# Managing Water Resources





CONTENTS

 $\cap$ 

EMPLOYEES

## and returned to the production process. We carefully monitor the quality of water resources that are used and withdrawn by

while modernising gas cleaning facilities

to reduce the use of water, the priority is

Metinvest's production processes

mainly use water to cool equipment or

substances without direct contact with

the raw materials or products. Systems

water intake to replenish the reverse

Water resources are also used for

cooling cycles when water evaporates.

are designed to require insignificant fresh

technological purposes. For example, the

Group's mining and processing plants use

recycled water to prepare a mixture with

milled ore before separating the valuable

components from the tailings. In addition,

the BOF production process uses water to

purify the gas from steel production. This

recycled water is cleaned in storage ponds

local water recycling.

primarily given to using dry methods and

Metinvest's assets to ensure compliance with existing environmental legislation. It is vital for us to ensure that our impact on water resources is within the boundaries specified in environmental standards. We monitor our impact and regularly modernise our laboratories to ensure the accuracy of our measurements.

### GRI 303-3; 303-4; 303-5

In 2020, Metinvest's systematic efforts to improve and mitigate its impact on water resources, increase operating efficiency and ensure proper maintenance resulted in a share of reused and recycled water withdrawn from all sources, including previously recycled, of 81%, up one percentage point year-on-year.

In 2020, we reduced the total volume of water intake and discharge by 4% and 3% year-on-year, respectively.

Another positive factor was the ongoing investment programme, which included installing a new cooling system at Azovstal's blast furnace no. 3 and performing capital overhauls of Avdiivka Coke's recycled water supply systems.

During the reporting period, Azovstal switched its cooling systems to use chemically purified recycled water, including pre-commissioning work and putting the system into operation. This initiative reduced the volume of water drawn from the Sea of Azov by almost 4% year-on-year.



### GRI 303-1: 303-2

We strive to minimise our impact on water resources in the regions where we operate. We carefully monitor water quality, as well as the amount of water we use and return to the environment.

Metinvest's production assets use fresh and salt water from surface and ground water sources and utility systems. We do not consume water from areas undergoing water stress.

We seek to proactively identify the potential impact of our assets on water resources to prevent or reduce the existing impact. This requires a comprehensive assessment of investment projects from the standpoint of the efficiency of water resource use and with an aim to decrease negative factors. For instance,

Water consumption<sup>12</sup>, million m<sup>3</sup>

Year	Surface water	Ground water	Utilities	Other sources	Total
2018	617	3	44	8	672
2019	555	3	44	12	614
2020	533	4	41	7	585

12 Water consumption is defined as the use of water withdrawn from water bodies in production operations and for household purposes.

METINVEST SUSTAINABILITY REPORT 2020

To decrease costs and make more rational use of water resources. Avdiivka Coke also replaced a cooling fan tower.

In 2020, the Group's iron ore assets in Kryvyi Rih conducted scheduled maintenance on tailings storage facilities and pipelines that transport clarified water and sludge. In particular, Ingulets GOK began constructing a pumping facility to withdraw drainage water and return it to the water recycling system. It also installed a variable frequency driver to regulate the pressure in pumps during the day.

Central GOK continues to develop and implement measures to rehabilitate the bed of the Ingulets River and enhance the water quality in the Karachunivske Reservoir. In the near future, we plan to amend Metinvest's existing Policy and Principles in the Field of Health, Safety and the Environment to harmonise the approach to such issues as managing or decreasing water consumption and discharge with our objectives and tasks in this area. The Group is currently working to develop conceptual technological solutions in order to decrease the impact of our assets on water resources. We will use the results of these efforts to determine relevant key target indicators.



# **Expanding the environmental** monitoring system in the **Donbas region**

In 2020, Avdiivka Coke and Inkor Chemicals<sup>13</sup> participated in a project to increase the capabilities of environmental monitoring systems in the Donbas region, which was implemented by the coordinator of the Organisation for Security and Co-operation in Europe (OSCE) in Ukraine.

One of the initiative's main goals is to enhance the collection, accumulation, processing and reporting of environmental data in order to identify ways to improve natural resource use and compliance with environmental protection requirements in the conflict area in Fastern Ukraine

The project analysed the sludge collectors of these Metinvest assets to determine their potential cross-border impact on local water resources.



Total volume of water intake<sup>14</sup>,

million m<sup>3</sup>

METINVEST

SUSTAINABILITY REPORT 2020

Ň

### Total volume of wastewater discharge, million m<sup>3</sup>

545

2019

605

2018

Share of fresh water consumption

Share of recycled water



13 Inkor Chemicals was merged with Avdiivka Coke in late 2020.

14 Water intake is defined as water withdrawal from water bodies for consumption or storage.

603

ANNEXES

ABOUT THE REPORT

ABOUT METINVEST

SUSTAINABLE DEVELOPMENT

CORPORATE GOVERNANCE

ENVIRONMENTAL ACTION

HEALTH AND SAFETY