

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. A detailed description of the testing procedures applied for sites and business activities along the value chain and the engagement of affected communities can be found in ESRS 2 IRO-1 E2.

The following table provides specific information on SBM-3:

Topic/sub-topic/ sub-sub-topic	Impact, risk, opportunity (IRO)	Description	Value chain	Time horizon	Affected stakeholders
Air pollution	● NO _x , SO _x , and dust emissions	Due to the production processes and raw materials used, air pollutants such as SO _x , NO _x and dust are emitted despite mitigation measures. These emissions contribute to air pollution and lead to the pollution of ecosystems	>>>	●●●●	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

IMPACT, RISK, AND OPPORTUNITY MANAGEMENT

Disclosure Requirement E2-1 – Policies related to pollution

Active environmental protection, which encompasses, in particular, the prevention and reduction of environmental pollution, has been firmly embedded in voestalpine’s corporate principles and the Group’s Environmental Policy for decades.

The Environmental Policy is an overarching framework that defines principles and guidelines. The environmental management systems are incorporated in the policy and translate the requirements set forth therein into concrete measures at the operational level.

In order to effectively manage the negative impacts related to 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 90% (2024/25: 86%) of the manufacturing companies responsible for 99% (2024/25: 98%) of voestalpine’s production volume.

The environmental management systems define how the individual companies can continuously improve their environmental performance, comply with legal and other requirements, and achieve their site-specific environmental targets in accordance with the Plan-Do-Check-Act (PDCA) approach.

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, in order to enable process manager to take action at an early stage in the process management system when necessary.

The installations for preventing and reducing adverse environmental impacts meet the national requirements for the current state of the art (such as in the European Union for large plants according to the BAT documents under the Industrial Emissions Directive) and can also meet additional requirements. 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.

POLICY OVERVIEW

IROs addressed	Policy	Scope of the policy	Responsibility and monitoring	Other comments
NO _x , SO _x , and dust emissions	Environmental Policy	Own operations	Management boards of the companies	» For implemented environmental management systems: regular compliance check as part of the PDCA cycle and engagement of authorities, experts, and direct representatives of neighboring communities as necessary

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 for the individual companies.

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 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.

The following table explores examples of activities related to implementation of the state-of-the-art and outlines the negative impacts and mitigation measures along with example projects.

State-of-the-art activity	Emissions/ substances	Mitigation activity
Iron and steel manufacturing		
	Air emissions: Dust	<ul style="list-style-type: none"> » Extraction systems for preventing and reducing diffuse dust emissions » voestalpine Stahl GmbH example: installation of an additional extraction and filtration system in the blast furnace area to reduce diffuse dust emissions. » Complete encapsulation and containment of plant processes to prevent dust emissions
	Air emissions: NO _x	<ul style="list-style-type: none"> » Exhaust gas recirculation in the sinter plant » Selective catalytic reduction (SCR) to reduce nitrogen oxide emissions
	Air emissions: SO _x (SO ₂)	<ul style="list-style-type: none"> » Desulphurization of coke oven gas » SO₂ reduction by injecting adsorbent in the sinter plant exhaust gas
	Water emissions: Heavy metals and total suspended solids	<ul style="list-style-type: none"> » Separate collection of different wastewaters » On-site waste water treatment with neutralization and heavy metal precipitation, as well as sand filter systems » Uddeholms AB example: Expansion of water management in the steelworks area to further reduce zinc emissions
Metal processing		
	Air emissions: Dust	<ul style="list-style-type: none"> » Extraction systems to catch dust emissions » Dust separation in an electrostatic precipitator or fabric filter
	Air emissions: NO _x	<ul style="list-style-type: none"> » 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	<ul style="list-style-type: none"> » Separate collection of different wastewaters » On-site waste water treatment with neutralization and heavy metal precipitation, as well as sand filter systems » voestalpine Grobblech GmbH example: ongoing expansion of the water management system with a new cleaning facility to further reduce the total suspended solids
Power plant engineering		
	Air emissions: NO _x	<ul style="list-style-type: none"> » Low-NO_x burner technology » Air staging » Selective catalytic reduction of nitrogen oxides (SCR) » voestalpine Stahl GmbH example: installation of a DeNO_x system in the power plant area to reduce NO_x emissions
	Air emissions: CO	<ul style="list-style-type: none"> » Optimized process control » LAMBDA air control for complete combustion » Combustion air preheating
	Air emissions: SO _x (SO ₂)	<ul style="list-style-type: none"> » Pre-desulphurization of process gases (coke oven gas)
	Water emissions: Input of pollutants	<ul style="list-style-type: none"> » 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.

