



ArcelorMittal

ArcelorMittal Poland

ArcelorMittal Poland– existing investments and decarbonisation plans

5th June 2025

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Agenda



About ArcelorMittal



Recent investments



Challenges of decarbonisation



About ArcelorMittal

About ArcelorMittal

125,000 employees

143 nationalities in 60 countries worldwide

USD 7,1 bn

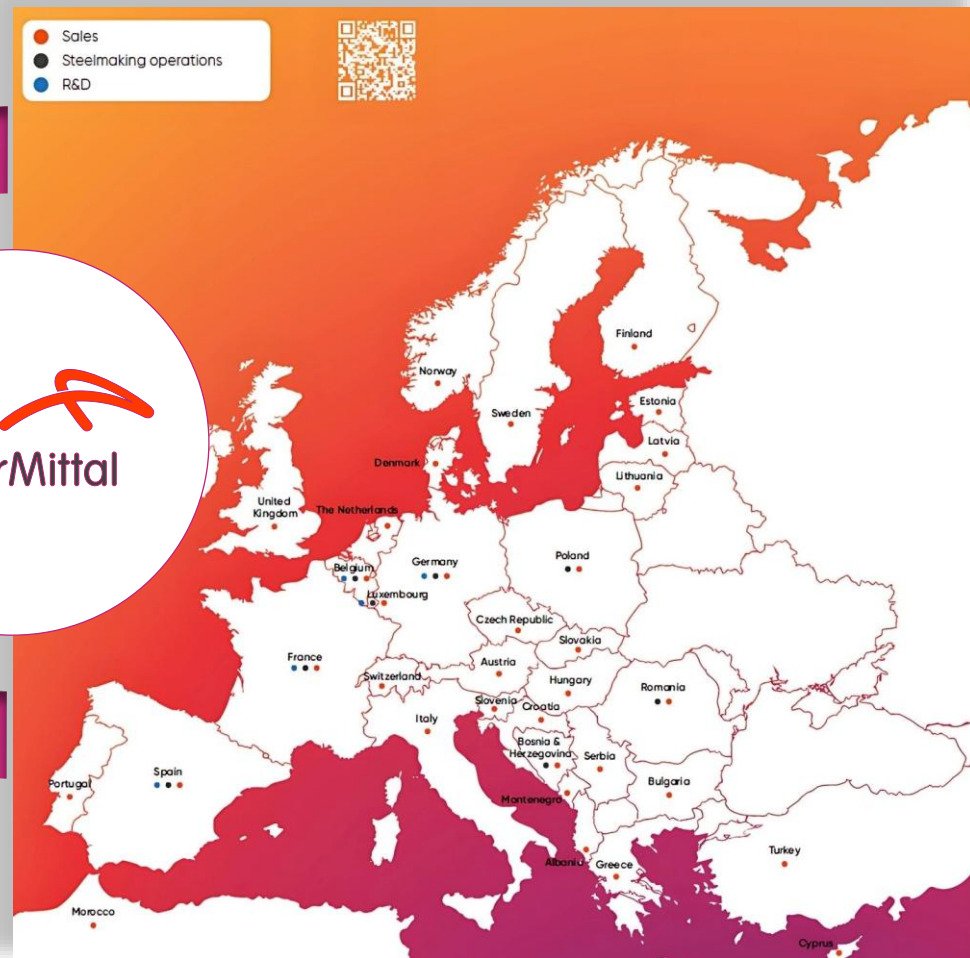
EBITDA in 2024, and steel shipments of
54 m tonnes

