

ENVIRONMENTAL ACTION

MITIGATING IMPACT ON AIR QUALITY



Metinvest aims to reduce its air emissions by implementing numerous projects while increasing overall production efficiency, since environmental protection is one of our key priorities. In 2019, we fully complied with the pollutant thresholds set in the air emission permits for all the primary sources of emissions at our sites, including sinter and pelletising plants, blast furnaces, basic oxygen furnaces and coke batteries.

In 2019, after overhauling blast furnace no. 3, Azovstal decreased the dust emissions of its blast furnace unit and provided the furnace with new environmental protection equipment. In 2020-21, Azovstal plans to continue improving the aspiration system of its blast furnaces, mixers and rotary kilns, as well as in the iron desulphurisation units and basic oxygen furnaces.

Within the sinter plant reconstruction project, Ilyich Steel has already commissioned new bag filters for the six sintering machines in its sintering and cooling zones, as well as for another six machines in its sintering zones where the cooling zones were previously equipped with high-efficiency electrostatic filters. The reconstruction project is expected to be completed in 2020. The asset will also continue to renovate its blast furnaces and basic oxygen furnace shop with a focus on gas cleaning systems, dust-cleaning and aspirating in 2020.

Mariupol Machining and Repair Plant managed to reduce dust emissions by 30% by modernising its gas treatment plant and shot-blasting chamber. Zaporizhia Coke overhauled three coke batteries, which reduced its emissions by 45%.

GRI 305-7

Gross emissions, thousand tonnes

Year	Nitrogen dioxide (NO ₂)	Sulphur dioxide (SO ₂)	Carbon monoxide (CO)	Solids (dust)	Total
2017	15.3	20.3	240.6	29.4	314.3
2018	15.7	19.7	270.6	30.0	344.5
2019	14.6	18.1	288.0	26.0	354.0 ³

In 2019, Inkor Chemicals launched an emissions purification project for the crystallisation compartment of naphthalene production. The asset will finish this optimisation in 2020.

GRI 305-1

ADDRESSING CLIMATE CHANGE

Metinvest is fully aware of the gravity of climate change and contributes to tackling it. The Group takes inventory of its GHG emissions, starting from 2020 actively participates in discussions around Nationally Determined Contribution (NDC) and Green Deal projects, and makes every effort to develop strategies and initiatives aimed at minimising its carbon emissions. We have chosen a risk-based approach to integrating climate risks into our plans and business processes, allowing us to minimise our carbon emissions in the long run.

Determining our current level of GHG emissions, as well as formulating goals and approaches to reduce our impact on the climate, is very important for Metinvest and makes up just one part of our general approach to environmental protection. In view of the rapprochement between Ukraine and the EU, we will be reviewing all climate impact requirements applicable to the Group's activities.

Following the ratification of the Association Agreement between Ukraine and the EU, we have been preparing to comply with a number of important EU legislative acts related to environmental protection, including Directives 2010/75/EU and 2003/87/EU, which stipulate regulatory requirements for emissions based on the best available techniques in Europe. These directives cover issues ranging from environmental monitoring to the system for determining GHG quotas and emissions trading. To ensure full conformity, Metinvest plans to take part in pilot projects to obtain integrated environmental permits in the near future. By applying the best available techniques, the Group will be able to develop highly advanced environmental protection measures and adopt operational methods at its assets that comply with the most rigorous European standards.

3 The total increase in emissions in 2019 is mostly related to gaseous components, such as carbon monoxide, which comes from the combustion process. For instance, the new bag filters installed at Ilyich Steel's sinter plant require greater air pressure, which consequently leads to a higher volume of this gas. In addition, the emissions of dust, sulphur oxides (SO_x) and nitrogen oxides (NO_x) are decreasing.



HELPING TO DEVELOP GHG EMISSIONS TRADING

Since 2017, Metinvest has been participating in a joint project with the World Bank and Ukraine's Ministry of Ecology and Natural Resources to create a national GHG emissions trading system (ETS).

The Zaporizhstal JV and Central GOK also acted as pilot sites to develop mechanisms for monitoring, recording and verifying GHG emissions with the view of codifying such practices in national legislation. In 2019, these assets developed drafts of monitoring plans and conducted test verifications.

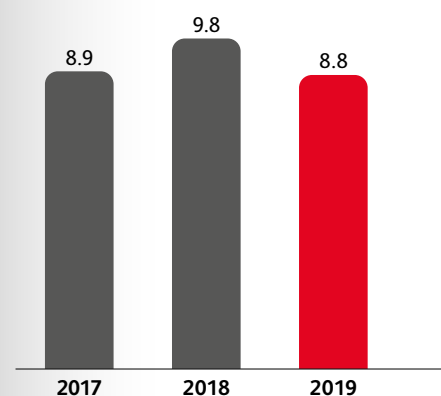
The project's next stage is to implement the Ukrainian emissions trading system in accordance with Directive 2003/87/EU.

“THE PROJECT’S GOAL IS TO TRAIN STAFF AND PREPARE THE PLANTS FOR THE INTRODUCTION OF A SYSTEM FOR MONITORING AND REPORTING GREENHOUSE GAS EMISSIONS, AS WELL AS THE NATIONAL GREENHOUSE GAS EMISSIONS TRADING SYSTEM.”

Yuriy Ryzhenkov, Chief Executive Officer

In 2019, Metinvest reduced its direct GHG emissions by 10% year-on-year to 8.8 million metric tonnes of CO₂ equivalent. This was primarily due to alterations in blast furnace utilisation at Azovstal, as well as the shutdown of blast furnace no. 3 at Ilyich Steel and coke chambers at coke producers for major overhaul.

Gross direct GHG emissions of CO₂ equivalent, million tonnes



Note: GHG emissions were calculated for each asset using the methodologies imposed by local regulators⁴.

⁴ For more information on GHG emissions, please refer to Annex 3.