

## Operational improvements

In 2020, Metinvest continued to focus on overcoming several challenges, one being an efficiency gap compared with leading peers in the industry. By the year-end, the Group had succeeded in narrowing it significantly.

### CLOSING THE EFFICIENCY GAP

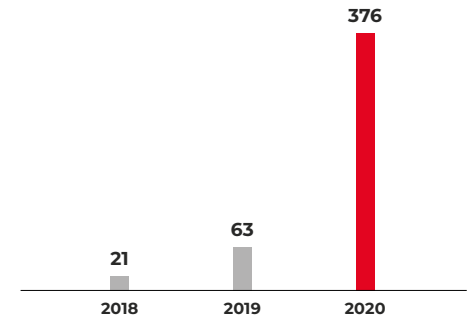
Among the many uncertainties posed by 2020, one constant was Metinvest's focus on operational efficiency. By engaging personnel in continuous improvements, in particular through customising the incentive system and using IT tools, the Group was able to connect directly with each employee to fully engage the workforce in achieving the desired goal.

Overall, Metinvest achieved operational improvements totalling US\$376 million during the reporting period, a six-fold increase year-on-year. This was primarily due to reductions in variable costs, driven by such measures as lower equivalent fuel consumption at the steelmakers and improved mining fleet efficiency at the iron ore producers.

### Effect of operational improvements

**US\$376M**

+6.0x



Pursuing greater efficiency

In addition, Metinvest introduced digital strategies for much of its processes and businesses.

In 2020, the Group's steel plants delivered operational efficiency gains of US\$184 million, primarily from advances in sinter, iron and steelmaking operations. The single largest contributor in monetary terms was better equivalent fuel consumption in hot metal production, which resulted from numerous investment projects and operational measures.

One key operational activity was the initiative to stabilise blast furnace heat balance by reducing the silicon content

of hot metal and decreasing its variability. During the second half of 2020, the variability was halved across Metinvest's blast furnaces.

This reduced the silicon content of hot metal from 0.71-0.76% to 0.64-0.65% and, in turn, coke consumption by 5 kg a tonne. One of the most promising developments in this area is the use of artificial intelligence to control blast furnace heat balance. In 2020, a solution for predicting silicon in hot metal was developed and successfully tested at Azovstal's blast furnace no. 4. In 2021, the Group plans to roll this out across all of its blast furnaces.

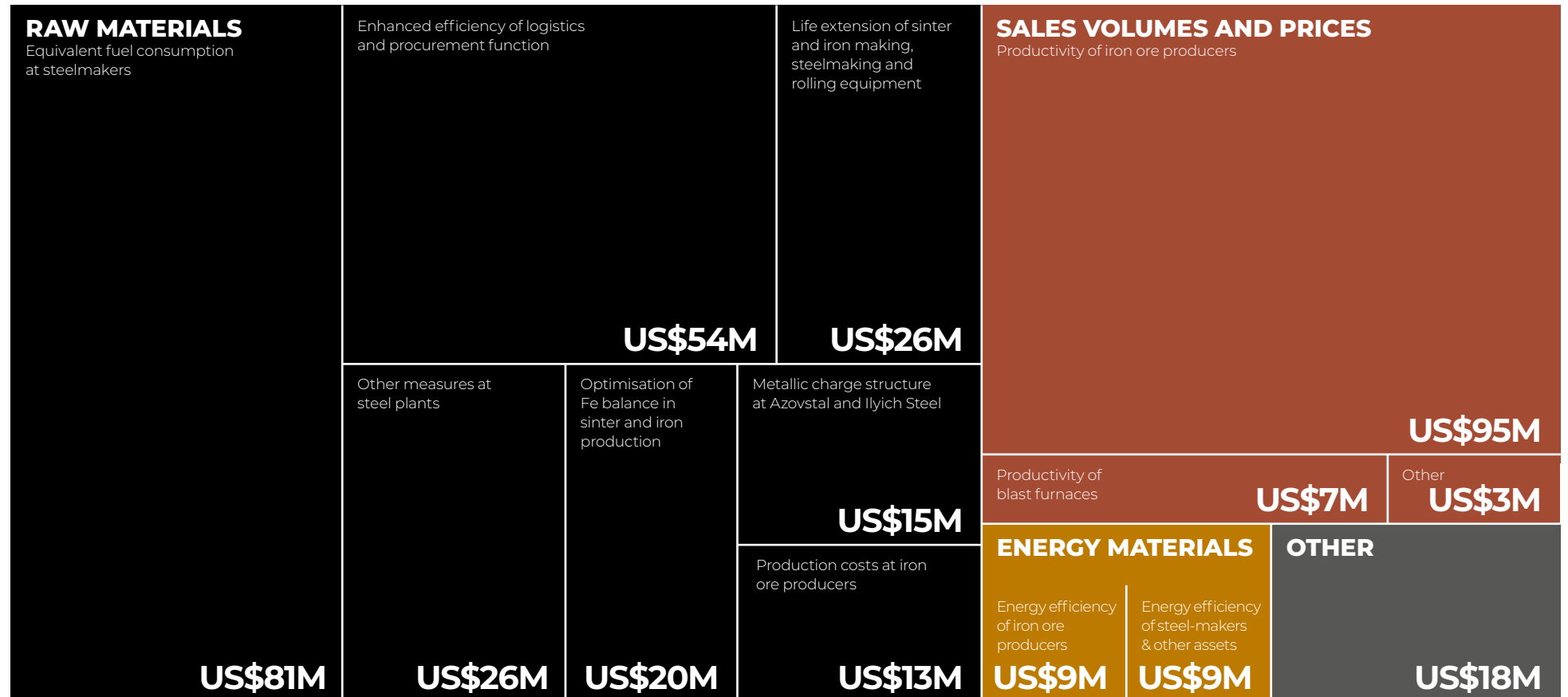
Meanwhile, Metinvest's iron ore assets made combined operational improvements of US\$117 million, mostly from enhanced productivity.

First, the Group increased the equipment utilisation ratio by renovating the heavy truck fleet, optimising repair and maintenance work, and extending the life of quick wear units. Second, it extended the available operating time of open pit mines by reducing the number of blasts and enhancing their intensity. Third, the Group improved productivity at its ore beneficiation plants. Among other factors, these helped Metinvest to boost overall iron ore concentrate output by 5% year-on-year in 2020.

This had a significant economic effect, as the ability to sell additional volume coincided with a time when the benchmark iron ore price was high.

From here, the aim is to sustain the operational efficiency momentum gained in 2020. The Group recognises that each further step will be increasingly difficult. To achieve its objectives, it will need to apply creative solutions and tools, including digital technology such as artificial intelligence.

**OPERATIONAL IMPROVEMENTS DURING 2020 CREATED US\$376M OF SAVINGS CONSISTING OF:**



■ Raw Materials ■ Sales volumes and prices ■ Energy materials ■ Other