53% crude steel

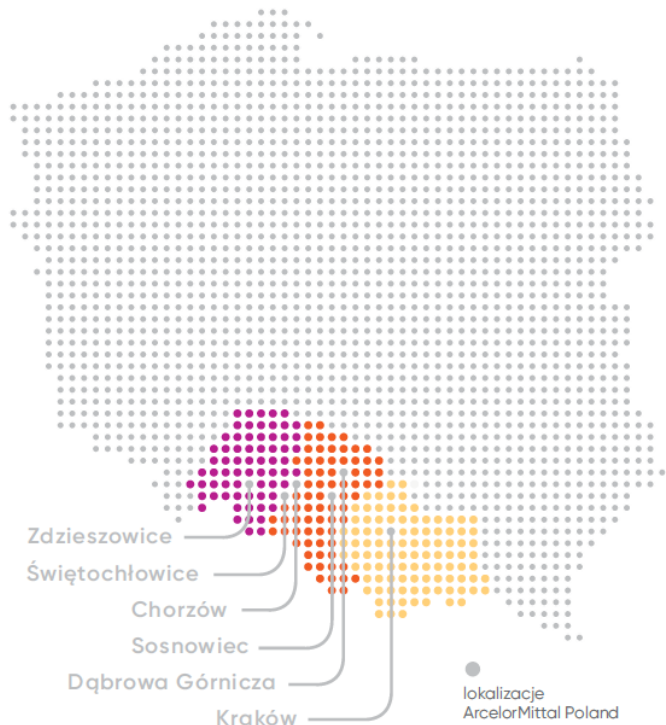
manufactured in Europe, 38% in the
Americas, and 9% in other countries
including South Africa and Ukraine

ArcelorMittal Europe

ArcelorMittal Poland is part of ArcelorMittal Europe.
ArcelorMittal Europe employs 49,000 people.
In 2024, the segment sold 28.7 m tonnes of steel.



About ArcelorMittal Poland



- ArcelorMittal Poland is the largest producer of steel and coke in Poland,
- We have plants in three provinces: Śląskie, Małopolskie and Opolskie; we own the largest coking plant in Europe (Zdzieszowice),
- Our distribution network is ArcelorMittal Distribution Solutions,
- Together with our subsidiaries, we employ over **9 thousand employees**,
- **2000 people** work for us in external companies,
- We produce:
 - a) long products** – a long 120-metre rail, a rail with a hardened head, wire rod, sections, sheet piles,
 - (b) flat products** — hot-rolled sheets, cold-rolled sheets, hot-dip galvanised steel sheets and strips, organic coated sheets and strips

