ESRS E2 POLLUTION

As part of its double materiality assessment, voestalpine has identified its material impacts, risks, and opportunities related to air, water, and soil pollution, as well as critical substances and substances of very high concern. A detailed description of the testing procedures applied for sites and business activities along the value chains and the engagement of affected communities can be found in ESRS 2 IRO-1.

The following table provides specific information on SBM-3:

Topic/sub-topic/ sub-sub-topic		Impact, risk, opportunity (IRO)	Description	
Air pollution	●	NO_X, SO_X, and dust emissions from our own production processes	In recent decades, voestalpine has implemented measures to significantly reduce air emissions; due to the nature of its production processes and the raw materials used, SO_2, NO_X, and dust continue to be emitted	

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

E2-1 – Policies related to pollution

Active climate change mitigation—in particular avoiding and mitigating air pollution—has been firmly anchored in voestalpine's corporate principles for decades.

In order to effectively manage the negative impacts associated with pollution, voestalpine relies on locally implemented environmental strategies. To facilitate this, environmental management systems (EMS) have been implemented at the production sites in accordance with the recognized EMAS, ISO 14001, or equivalent regulations. Environmental management systems make it possible to effectively roll out site-specific actions and targets at short notice.

A corresponding environmental management system is already in place at the majority of companies that have a significant impact on the environment from a Group perspective. At present, this covers 86% of the manufacturing companies responsible for 98% of voestalpine's production volume.

	Impact on strategy and business model	Value chain	Time horizon	Affected stakeholders
	Consideration of legal provisions in the strategy and business model Adaptation of central production facilities and processes	››› Group-wide	●●●●	Environment and society Local, national, and international authorities

Key

- ● Actual positive impact
- ● Actual negative impact
- ○ Potential positive impact
- ○ Potential negative impact
- \+ Opportunity
- ! Risk
- ››› Upstream
- ››› Own operations
- ››› Downstream
- ●○○○ < 1 year
- ○●○○ 1–5 years
- ○○●○ 5–10 years
- ○○○● 10+ years

The environmental management systems define how the respective companies can improve their environmental performance, fulfill legal and other commitments, and achieve local environmental targets. Environmental targets are defined and the necessary action determined and implemented in line with the plan-do-check-act (PDCA) approach, as outlined below:

Plan: Identification and analysis of issues or areas that demonstrate the potential for improvement, target setting, and the development of a detailed implementation plan.

Do: Implementation of necessary actions according to the implementation plan.

Check: Monitoring and assessment of implementation results to determine whether the targets set have been achieved.

Act: Derivation and implementation of further measures based on the results of the review.

Preventing and reducing negative impacts on air, water, and soil quality (e.g., NO_x, SO_x, and dust emissions) is one of the core tasks handled by the environmental management systems in place at voestalpine production companies. One of the main tools employed in this regard is comprehensive pollutant monitoring, which is conducted both in line with and beyond the thresholds of regulatory requirements. This enables process managers to intervene in process management early on in the event of an incident.

Installation set up for preventing and reducing adverse environmental impacts correspond to the current state of the art or meet standards that exceed the current state of the art. Like all process plants, they are inspected and maintained on a regular basis. Periodic inspections are also carried out by the authorities, resulting in adjustments and the development of new plans for minimizing pollutants, if necessary with the involvement of external experts.

The Group relies on trained personnel and internal experts to identify problematic situations at an early stage and take appropriate action in response. In the case of extraordinary events, local emergency plans and protocols are in place to facilitate a rapid response and appropriate action. On-call services are available 24 hours a day to coordinate the necessary procedures in the event of an incident and to facilitate the involvement of external support and authorities if necessary.

In order to harmonize and standardize Group-wide environmental management, a Group-wide environmental guideline is currently in the pipeline. Once introduced, the guideline should have an impact on the current decentralized environmental management systems in place at the individual companies and create a common framework for the Group in consideration of the upstream and downstream value chain.

POLICY OVERVIEW

IROs addressed	Policy	Core content	Scope of the policy	Responsibility and monitoring	Other comments
NO_x, SO_x, and dust emissions from our own value-added processes	Environmental management system	Environmental management system in accordance with ISO 14001, EMAS, or equivalent in place at production sites with material environmental impacts from a Group perspective and compared to Group-wide benchmarks, or production sites that make a material contribution to improving Group-wide environmental performance from a Group perspective Determination of how the organization can improve its environmental performance, fulfill its legal commitments, and achieve local environmental targets in line with the PDCA approach	Group manufacturing companies and sites	Management boards of the companies	Regular compliance check as part of the PDCA cycle Engagement of authorities and experts, if necessary direct representatives of neighboring communities

E2-2 – Actions and resources related to pollution

For years, voestalpine has been committed to comprehensive and active climate change mitigation and has continuously undertaken activities to prevent and reduce emissions. As one of these activities, comprehensive environmental impact assessments are carried out at voestalpine sites on an ongoing basis. Based on the findings from the assessments, investments and expansion projects are pursued to improve existing environmental protection facilities. These activities have led to continuous reductions in emissions in recent years. Further information on this topic can be found in the published environmental reports.

