

# MANAGING WASTE



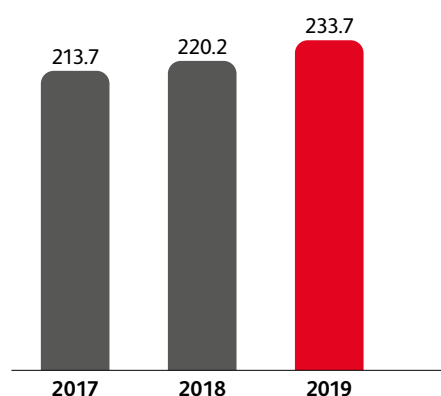
## GRI 306-1; 306-2

Metinvest acknowledges that its operations generate industrial waste, including overburden and tailings from the enrichment process, slag and sludge. The Group therefore makes every effort to reduce the waste it creates.

Metinvest generated 234 million tonnes of waste in 2019, 94% of which was non-hazardous waste from mining assets in the form of overburden and tailings. During the reporting period, 28% of all waste by volume was recycled. The total weight of recycled waste increased by 9% year-on-year in 2019, which is a testimony to the positive effects of the

## GRI 306-3

### Total volume of waste generated at the Group's assets, million tonnes



### Total weight of waste, million tonnes

Year	Total weight of generated waste	Weight of landfilled waste	Weight of waste transferred to third parties	Weight of recycled waste
2017	213.7	156.3	0.9	56.0
2018	220.2	158.7	0.9	60.1
2019	233.7	166.3	2.6	65.6

Group's multi-pronged effort to cut down on waste disposal and operational improvements.

As part of our approach to managing waste generation, we also seek to reuse and recycle waste in production processes as much as possible. In 2019, Metinvest implemented several projects to achieve these objectives.

## GRI 306-1; 303-2

Metinvest minimises waste storage spaces by depositing its industrial waste in specially designated areas, such as mining allotments and slag and sludge ponds, and has enacted practices to ensure that mining allotments are used rationally. For example, overburden rocks are used at mining assets for crushed stone production, as well as for the construction and repair of automobile and railway links at mines.

By-products of metallurgical production are also partly recycled. Since 2004, Azovstal has been using equipment from the US manufacturer AMCOM to reprocess slag and extract metal-containing components (scrap). Using scrap not only reduces the volume of waste in the slag deposit, it also lowers the consumption of raw iron ore.

Since June 2019, as part of its social partnership with district and village councils in Donetsk region, Metinvest engages in non-commercial distribution of slag products from Azovstal and Ilyich Steel. This programme not only helps us to minimise our slagheap, it reduces the cost of local infrastructure development, as our by-products are used as free construction material. By the end of 2019, we provided almost 160,000 tonnes of slag products for road construction in villages close to Mariupol and other villages in Donetsk region.

Every year, the Zaporizhstal JV uses the entire volume of blast furnace by-products it creates to manufacture 1.5 million tonnes of construction materials. Scrap is extracted from the open-hearth slag and crushed stone is produced both for our own needs and for sale to external customers.

To uphold its commitments to the Stockholm Convention on Persistent Organic Pollutants, which aims to put an end to polychlorinated biphenyl (PCB) use in equipment, as of the end of 2019, Ilyich Steel had replaced 62% of its electric transformers that contained PCBs and transferred them to disposal.

Avdiiivka Coke reduces hazardous tarry waste generation through technical re-equipment of resin collectors and a chemical processing waste pumping unit. Avdiiivka Coke also participated in a joint project with the Organisation for Security and Co-operation in Europe (OSCE) and Ukraine's Ministry of Energy and Environmental Protection titled "Assistance in Expanding the Monitoring System in the Donbass Region". The project involved a study of the current state of Donbass tailings and their possible impact on bodies of water in a military environment.