

ENVIRONMENT

AN ENDURING PRIORITY

In 2021, Metinvest worked diligently to reduce its environmental impact and contribute to global efforts to tackle climate change. The Group continued to make significant investments in efficient production equipment and partnered with leading international experts in green steelmaking.

GENERAL APPROACH

GRI 103-2; 103-3

Metinvest's strategic vision on environmental protection is based on the following priorities:

- reduce environmental impact
- preserve raw materials and energy resources and use them efficiently
- safeguard natural landscapes and biodiversity

The Group's key environmental principles include complying with legislative requirements and establishing multi-level control systems. Metinvest's approach to managing its impact in this area is governed by the Policy in the Field of Health, Safety and the Environment.

At the highest level of the Group's corporate governance, the Supervisory Board's Health, Safety and Environmental Committee provides strategic oversight of Metinvest's environmental management.

The environmental function within the Group's Sustainable Development and People Management Directorate ensures compliance with legislative requirements, conducts risk assessments and internal audits, and develops strategies to reduce the ecological footprint of the business, among other priorities.

At the asset level, members of senior management meet quarterly to discuss key environmental issues and take decisions regarding the implementation of relevant projects.

In 2021, Metinvest continued to evaluate its assets for compliance with international standards. In particular, Metinvest-Promservice and Zaporizhia Coke obtained ISO 14001:2015 environmental management system certification during the reporting period. As of the year-end, 14 of the Group's assets¹ had such certification.

Throughout the year, Metinvest conducted regular internal audits to assess its environmental impact. They covered production activities and included analysis of measures to reduce air and greenhouse gas (GHG) emissions, waste management initiatives, use of water resources and compliance with water quality standards.

The Group seeks to maintain an open dialogue with all stakeholders to jointly solve ecological issues in the regions where it operates. Any direct complaints about environmental matters may be submitted via the Trust Line.

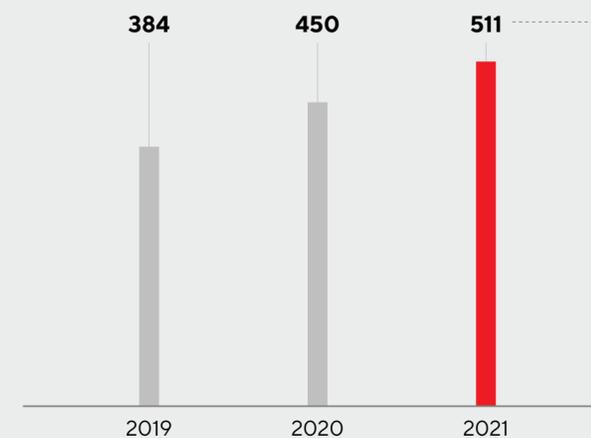
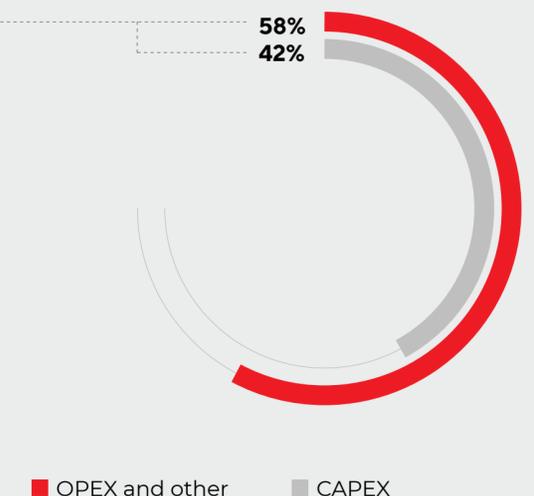
¹ Azovstal, Central GOK, Ferriera Valsider, Ilyich Steel, Ingulets GOK, Mariupol Machining and Repair Plant, Metinvest Holding, Metinvest-Promservice, Metinvest Tramet, Northern GOK, Promet Steel, Spartan UK, Unisteel and Zaporizhia Coke.

