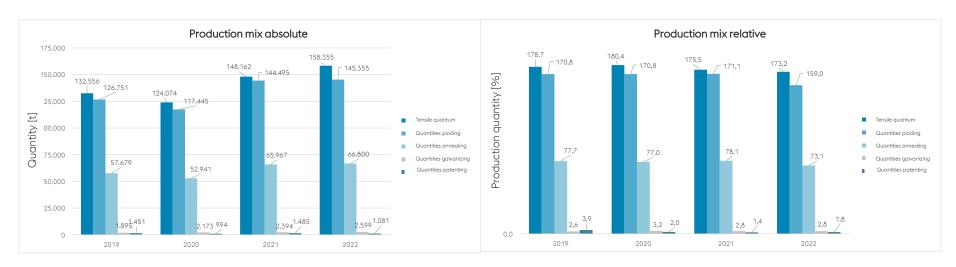


Production has increased over the last 3 years.





### Processing depth



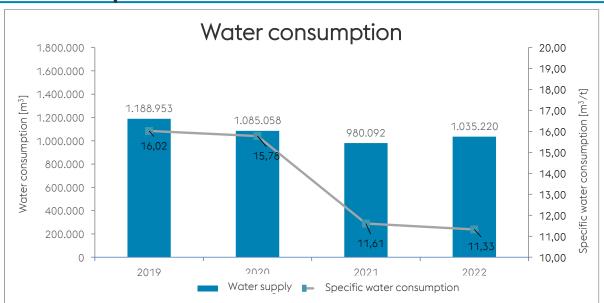
In line with total production, the individual items in the product mix also increased. The relative shares in the pickling, annealing area decreased in CY2022.



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#### Water consumption

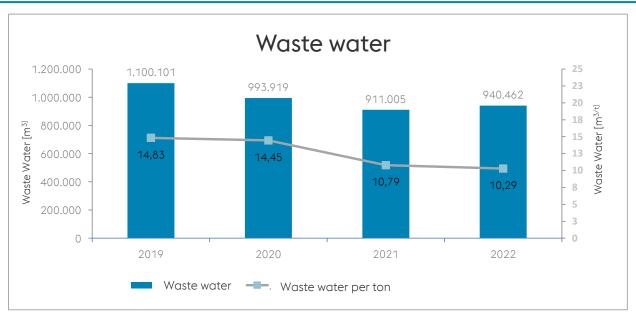


Absolute water consumption increased slightly due to increased production and the divestment of a cooling system. Specific water consumption was reduced.





#### Waste water



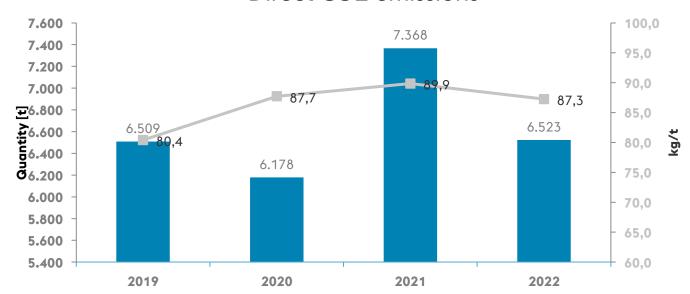
The main component of the wastewater volume is the cooling water. This is calculated as a percentage of the well water volumes extracted. As mentioned above, the absolute quantity increased somewhat, while the specific quantity was reduced.





#### CO2 - emission

#### Direct CO<sub>2</sub> emissions



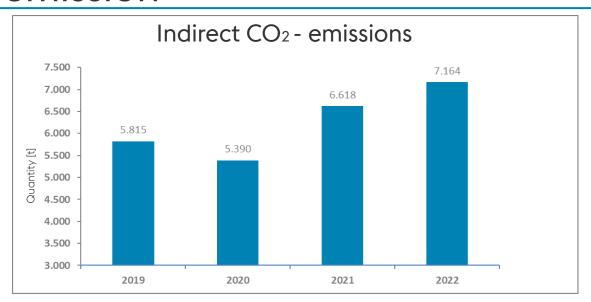
In calendar year 2022, both the absolute and the specific amount of  $CO_2$  could be reduced.