Smarter steels
for people and planet



ArcelorMittal



ArcelorMittal in Poland



PLN 10,5 bn

investments in our
plants



PLN 24 m

support for community
projects



90%

reduction of
dust emissions



42%

reduction of CO₂
emissions

Existing investments

Crude steel production in the world



REGIONS IN DESCENDING ORDER OF CRUDE STEEL PRODUCTION TABLE • 2023

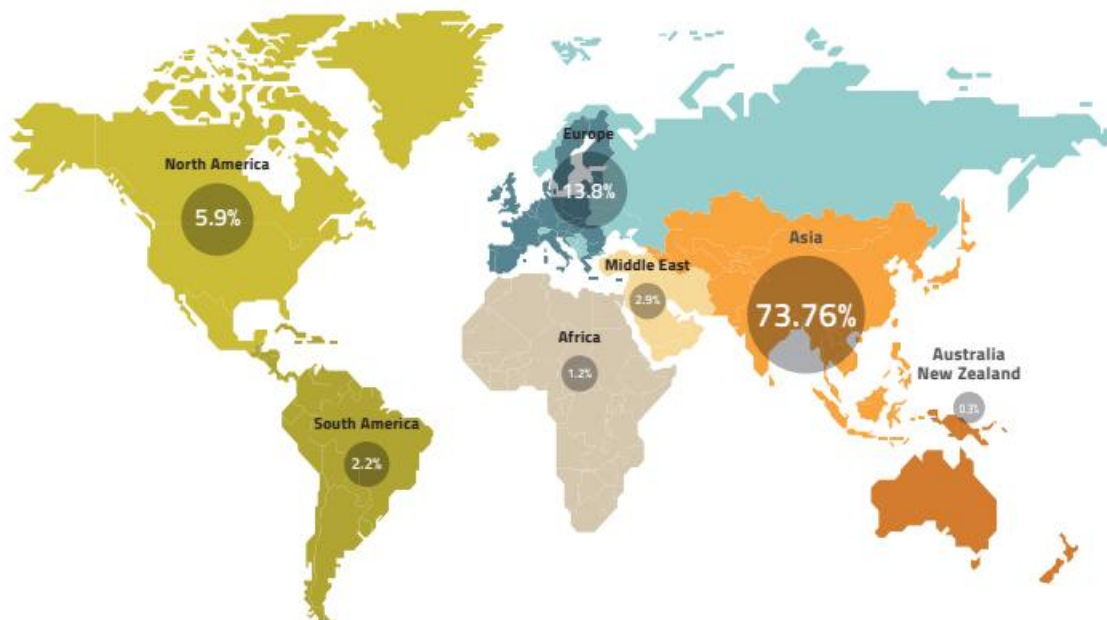
SOURCE: EUROFER

		% shares
	2023	2023
Asia and Oceania	1,361	73.6%
▶ of which China	1019	55.1%
▶ of which India	141	7.6%
▶ of which Japan	87	4.7%
Europe	256	13.8%
▶ of which European Union 27	126	6.8%
▶ of which Ukraine and CIS	88	4.8%
North America	110	5.9%
of which United States	81	4.4%
South America	42	2.2%
Middle East	53	2.9%
Africa	22	1.2%
Australia/New Zealand	6	0.3%
WORLD	1.850	100%

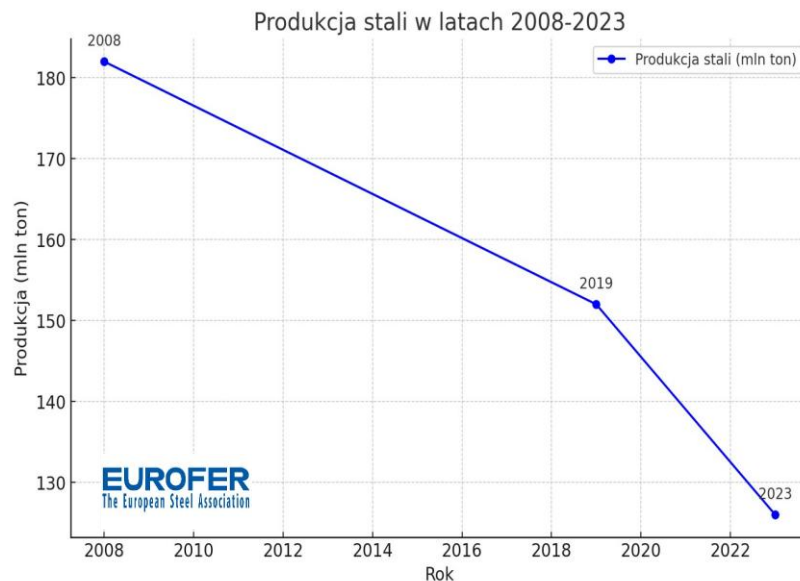
MAP OF STEEL PRODUCTION BY REGION

MAP • 2023

SOURCE: EUROFER



Steel production in Europe 2008-2023



Since 2008, the production capacity in the European in the steel industry fell by 1/3, and employment by 1/4.