REACHING NEW HEIGHTS

During the reporting period, Metinvest spent US\$511 million on environmental initiatives, up 14% year-on-year.

Of this, US\$213 million was capital expenditure², an increase of 4% from the previous year's record amount.

² Environmental CAPEX for assets located in Ukraine is calculated based on Ukrainian regulatory requirements and methodology and may differ from the IFRS approach.

Spending on environment**US\$511 mn** +14%**Spending by type in 2021**

ADDRESSING CLIMATE CHANGE

Metinvest recognises that climate change is a global challenge and supports the fight against it. Consistent with UN SDG 13 (Climate Action), this was one of the Group's sustainability priorities in 2021. For more details about SDG contributions, see page 31.

During the reporting period, Metinvest considered decarbonisation options for its operations, engaged with industry associations on climate change to find technological solutions in this area, and worked to enhance community awareness of related topics.

GHG emissions disclosures

GRI 305-1; 305-2; 305-4

The GHG emissions of Metinvest's assets include carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), while CO₂ remains the primary greenhouse gas emitted by the Group.

As of 1 January 2021, the way in which Metinvest calculates its CO₂ emissions changed, following the adoption of Ukraine's new law "On the Principles of Monitoring, Reporting and Verification of Greenhouse Gas Emissions". It amended the methodology used to calculate CO₂ emissions from stationary sources, using the full carbon balance at an installation's input and output points. Previously, calculations were based on the emission rates of relevant substances under the terms of an installation's applicable permits. As the new approach is in line with the one adopted by the EU, it made the Group's CO₂ intensity reporting comparable with those of EU-based peers.

Although Metinvest was not obliged to begin using the new methodology until 2022 in its reporting for 2021, for reasons of accountability and transparency, it recalculated and presented historical numbers proactively in its sustainability reporting for 2020 for the first time.

This was intended to ensure comparability between reporting years and with other similar metals and mining companies. In addition, although not required by this new framework, the Group calculated direct Scope 1 CO₂ emissions from mobile sources and indirect Scope 2 CO₂ emissions associated with its electricity purchases in accordance with the Greenhouse Gas Protocol.

In 2021, the Group's CO₂ emissions increased. In particular, Scope 1 CO₂ emissions totalled 24.8 million tonnes, up 7% year-on-year, while Scope 2 CO₂ emissions amounted to 3.1 million tonnes, up 15% year-on-year. The Scope 1 CO₂ emissions grew primarily because of the consolidation of the newly acquired assets of Kamet Steel. Scope 2 CO₂ emissions increased year-on-year as electricity consumption grew at some of the Group's existing assets, mainly due to higher production and repair loads, as well as the integration of Pokrovske Coal.

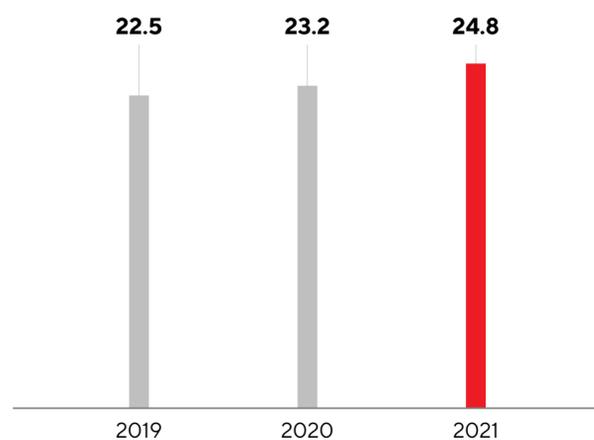
Meanwhile, the direct CO₂ emissions intensity of Metinvest's steelmakers fell by 6% year-on-year to 2.17 tonnes of CO₂ per tonne of crude steel production. This was primarily caused by growth in production efficiency, as well as a reduction in the consumption of carbon-containing materials. The latter was achieved mainly through the implementation of the following initiatives:

- upgrading the gas cleaning facilities for the casthouse and stockhouse of blast furnaces Nos. 4 and 5 at Ilyich Steel
- undertaking the complex modernisation of the sinter plant at Ilyich Steel
- overhauling the heating walls of coke oven batteries Nos. 3 and 4, as well as air heaters of blast furnaces Nos. 3 and 4 at Azovstal
- a quality improvement in the coal blend at Azovstal and burden in the BF-process at Ilyich Steel

Metinvest emits methane mainly from its coking coal underground mining operations. In 2021, the Group's CH₄ emissions increased to 84 thousand tonnes (compared with 12 thousand tonnes in 2020) as a result of the consolidation of Pokrovske Coal. Meanwhile, United Coal decreased its methane emissions year-on-year, primarily by sealing off abandoned areas in its Affinity mine, which are the largest source of such emissions, and installing a methane flare.

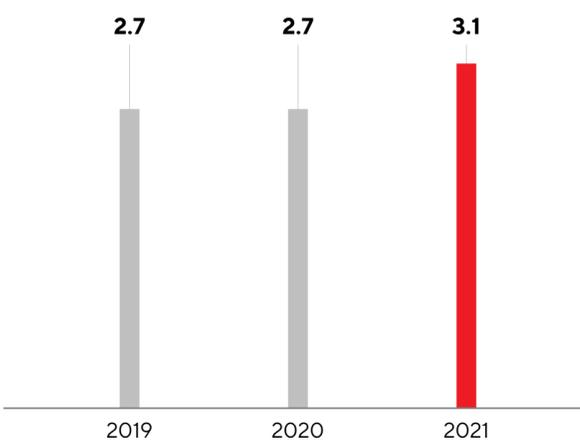
Direct CO₂ emissions (Scope 1)

24.8 mt +7%



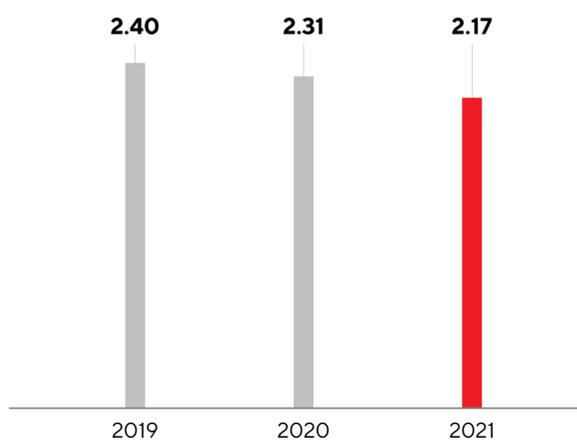
Indirect CO₂ emissions (Scope 2)³

3.1 mt +15%



Direct CO₂ emissions intensity, per tonne of crude steel⁴

2.17 tonnes -6%



³ Scope 2 CO₂ emissions were calculated using the location-based method. As Metinvest generally purchases electricity from traders, this approach reflects the average emissions intensity of power grids through which energy consumption occurs, primarily using grid-average emission factor data. This data cannot be used for the purposes of taxation or other withholdings.

⁴ The calculation is based on Scope 1 stationary and mobile CO₂ emissions of the Group's steelmakers. As Metinvest is a vertically integrated company and is self-sufficient in core raw materials for steel production, only those material flows directly used in steelmaking processes were taken into account, while volumes of merchant pig iron were not included. The intensity indicators for 2019-2020 were restated to exclude raw materials used in the production of merchant pig iron.

Decarbonisation

In 2021, Metinvest worked to develop a long-term decarbonisation roadmap, although it has since had to postpone these efforts because of the war. The intended step-by-step approach was to include key milestones for the transition to low-carbon operations, in line with international best practices. The decarbonisation journey was planned to be supported with respective targets and a list of technological measures designed to achieve these goals.

The Group's search for feasible pathways was focused on known and proven technologies, including direct reduced iron (DRI) in combination with the electric arc furnace (EAF). For more details, see the following [interview with Metinvest's CEO](#).