#### CO2 - emission



\* Partially estimated

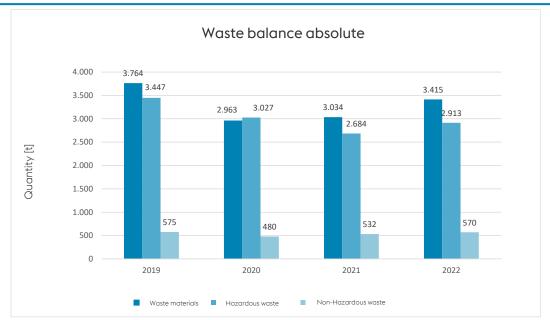
 ${\rm CO_2}$  indirect ightarrow Emissions caused by transport outside the plant premises. These have increased in line with increased production



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#### Waste balance

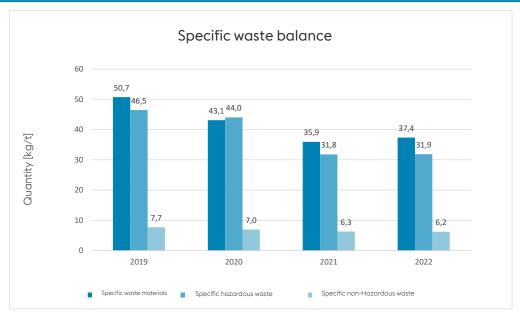


Waste volumes increased somewhat in line with the rise in production. The increased scrap volumes are striking.





#### Waste balance

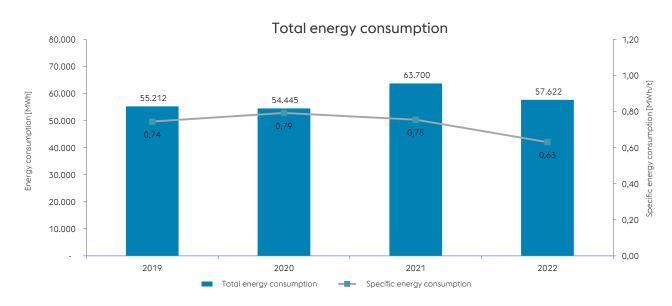


The specific values in the area of "Hazardous and non-hazardous waste" are in the range of the previous year. Waste materials increased due to the higher proportion of scrap.





#### Total energy consumption

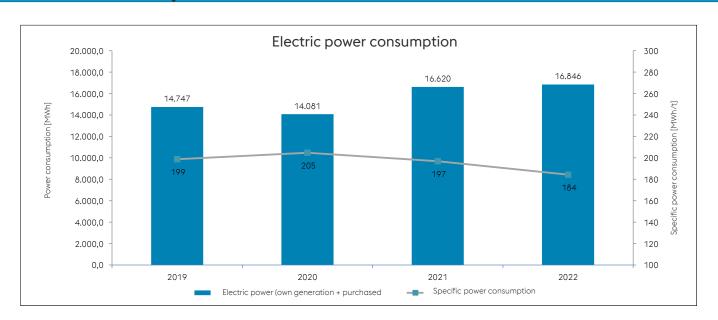


Both absolute and specific total energy consumption were reduced. The main influence here is in the area of natural gas (see below).





#### Power consumption

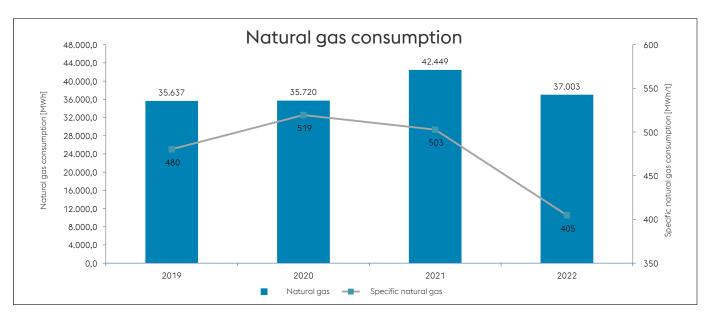


Absolute consumption has increased due to the increase in production, while specific consumption has been reduced.





#### Natural gas consumption

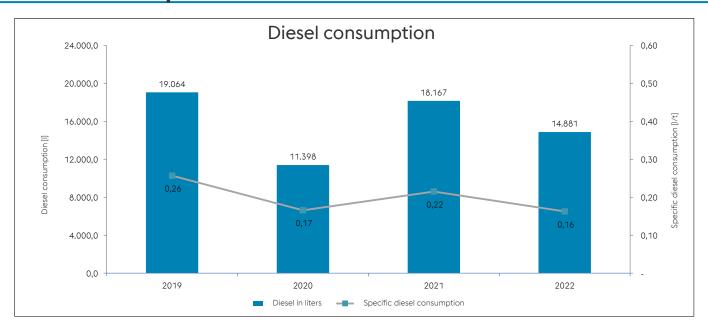


Both absolute and specific consumption were reduced. The reasons are the good order situation, a slightly lower processing depth, optimizations in the area of heating, and a shift of energy-intensive annealing programs to voestalpine Wire Rod Austria.