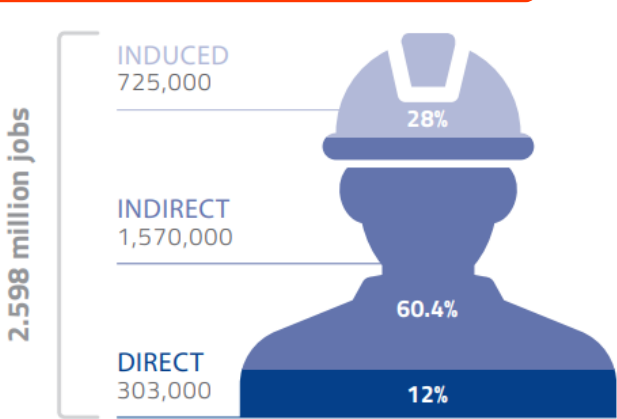
Employment in the European steel sector

EMPLOYMENT

GRAPHIC • 2023

SOURCE: OXFORD ECONOMICS

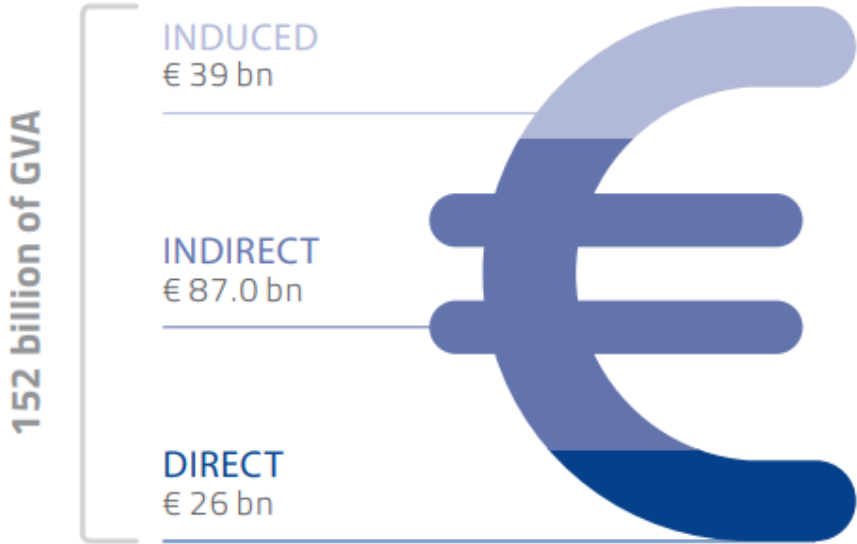
The EU steel industry supports nearly 2.6 million jobs



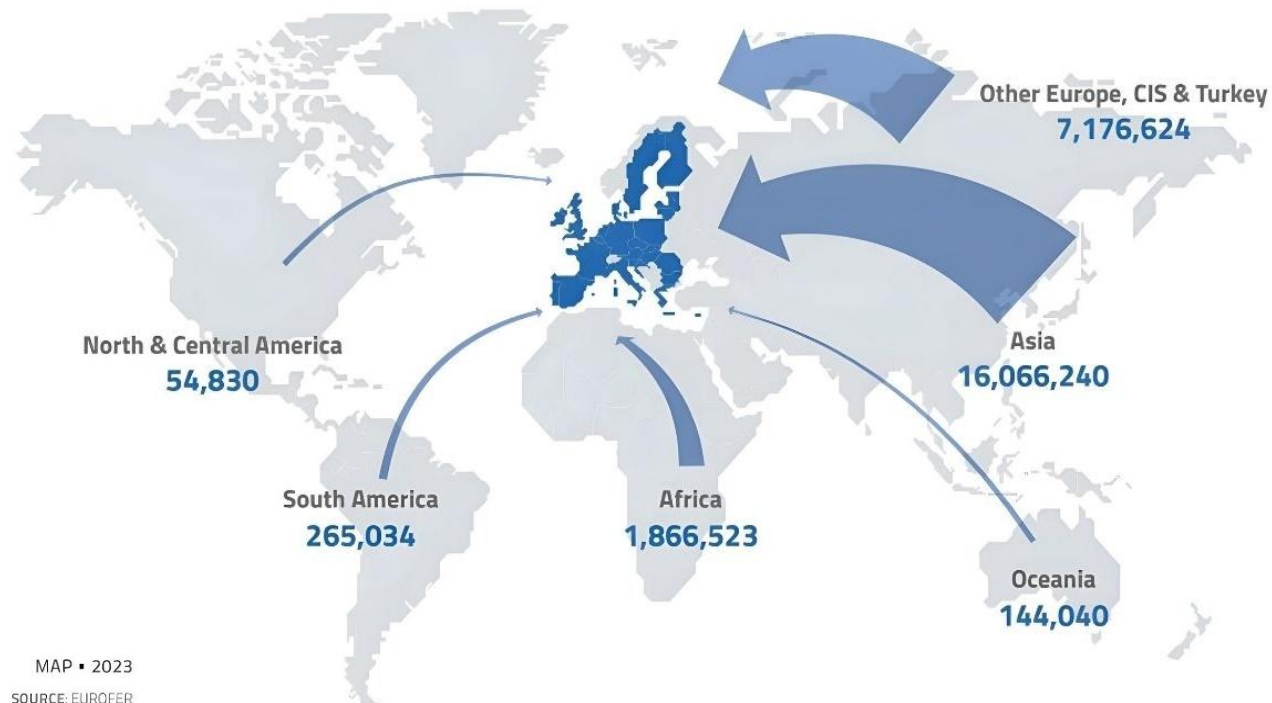
	'Type I' multiplier	'Type II' multiplier
Multiplier for GVA	4	6
Multiplier for jobs	6	9

The 'type I' multiplier is the ratio of direct plus indirect activity to direct activity.
The 'type II' multiplier is the ratio of total activity to direct activity.

The EU steel industry creates around €152 billion of Gross Value Added



Steel imports into the EU from third countries



Imports of steel products to the European Union in 2023 amounted to 25.6 million tons.