Metinvest was pursuing its decarbonisation agenda through partnerships with international leaders in green steelmaking. During the reporting period, the Group signed memoranda of understanding on the development of decarbonisation technologies with several experts in metals and mining, including K1-MET, Primetals Technologies and SMS group⁵.

Notably, in 2021, the Financial Times and the research company Statista named Metinvest Trameal, one of the Group's Italian re-rollers, in its listing of Europe's Climate Leaders. The rating consisted of 300 companies that achieved the greatest reduction in their GHG emissions intensity in 2014-2019, adjusted for revenue growth. To earn its place in the ranking, Metinvest Trameal reduced its core GHG emissions by 6.8% during that period.

In early January 2022, after the reporting period, Metinvest became a member of the European Steel Technology Platform (ESTEP), which gathers stakeholders from steel companies, the academic and scientific fields, steel technology and equipment suppliers, and customers in the steel industry. Participation in ESTEP will make it possible to enhance collaboration with industry leaders on innovative, low-carbon steelmaking technologies in the future.

ENERGY EFFICIENCY

GRI 103-2; 103-3; 302-1; 302-4

Metinvest has a dedicated division at the executive team level, as well as energy management and efficiency departments at each production asset. They are responsible for planning and controlling energy resource consumption in production and implementing energy efficiency measures.

The Group has been developing energy management systems at its production assets that conform to international standards. At the end of the reporting period, ten assets⁶ had certified their energy efficiency management systems as compliant with ISO 50001:2011.

In 2021, the direct energy consumption of Metinvest's assets increased by 13% year-on-year to 236,547 terajoules, mainly due to the consolidation of the new Kamet Steel assets.

The Group spent US\$16 million on energy efficiency measures during the reporting period, a nearly two-fold increase year-on-year. It implemented the following key energy efficiency projects at several of its assets:

- installing more efficient lighting systems, pumps and other equipment
- increasing the productivity of sintering machines
- modernising the compressed air system

This contributed to an increase in energy savings by 4% year-on-year to 5,179 terajoules.

In 2021, Metinvest also engaged a contractor to implement turn-key projects that deliver energy savings. The Group pays for the provision of such services using the economies achieved.

AIR EMISSIONS

GRI 305-7

In 2021, Metinvest's air emissions increased by 8% year-on-year to 388 thousand tonnes. This was primarily driven by the integration of the newly acquired assets of Kamet Steel, which emitted 30 thousand tonnes in the period following their consolidation into the Group.

Excluding the new assets, total air emissions would have fallen by around 2% year-on-year, primarily because of lower carbon monoxide emissions at Azovstal, following the repair of the air heaters of its blast furnaces.

⁵ K1-MET is a leading Austrian competence centre for the development of advanced metallurgical and environmental processes. Primetals Technologies is an international pioneer in the fields of engineering, plant building and lifecycle services for the metals industry. SMS group is a leading company in iron and steelmaking technologies.

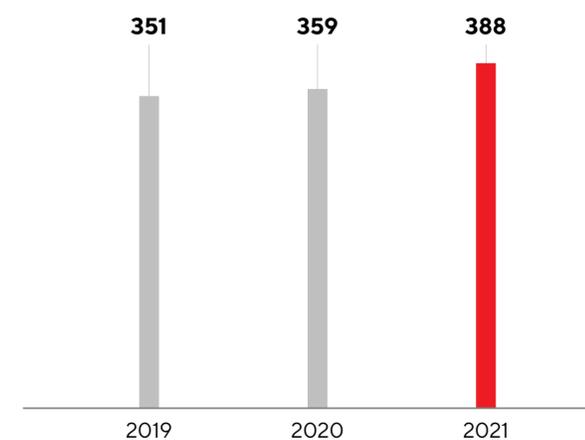
⁶ Avdiivka Coke, Azovstal, Central GOK, Ilyich Steel, Ingulets GOK, Kamet Steel (coking facilities), Mariupol Machining and Repair Plant, Northern GOK, Zaporizhia Coke and Zaporizhia Refractories.