A large number of activities aimed at protecting the environment are carried out every year. These range from modifying the process control system to overhauling and expanding existing installations, and completely rebuilding environmental protection systems such as pollutant separation systems.

At voestalpine, measures to reduce pollution are particularly relevant at the local level, as the main sources of environmental pollution are site-specific and largely depend on different production processes and plant configurations.

The process defined by the environmental management systems (PDCA cycle) envisages a continuous assessment of the current environmental situation and the derivation of necessary measures for environmental protection. Regular reviews and evaluations at site level help to ensure that measures are implemented quickly and maximize their impact in line with local requirements.

Alongside ongoing progress monitoring by the management systems, additional potential improvements are discussed with the external experts during official inspections.

When evaluating possible measures, the specialist departments also involve external experts from public authorities, plant designer, and technology suppliers, as well as the company's own research departments. Measures under consideration are often reviewed in comparison with the specifications of the European Commission on the state of the art.

Activities related to environmental protection are primarily pursued through two approaches:

» **Process-integrated activities:**
adjusting process sequences or making adaptations (e.g., burner replacement) to prevent or reduce emissions.

» **End-of-pipe technologies:**
preventing the emission of already generated pollutants into the environment, or treating the pollutants prior to emission.

Detailed lists of the set activities can be found in the locally published environmental statements and elsewhere. The following activities can be cited as examples for the reporting year:

» **voestalpine Stahl GmbH:**
Extensive extraction systems have been installed in the raw material supply area and the casting ladle tilt station of the steel plant to capture and reduce dust emissions.

» **Villares Metals:**
Expansion of the existing dust extraction system to further reduce dust emissions in the steel plant has been implemented.

» **voestalpine Grobblech GmbH:**
Expansion of the water management system with a new downstream cleaning facility to further reduce the total suspended solids in accordance with the new requirements based on best available techniques is currently being implemented.

The following table explores examples of activities related to implementation of the best available techniques and outlines the IROs addressed and further activities.

OVERVIEW OF ACTIONS

IROs addressed	Action	Core content and expected results
NO_x, SO_x, and dust emissions from our own value-added processes	Package of measures to reduce the release of emissions into the air, water, and soil	» Implementation of location-based emission reduction measures » Important matter: implementation of requirements from the BAT process for implementing the best available techniques (valid for sites subject to IED); further regulatory requirements in other countries Expected results: Reduction in the release of emissions into the air, water, and soil

State-of-the-art activity	Emissions/ substances	Mitigation activity
Iron and steel manufacturing		
	Air emissions: Dust	» Extraction systems for preventing and reducing diffuse dust emissions » Complete encapsulation and containment of plant processes to prevent dust emissions
	Air emissions: NO_X	» Exhaust gas recirculation in the sinter plant » Selective catalytic reduction (SCR) to reduce nitrogen oxide emissions
	Air emissions: SO_X (SO_2)	» Desulphurization of coke oven gas » SO_2 reduction by injecting adsorbent in the sinter plant exhaust gas
Metal processing		
	Air emissions: Dust	» Extraction systems to catch dust emissions » Dust separation in an electrostatic precipitator or fabric filter
	Air emissions: NO_X	» Optimized process control of heating furnaces » Avoidance of false air intake through optimized design of the furnace chambers
	Water emissions: Heavy metals and total suspended solids	» Separate collection of different wastewaters » On-site wastewater treatment with neutralization and heavy metal precipitation, as well as sand filter systems
Power plant engineering		
	Air emissions: NO_X	» Low-NO_X burner technology » Air staging » Selective catalytic reduction of nitrogen oxides (SCR)
	Air emissions: CO	» Optimized process control » LAMBDA air control for complete combustion » Combustion air preheating
	Air emissions: SO_X (SO_2)	» Pre-desulphurization of process gases (coke oven gas)
	Water emissions: Input of pollutants	» Separate collection of water and wastewater streams » Dry, water-free waste gas treatment systems

The set activities are implemented as part of an overarching package of measures and cover the scope of the company's own operations. The upstream and downstream value chain is not taken into consideration in this context.

