

Addressing Climate Change



Climate change is a challenge facing the entire global community. Supporting the fight against climate change is one of the most important tasks for Metinvest. In 2020, we singled out UN Sustainable Development Goal (SDG) 13 – “Take Urgent Action to Combat Climate Change and Its Impacts” – as one of our priorities for sustainable development.

Our approach includes working to enhance community awareness of GHG emissions, engage with industry associations and support open dialogue with our stakeholders on climate change to find opportunities for joint research and development initiatives in this area.

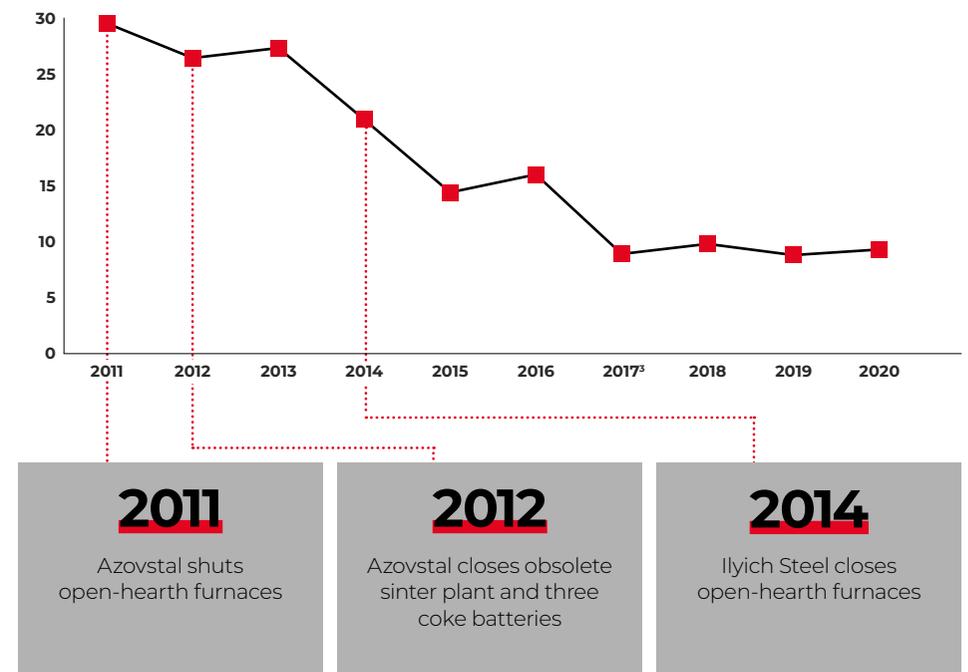
The Group pays significant attention to Ukrainian climate change policies, development and implementation. This includes such areas as fulfilling the [Association Agreement between Ukraine and the EU](#), reforming Ukrainian legislation to comply with the EU legal framework, updating Ukraine’s Nationally Determined Contribution under the Paris Agreement, and determining the best way for Ukraine to implement the European Green Deal initiatives.

Metinvest is engaged in a dialogue on these issues with the Ministry of Environmental Protection and Natural Resources of Ukraine and other central executive bodies. This takes place both directly and as part of industry associations such as the European Business Association, Ukrainian Business and Trade Association, and Ukrmetallurgprom Association of Enterprises.

We continue to contribute to the fight against climate change. In the past decade, the Group has made significant iterative progress in reducing the volume of its GHG emissions. For example, from 2011 to 2020, its annual direct GHG emissions (calculated for each installation in line with methodologies applied by local regulators) declined from 29.5 million tonnes to 9.3 million tonnes of CO₂ equivalent.

Metinvest aims to sustain a trend of meaningful, incremental reductions in the GHGs that it emits. The Group is working to develop a long-term decarbonisation roadmap, backed by clear targets and technological tasks. The key focus will be on the steelmaking and coking assets, as the largest contributors to GHG emissions.

Direct GHG emissions in CO₂ equivalent in 2011-20, million tonnes²



2011

Azovstal shuts open-hearth furnaces

2012

Azovstal closes obsolete sinter plant and three coke batteries

2014

Ilyich Steel closes open-hearth furnaces

In 2020, Metinvest’s US coking coal mining asset United Coal launched a methane decomposition and mine sealing project. To reduce GHG emissions, a methane abatement unit was installed and 970 acres of old mines were sealed. In 2020, 12,494 tonnes of methane were abated.

² The Scope 1 data for the Group’s Ukrainian assets in this chart has been prepared using GHG emissions measurement and reporting methodologies in place under Ukrainian law prior to 1 January 2021.
³ In 2017, Metinvest lost control over assets in the temporarily non-government controlled territories of Ukraine (including a vertically integrated steelmaker with an annual crude steel production capacity of 2.7 million tonnes).

NEW DISCLOSURES ON GHG EMISSIONS⁴

As of 1 January 2021, the way in which the Group calculates its GHG emissions changed, following the adoption of Ukraine's new Law "On the Principles of Monitoring, Reporting and Verification (MRV) of Greenhouse Gas Emissions", which is aligned with the EU approach. It amends the methodology used to calculate CO₂ emissions (a major part of GHGs for Metinvest), 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 the permits issued for an installation by the Ministry of Environmental Protection and Natural Resources of Ukraine.