⁷ The air emissions indicators were restated for 2019-2020 because of a revised approach that excludes N₂O and CH₄ generated by Ukrainian assets from the calculation of the total, as they are included in GHG emissions.

⁸ For 2021, this indicator excludes some non-material data of Mariupol-based assets that could not be retrieved when preparing the reporting because of the impact of the war in 2022. Only purchased (or extracted) fuel was factored into the calculations. The coefficient used for conversion from TOE to TJ is 1 TOE = 0.0293076 TJ. Metinvest does not use higher heating values (HHV), also known as gross calorific values (GCV), in its calculations of energy consumption from fuel.

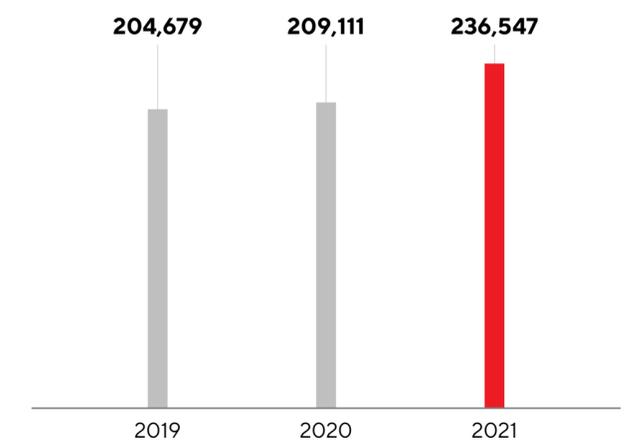
Air emissions (excluding GHG emissions)⁷

388 kt +8%



Direct energy use⁸

236,547 TJ +13%



WASTE MANAGEMENT

GRI 306-1; 306-2; 306-3; 306-4

Responsible waste management is an important aspect of Metinvest's environmental agenda. The production cycle generates industrial waste, including overburden and tailings from ore extraction and enrichment, chemical by-products from coke production, as well as slag and iron-containing sludge from hot metal and steel production.

Throughout its operations, the Group strives to minimise the volume of waste generated and store it safely in specially designated areas. Metinvest also works to maximise its reuse and recycling, including through the production of crushed rock for road repair and construction, the commercialisation of by-products such as coal tar pitch, naphthalene, benzene produced from coking gas generated during coke production, and the replacement of iron ore raw materials with scrap. Overall, in 2021, the share of scrap consumed by

the Group's steelmakers for total steel production was 20%, up one percentage point year-on-year.

In accordance with applicable legislative requirements and Metinvest's internal regulations, all assets regularly collect data about the volumes and types of waste that they generate. Each asset has coordinators responsible for gathering the required information and uploading it digitally into the Group's centralised database.

Metinvest deposits its waste in specially designated areas, including slag and sludge storage facilities at steelmaking assets. In addition, the Group's iron ore mining assets operate tailings storage facilities for waste material from the production of concentrate. These structures are commonly located in areas that feature relatively low seismic activity and reduced exposure to strong rains. Metinvest fully complies with regulatory requirements and applicable legislation

to retain the licences required to operate such facilities. The Group closely monitors dam stability at the tailings facilities and designates employees responsible for checking them twice a day. It also tracks waste volumes and disposal methods and assesses any associated impacts. In addition, external control is performed annually by the Ukrainian state authorities that analyse the condition of the tailings facilities.

In the reporting period, Metinvest generated 270 million tonnes of industrial waste from production, 99% of which was non-hazardous, mostly overburden and tailings from the iron ore producers. The slight increase (6% year-on-year) in waste generation was mainly due to the production growth of the Group's iron ore producers. Meanwhile, the total volume of recycled wastes increased by 15% year-on-year to 69 million tonnes as a result of an increase in the use of mining waste as a construction material for roads in Ukraine.