#### Diesel consumption



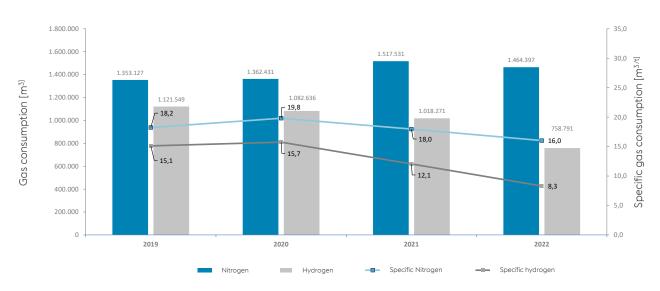
Both absolute and specific diesel consumption were reduced. This is partly due to the improved logistics concept.





#### Gaseous media

#### Gaseous media

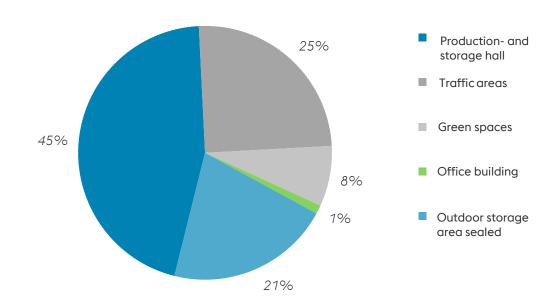


The quantities of inert gas were reduced both in absolute and specific terms. This was achieved by optimizing the process technology and shifting energy-intensive annealing iron to voestalpine Wire Rod Austria GmbH.

Voestalpine



## Biodiversity 2023







## Environmental program 2022 - Implementation

No.	Destination	Savings & Impact	Measure	Date	Responsible	Status
1	Reduction in electricity demand	60 MWh	Replacement of discharge luminaires with LEDs in Halls 10,11, 4 and 5+6	12/22	OA	100%
2	Reduction of hydrogen demand	800 MWh	Adaptation of the rinsing programs, optimization of the base loading in the annealing shop		TE	96%
3	Reduction of natural gas use in the galvanizing plant	1,500 MWh	Use of thermal insulation boxes to reduce heat losses	12/22	OW21	187%
4	Reduction of energy demand of cooling systems	40 MWh	Conversion of the GA8/Stab1 wet cooling tower to an open cooling system		OA	100%
5	Construction of a photovoltaic system	Strategic	Development of a concept and preparatory measures for the construction of a photovoltaic plant	09/22	OA	100%
6	Energy-efficient heat supply to the site	Strategic	Development and evaluation of scenarios for alternative heat supply - focus on plant heating, pickling shop and annealing shop.		OA	100%
7	Automatic detection of energy consumption Deviations	Strategic	Automated data evaluation by means of IBA Analyzer and alarming	08/22	OA	80% (reference project sanitary room)
8	Energy saving through scrap reduction	100 MWh	Reduction of the scrap content in production through various measures	12/22	OW	0% Causes are presented in the MR
9	Modernization of the heating of the patenting line	Strategic	Automation of heating and installation of a furnace control system		OA	0% (project implementatio n suspended)

#### voestalpine Wire Austria GmbH



## Environmental program 2023

No.	Destination	Savings & Impact	Measure	Date	Responsible
1	Reduction of the thermal natural gas demand	200 MWh/a	Installation of a preheating station of the rinsing water in the pickling plant for waste heat utilization in summer	12/23	OA
2	Reduction of electrical energy demand	60 MWh/a	Revitalization of the GA8 drawing line - installation of asynchronous drives instead of DC drives	01/23	OA
3	Green electricity generation through PV system	90 MWh/a	Construction of a PV plant at the WD storage yard in the amount of 82 kWp	09/23	OA
4	Reduction of the electr. energy demand	30 MWh/a	Reduction of internal network losses through (load shifting UW4 transformer1, UW7 transformer2)	12/23	OA
5	Energy saving through scrap reduction	156 MWh	Reduction of 2 A scrap (16MnCr5 = 520 kWh/t & 300t) in production	03/24	OW
6	Reduction of the electr. energy demand	8.4 MWh/a	Reduction of runtime heater fan in summer for cooling purposes	03/24	OA
7	Reduction of the specific natural gas consumption of the plant heating system	422 kWh/HGT <sub>20/12</sub>	Reduction of the spec. natural gas demand by manual heating intervention	05/24	OA