Time horizon	Scope of the action	Responsibility and monitoring	Significant expenditure (if relevant)	Other comments
Project-dependent	Own value chain (sites subject to IED or comparable legislation outside the EU)	Management boards of the companies Divisional management (management boards)	CapEx of EUR 27.6 million	Indirect consideration of interests through implementation of regulatory requirements (environment, society)

METRICS AND TARGETS

E2-3 – Targets related to pollution

voestalpine employs individual targets at each site to manage site-specific environmental impacts. Due to the high number of operational sites with different process and production processes, as well as complex plant networks, the environmental impacts differ considerably from site to site. Group-wide standardization or central control of environmental targets is therefore not feasible at present. Accordingly, no ESRS-compliant Group environmental targets are currently defined or planned. Nevertheless, the pertinent legal requirements are observed and effectiveness is continuously ensured through the environmental management system and reviewed through regular external audits.

E2-4 – Pollution of air, water, and soil

In order to ensure compliance with the legal requirements and to make the processes as efficient as possible, comprehensive monitoring systems have been implemented to track pollutant emissions at the Group's production sites. These include continuous and periodic measuring systems that detect emissions in the air, water, and waste water. Pollutant analyses are then carried out by accredited, in-house, or external laboratories. In certain cases, for instance when process gases are burned, emission levels are recorded using the stoichiometric combustion calculation based on the composition of the measured process gas. This approach is recognized in the field and comparable to direct emission measurement. Due to the small volume of corresponding calculated emission data, the resulting level of uncertainty is very low.

The emission levels reported by the Group companies refer to the calendar year and are projected over the course of the business year on the basis of forecast values. Due to the fact that plant operating methods remain consistent throughout the year, it can be assumed that the extrapolated figures are highly accurate.

At Group level, a survey of all metrics relevant to the environment takes place on an annual basis on an online reporting system. Topic-specific data are collected by local experts. A high number of production sites are already subject to comprehensive legal reporting requirements, such as the European Pollutant Release and Transfer Register Regulation (E-PRTR). Group-wide data collection takes place on the basis of these requirements, thereby ensuring high data quality along with verification by external control bodies.

OVERVIEW OF METRICS

ESRS disclosure requirement	Paragraph	Datapoint/metric	Basis for the preparation and description of the metrics used; description of the assumptions and methodology
E2-4 Pollution of air, water, and soil	28a	Emissions released into the air, water, and soil (non-GHG)	Only includes emissions from installations that exceed the thresholds of the European Pollutant Release and Transfer Register (E-PRTR Regulation) Emission levels are based on an evaluation over the course of the CY and monitoring requirements, which are converted to the BY for reference factors

The following table provides an overview of the volumes of pollutants released into the air and water by voestalpine in the business year 2024/25. This marks the first time that this data has been reported in this format and for the new reporting period on the basis of the business year. Consolidated data for earlier periods are not available. Accordingly, no developments or changes over time can be presented in this sustainability statement. However, starting in the new reporting period, any changes in the volumes of pollutants released compared with 2024/25 will be included.

OVERVIEW OF EMISSIONS

in tons	2024/25		
	Air	**Water**	**Soil**
Carbon monoxide (CO)	159,089	-	-
Sulfur oxides (SO_X/SO_2)	5,011	-	-
Nitrogen oxides (NO_X/NO_2)	4,340	-	-
Particulate matter (PM10)	342	-	-
Methane (CH_4)	182	-	-
Chlorine and inorganic compounds (as HCl)	20.0	-	-
Lead and lead compounds (Pb)	0.3	0.2	-
Mercury and mercury compounds (Hg)	0.3	0.004	-
Cadmium and cadmium compounds (Cd)	0.03	-	-
Hydrofluorocarbons (HFCs)	35.3	-	-
Chromium and chromium compounds	0.1	1.0	-
Zinc and zinc compounds	5.5	6.9	-
Benzene	5.3	-	-
Polycyclic aromatic hydrocarbons (PAHs)	0.1	-	-
Fluorine and inorganic compounds (as HF)	6.7	-	-
Total nitrogen	-	304	-
Total phosphorus	-	28	-
Nickel and nickel compounds	-	1.1	-
Naphthalene	-	0.01	-
Phenols (as total C)	-	194	-
Total organic carbon (TOC) (as total C or COD/3)	-	432	-
Cyanides (as total CN)	-	0.8	-
Fluorides (as total F)	-	63	-
Arsenic and arsenic compounds	-	0.01	-

Where applicable: description of the sources of measurement uncertainty	**Resulting level of accuracy**	**External validation**	**Where applicable: measures planned to improve accuracy**
Estimate for individual quarters	High (+/–3%)	None	Ongoing development and expansion of data collection and evaluation