OVERVIEW OF ACTIONS

IROs addressed	Action	Time horizon	Scope of the action	Significant expenditure (if relevant)/other comments
NO _x , SO _x , and dust emissions	Package of measures to reduce the release of emissions into the air, water, and soil	Project-dependent	Own operations (sites subject to IED or comparable legislation outside the EU)	<p>CapEx of EUR 35.4 million and planned CapEx through the business year 2030/31 of EUR 65.5 million (planned CapEx only includes actions exceeding EUR 5 million)</p> <p>Indirect consideration of interests through implementation of regulatory requirements (environment, society)</p>

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 and, accordingly, the local targets differ considerably from site to site. Group-wide standardization or central control of environmental targets is therefore not feasible at present. Accordingly, no quantifiable and results-driven 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 line with established standards and methods. 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 using a reference factor, namely the production forecast for the business year. Due to the fact that plant operating methods remain consistent throughout the year, it can be assumed that the extrapolated figures are highly accurate. A back test using actual data has confirmed their accuracy.

At Group level, a survey of all metrics relevant to the environment takes place on an annual basis via 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 of this raw data along with verification by external control bodies.

The following table provides an overview of the volumes of pollutants released into the air and water by voestalpine in the business year 2025/26 and a corresponding year-on-year comparison. Year-on-year differences in total emissions are caused by fluctuations at the individual production sites. In particular, production increases (e.g., zinc and compounds) or production decreases, changes in the pollutant measurement surveys (e.g., measurements of partially fluorinated HFCs during the reporting period indicated small leaks), and the attainment of the specified reporting thresholds (e.g., for lead and lead compounds (Pb)) have an impact on emissions.

OVERVIEW OF EMISSIONS

In tons	Air		Water		Soil	
	2024/25	2025/26	2024/25	2025/26	2024/25	2025/26
Carbon monoxide (CO)	159,089	172,481	-	-	-	-
Sulfur oxides (SO _x /SO ₂)	5,011	5,264	-	-	-	-
Nitrogen oxides (NO _x /NO ₂)	4,340	3,581	-	-	-	-
Particulate matter (PM10)	342	367	-	-	-	-
Methane (CH ₄)	182	287	-	-	-	-
Chlorine and inorganic compounds (as HCl)	20	35	-	-	-	-
Lead and lead compounds (Pb)	0.30	0.87	0.65 ¹	0.36	-	-
Mercury and mercury compounds (Hg)	0.28	0.29	0.004	0.004	-	-
Cadmium and cadmium compounds (Cd)	0.026	0.042	-	-	-	-
Hydrofluorocarbons (HFCs)	35	0.81	-	-	-	-
Partly halogenated hydrochlorofluorocarbons (HCFCs)	-	1.4	-	-	-	-
Chromium and chromium compounds	0.10	-	1.1 ¹	0.77	-	-
Zinc and zinc compounds	5.5	8.0	8.9 ¹	6.8	-	-
Benzene	5.3	4.9	-	-	-	-
Polycyclic aromatic hydrocarbons (PAHs)	0.14	0.14	0.030 ¹	0.022	-	-
Fluorine and inorganic compounds (as HF)	6.7	-	-	-	-	-
Total nitrogen	-	-	304	323	-	-
Total phosphorus	-	-	- ¹	-	-	-
Nickel and nickel compounds	-	-	1.2 ¹	0.86	-	-
Naphthalene	-	-	0.01	0.01	-	-
Phenols (as total C)	-	-	194	255	-	-
Total organic carbon (TOC) (as total C or COD/3)	-	-	432	473	-	-
Cyanides (as total CN)	-	-	0.84	0.73	-	-
Fluorides (as total F)	-	-	82 ¹	90	-	-
Arsenic and arsenic compounds	-	-	0.062 ¹	0.0069	-	-
Copper	-	0.32	0.15 ¹	0.12	-	-
Chloroalkanes	-	-	0.015 ¹	0.016	-	-
Trichloromethane	-	-	0.019 ¹	0.021	-	-
PCCD + PCDF (dioxins + furans) in kilograms	0.0005 ¹	0.0005	-	-	-	-

¹ Figure adjusted retroactively (see BP-2 for details).

OVERVIEW OF METRICS

ESRS disclosure requirement	Paragraph	Datapoint/metric	Basis for the preparation and description of the assumptions and methodology	Information on sources of a high level of measurement uncertainty and information on measurement
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 business year for reference factors	Estimate for individual quarters