ENVIRONMENTAL PROJECTS

GRI 203-2

In 2021, Metinvest achieved progress on numerous environmental initiatives. Consistent with the Group's commitment to its ESG agenda, it completed the auxiliary work for the modernisation of the Ilyich Steel sinter plant during the reporting period. Its direct environmental impact resulted in a reduction of dust emissions by 90% and sulphur dioxide emissions by 46%. In addition, in June 2021, Ilyich Steel finished the upgrade of gas cleaning facilities for the casthouse and stockhouse of blast furnace No. 5. It also completed a similar project at blast furnace No. 4 in February 2022, after the reporting period. These initiatives aimed to cut dust emissions from the blast furnaces by over 65%.

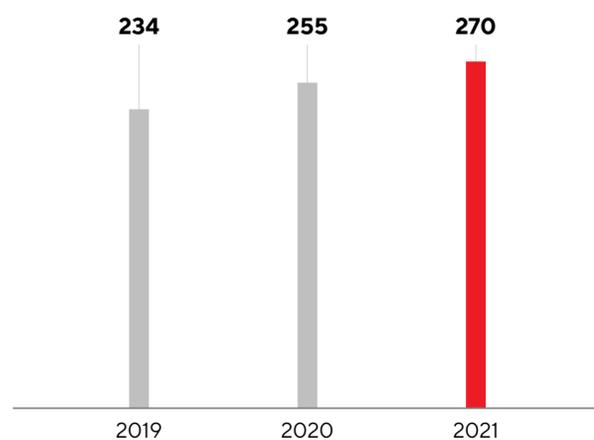
Azovstal was working on the modernisation of gas cleaning equipment of the basic oxygen furnaces, which aimed to cut dust emissions and reduce water usage through the application of best available techniques. The project was expected to be one of the Group's largest environmental initiatives following the completion of work at Ilyich Steel's sinter plant.

Northern GOK advanced the replacement of gas cleaning units for its Lurgi 552-A roasting machine, which was completed in early 2022, after the reporting period, to reduce dust emissions from the equipment by 40%.

Metinvest also continued to implement a programme of extensive maintenance on the coke oven batteries at Azovstal, Avdiivka Coke, Kamet Steel and Zaporizhia Coke to keep air emissions well below the permitted local levels.

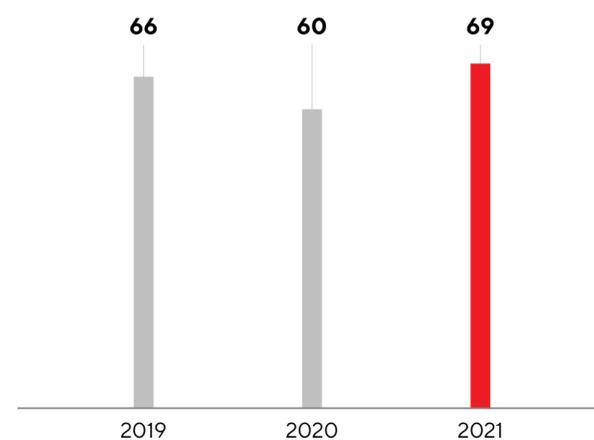
Waste generated

270 mt +6%



Waste recycled

69 mt +15%



WATER MANAGEMENT

GRI 303-1; 303-2; 303-3; 303-4; 303-5

Metinvest seeks to proactively identify, prevent and reduce the potential impact of its operations on water resources.

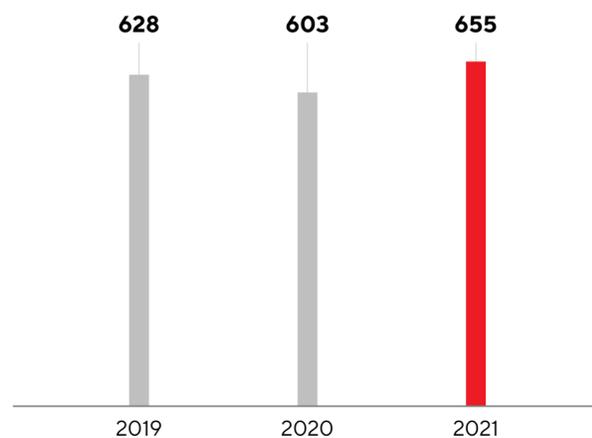
The Group's production assets use only fresh and salt water from surface and ground water sources and utility systems. They do not consume water from areas undergoing water stress.