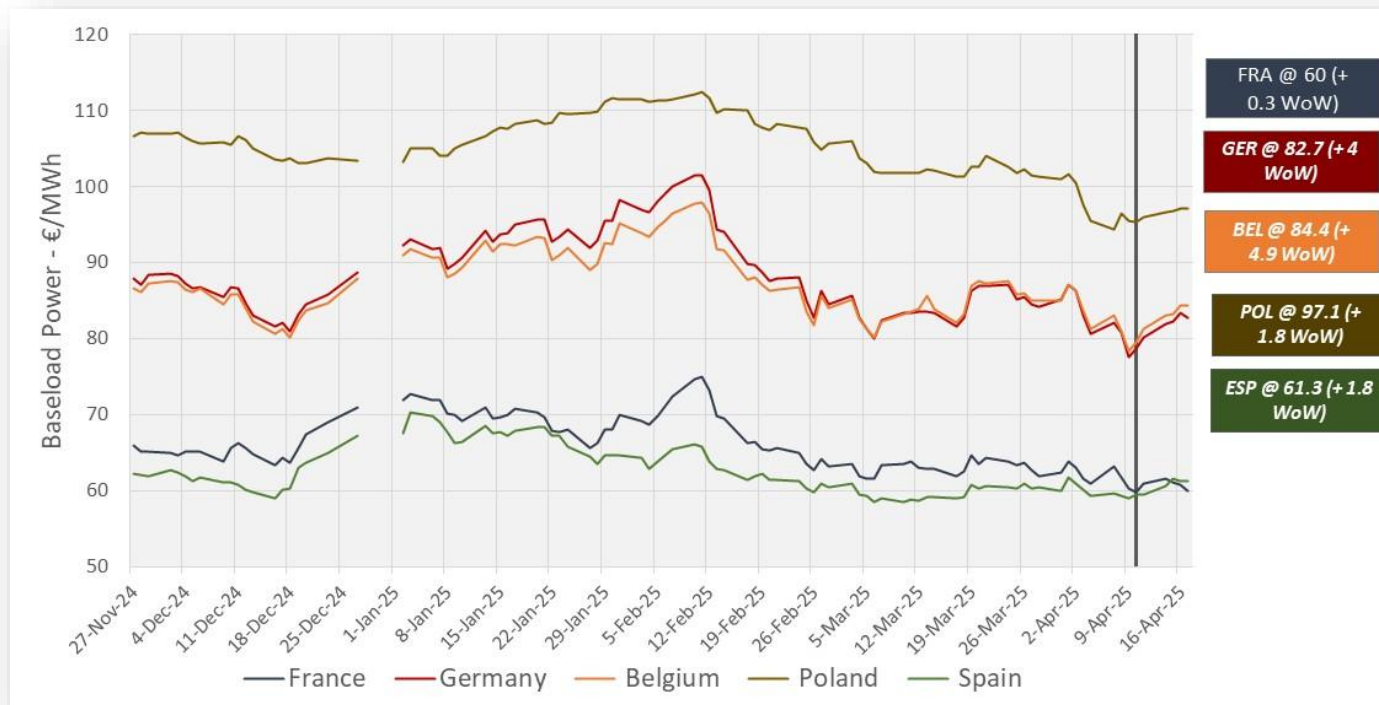
Price of CO2 emission allowances in the EU ETS



Źródło: energy.instrat.pl



Electricity prices in the EU



Source: ArcelorMittal's own study



Recent investments

Renovation of blast furnace No. 2

Implemented solutions:

1. New bag filter for dedusting the cast house
2. Innovative two-stage blast furnace gas treatment plant
3. Closed cooling system for tuyere sets and stoves
4. New refractory lining of the hearth

Key benefits of the investment:

1. Reduction of channelled emissions from the cast house < 10 mg/Nm³ (BAT)
2. Reduction of dust content in blast furnace gas to < 5 mg/Nm³
3. Significant reduction in water consumption for refilling the cooling circuit of tuyeres
4. Enabling the furnace to operate for the next dozen or so years

Value of all investments from stage 1: over PLN 1 billion

Head-hardened rail – 2024

ArcelorMittal Poland is one of the few manufacturers of the 120-metre rail in the world. Head-hardened rail – R&D project worth over PLN 105 million co-financed by the National Centre for Research and Development. The product is also intended for High-Speed Rail – thanks to the new parameters, such rail significantly increases safety in railway transport traffic.