#### voestalpine Wire Austria GmbH



## Environmental program 2023

No.	Destination	Savings & Impact	Measure	Date	Responsible
8	Reduction of compressed air requirements - Savings in electrical energy	30 MWh/a	Reduction in pickling line $C_3$ Measuring point by 300,0000 Nm <sup>3</sup> in pickling line at max. 150,000 pickling tons. E power requirement 0.11 kWh/Nm <sup>3</sup> Compressed air.	05/24	OA
9	Saving of the electr. energy demand	120 MWh/a	Replacement of further discharge luminaires with LEDs. At halls 9, 10, 11, 7, implementation lighting control hall 5/6	03/24	OA
10	Preliminary work for the new construction of the Andrieu weir	strategic	Obtaining of the water law permit for the new construction of the Andrieu weir incl. construction tendering	03/24	OA
11	Reduction of transmission heat losses building	75 MWh/a	Replacement of individual components of the building envelope Ha. 4b with components with U-values according to current OIB guideline and better.	03/24	OA

#### PROJECT: ROADMAP 2 ZERO





#### Our goal: CO2 neutrality by 2035\*

#### PRODUCTS & APPLICATION **END-OF-LIFE PRODUCTION** Mobility and Energy consumption & emissions Supply-chain Wire Technology - Roadmap 2 Zero Recycling behavior Steel to enable Success stories with Reduction of "Green" transport Energy-efficiency Material-efficiency Lightweight solutions circular economy customers process steps **H2** Renewable energy Recycling-friendly Use alternative Business trips and Reduction of scrap "Green" coatings packaging personal behavior greentec steel supply energy sources



#### AWARENESS - EDUCATION - BEHAVIOR - MARKETING



**CERTIFICATION** 

\* Scope 1 & 2

#### voestalpine Wire Austria GmbH





### Certificates



#### voestalpine Wire Austria GmbH

## Gültigkeitserklärung



Der leitende und zeichnungsberechtigte EMAS-Umweltgutachter
DI Christian Rezner
der Umweltgutachterorganisation
TÜV SÜD Landesgesellschaft Österreich GmbH
Franz-Grill-Straße 1
Arsenal, Objekt 207
A-1030 Wien

bestätigt, begutachtet zu haben, dass der Standort bzw. die Organisation, wie in der Umwelterklärung der Organisation

voestalpine Wire Rod Austria GmbH Drahtstraße 1 A-8792 St. Peter Freienstein mit der Registriernummer AT-000410

angegeben, alle Anforderungen der Verordnung (EG) Nr. 1221/2009 des Europäischen Parlaments und des Rates vom 25. November 2009 über die freiwillige Teilnahme von Organisationen an einem Gemeinschaftssystem für Umweltmanagement und Umweltbetriebsprüfung (EMAS) erfüllen.

Mit der Unterzeichnung dieser Erklärung wird bestätigt, dass

- die Begutachtung und Validierung in voller Übereinstimmung mit den Anforderungen der Verordnung (EG) Nr. 1221/2009 in der Fassung EG VO 2017/1505 und 2018/2026 durchgeführt wurden,
- das Ergebnis der Begutachtung und Validierung bestätigt, dass keine Belege für die Nichteinhaltung der geltenden Umweltvorschriften vorliegen,
- die Daten und Angaben der Umwelterklärung der Organisationen ein verlässliches, glaubhaftes und wahrheitsgetreues Bild sämtlicher Tätigkeiten der Organisationen innerhalb des in der Umwelterklärung angegebenen Bereichs geben.

Die Umweltgutachterorganisation TÜV SÜD Landesgesellschaft Österreich GmbH ist per Bescheid durch das Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft für die NACE-Codes 24.10 und 24.34 zugelassen.

St. Peter Freienstein am 18.04.2023





Leitender und zeichnungsberechtigter Umweltgutachter der TÜV SÜD Landesgesellschaft Österreich GmbH Franz-Grill-Straße 1, Arsenal, Objekt 207, 1030 Wien

voestalpine Wire Austria GmbH

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