In 2020, we analysed the impact that this new calculation methodology would have and took steps to prepare the information needed to report the required indicators. We examined the material flows of carbon-based raw materials, fuel, products and waste that are transported to and from our assets; and assessed possible changes in GHG emission volumes after moving to the new methodology.

Metinvest understands how important GHG data disclosures is for its stakeholders. The Group is obliged to report new data for 2021 in 2022. For reasons of accountability and transparency, historical figures presented in this report have been proactively recalculated to ensure comparability between reporting years and with other similar mining and metals companies. While the adjusted methodology has resulted in an increase of the Group's GHG emissions, this is not due to a change in operations.

In addition, although not required by the MRV framework, we calculated direct Scope 1 GHG emissions from mobile sources and indirect Scope 2 GHG emissions associated with Metinvest's electricity purchases in accordance with the Greenhouse Gas Protocol standard. We are disclosing these indicators, for the first time, to be more transparent about our environmental impact and in line with the best international practice.

The Scope 2 GHG emissions were calculated using the location-based method. As Metinvest generally purchases electricity from electricity traders, this approach reflects the average emissions intensity of power grids on which energy consumption occurs (using mostly grid-average emission factor data).

In 2020, Metinvest's Scope 1 GHG emissions increased by 3% year-on-year. This was primarily because hot metal production climbed by 7% and steel output by 9% year-on-year at the Group's Mariupol steelmakers. Another factor was the increased operation time of the heat-treating furnaces and boilers of combined heat and power plants at these facilities.

Scope 2 GHG emissions remained almost the same in 2020 compared with 2019, as there was no significant change in Metinvest's electricity consumption.

The Group also calculated the direct GHG emissions intensity of its Mariupol steelmakers, as the greatest emitters of such emissions, and is disclosing this for the first time. It was calculated as tonnes of CO₂ equivalent per tonne of crude steel. 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.

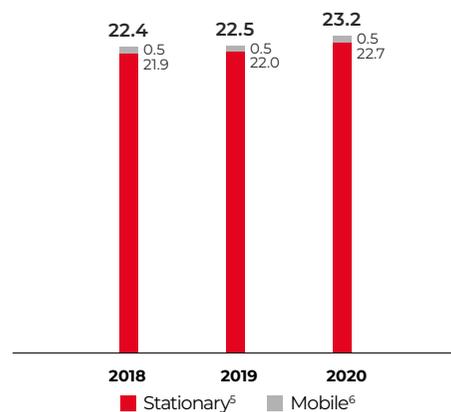
The GHG emissions intensity of the Mariupol steelmakers is in line with the intensity typical for vertically integrated steelmakers, which have similar production facilities as the Group.

Importantly, there is a clear downward trend in Metinvest's GHG intensity. This is being mainly driven by the alterations in blast furnace utilisation at Azovstal since mid-2019 when blast furnaces nos. 5 and 6 were shut down and replaced by the modernised and highly efficient blast furnace no. 3.

The external reputable expert was involved in recalculation of GHG emission indicators. New data will help us to set clear goals on decarbonisation and climate change risk reduction, as well as help our stakeholders to assess Metinvest progress in this area.

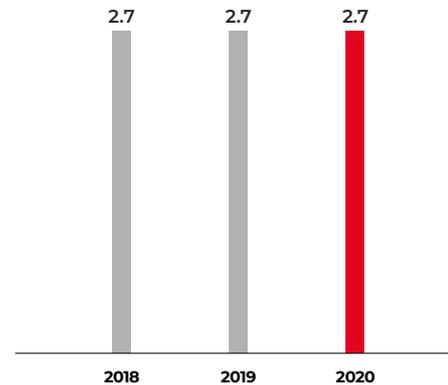
GRI 305-1

Direct GHG emissions in CO₂ equivalent (Scope 1), million tonnes



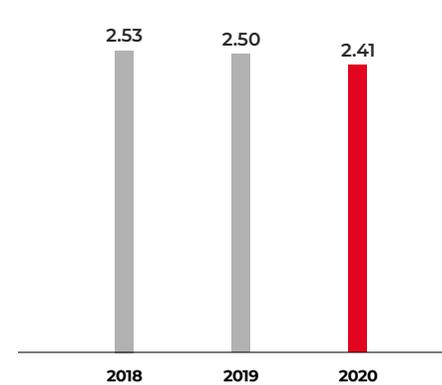
GRI 305-2

Indirect GHG emissions in CO₂ equivalent (Scope 2)⁷, million tonnes



GRI 305-4

Direct GHG emissions intensity, tonnes of CO₂ equivalent per tonne of crude steel⁸



- The only material greenhouse gas emitted by Metinvest is CO₂. Therefore, all references in this section to GHG emissions refer to CO₂ emissions.
- Scope 1 stationary GHG emissions for the Group's Ukrainian assets are based on the new calculation methodology under Ukraine's Law "On the Principles of Monitoring, Reporting and Verification of Greenhouse Gas Emissions", which took effect in 2021. These data cannot be used for the purposes of taxation or other withholdings.
- Scope 1 mobile GHG emissions are calculated in accordance with the Greenhouse Gas Protocol. These data cannot be used for the purposes of taxation or other withholdings.
- Scope 2 indirect GHG emissions are calculated in accordance with the Greenhouse Gas Protocol. These data cannot be used for the purposes of taxation or other withholdings.
- Calculation is based on Scope 1 from stationary and mobile GHG emissions of the Group's Mariupol steelmakers.