In 2021, Metinvest primarily used water to cool equipment or substances without direct contact with the raw materials or products. Systems were designed to require insignificant freshwater intake to replenish the reverse cooling cycles when water evaporates.

The Group's iron ore mining assets use recycled water to prepare a mixture with milled ore before separating the valuable components from the waste material, known as 'tails'. The latter are sent to the assets' tailings storage facilities.

Water intake

655 mcm +9%



In addition, the BOF production process uses water to purify the gas from steel production. This recycled water is cleaned in storage ponds and returned to the production process.

Metinvest carefully monitors the quality of water resources that are used and withdrawn by its assets to ensure compliance with existing environmental legislation. It also regularly modernises its laboratories to ensure the accuracy of measurements.

In 2021, the total volume of water intake and consumption increased by 9% year-on-year each to 655 million cubic metres and 639 million cubic metres, respectively. This was driven primarily by the integration of new steelmaking assets in Kamianske and greater output by Azovstal.

Recent acquisitions also impacted the share of freshwater intake, which reached 25% in 2021, up three percentage points year-on-year.

During the reported period, water discharge increased slightly by 1% year-on-year to 532 million cubic metres, mainly due to consolidation of the newly acquired assets of Kamet Steel. This was almost fully compensated by a lower discharge at Azovstal.

During the reporting period, the Group recycled and reused 81% of water consumed from all sources, which was the same level as in 2020.

For more details on key environmental data, see Annex 2.

BIODIVERSITY

GRI 304-1; 304-2; 304-3; 304-4

Metinvest cares about the preservation of biodiversity and monitors the efficiency of the measures that it takes to reduce its impact in this area. The Group's assets do not operate in any protected natural areas or areas of high biodiversity value. In addition, its activities do not affect the habitats of species on the International Union for Conservation of Nature (IUCN) Red List or national conservation list.

Metinvest strives to restore lands disturbed through its mining operations. It also undertakes a range of measures aimed at preserving landscapes, reducing the area of disturbed land and restoring sites to their previous condition.

According to Ukraine's Mineral Resources Code, Land Code, Mining Law and Land Protection Law, as well as other Ukrainian and US legislation and regulations, the Group is responsible for site restoration and soil rehabilitation upon decommissioning all non-hazardous waste storage facilities and mines. Metinvest's commitment to such rehabilitation work is underpinned by the licences for subsoil use obtained from the government authorities.

The Group's facilities continuously implement greening measures to reduce dust at dumps, tailings facilities and sanitary protection zones. They also engage in joint efforts to enhance the urban ecosystem.

Since the creation in 2001 of the Vizyrka nature preserve, Ingulets GOK has provided comprehensive support to protect its landscape. During the project's implementation, the Group significantly improved the health of water bodies and enhanced the fertility of the land in the nature preserve. The area has become home to more than 100 new species of animal life.

WAR IMPACT

The war has presented Metinvest and Ukraine with immediate and potentially serious environmental risks. To mitigate them, the Group has moved rapidly and decisively to safeguard its Ukrainian facilities.

For example, the decision to suspend production at some of the Group's assets minimised the risk of environmental impacts from damage incurred to the plants by shelling, disruptions in energy and water supplies, and other factors.

As of the time of writing, it is too early to assess the impact of the war on Metinvest's long-term environmental strategy and plans. Many of the initiatives in this area have been postponed, primarily because of the temporary occupation of some of Ukraine's territory, including Mariupol.

Metinvest remains committed to its overall agenda in this area and is carrying out some investment and maintenance work at facilities not directly affected by the hostilities, for instance at Kamet Steel. The Group's iron ore assets are implementing ongoing environmental projects, including dust suppression measures at tailings storage facilities. Metinvest's facilities outside Ukraine are also making progress on their environmental initiatives.