ArcelorMittal is interested in developing CCS technology

Development projects and technologies: Eco2CEE; LESS CO₂; METH2GEN;



- For **PLN 52 m** at the cold rolling mill in Krakow we built nine hydrogen furnaces. Ammonia is no longer used in the annealing process; fuel consumption significantly reduced.



- **35,000 kilometers**. This was the distance covered by bioLNG trucks that transported steel products from steel mills in Dąbrowa Górnicza and Kraków to customers in Belgium and the Netherlands.



Caring for the environment



Modernization of the CHP plant in Zdzeszowice – 2023-2025

The project has already consumed **PLN 250 million**.

It will be possible to reduce nitrogen oxide emissions to below **100 mg/Nm3**.

The modernization will not only reduce the environmental impact of the CHP plant but also increase the energy security of the plant and residents.

New installations in Świętochłowice 2024-2025

- Over **PLN 40 million**. This amount consists of two projects:
 - a) installation of a new regenerative thermal oxidiser
 - b) rapid cooling system.
- Thermal afterburner reduced VOC emissions
- The new installation also reduced the number of emitters – from four to one – and the consumption of natural gas, which reduced CO₂ emissions.

Modernization of Maerz furnaces at lime plant in Dąbrowa Górnicza – 2024

The project cost **PLN 45 million** and allowed us to reduce particulate matter emissions to **10 mg/Nm3**.



Reducing environmental impact

Improving the energy efficiency of current technological processes

- Reduction of metallurgical coke consumption
- Reduction of electricity consumption in metallurgical processes

Increasing the share of renewable energy in the energy mix

- Photovoltaic farms

Low-emission metallurgical paths

- Electric Arc Furnaces (EAF)
- Direct Iron Reduction Technologies Using Hydrogen

Development of CO2 capture, transport, utilization and storage technologies



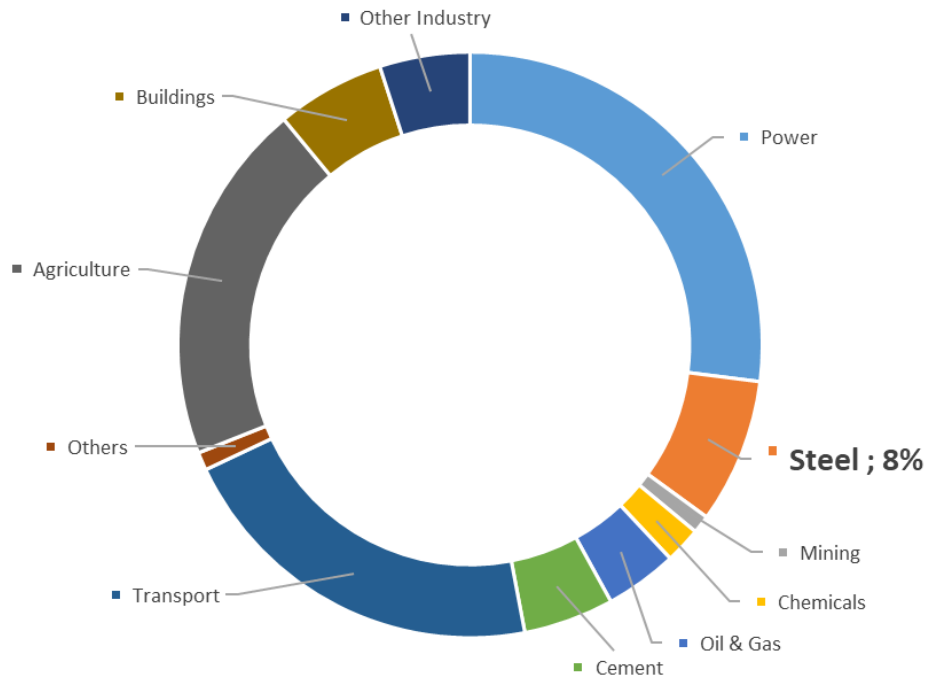
ArcelorMittal Group wants to achieve net zero emissions by 2050.

Challenges of decarbonisation

Global CO2 emissions

Steel is responsible for about 8% of CO2 emissions globally

CO2 emissions
on a global scale



Source: ArcelorMittal's own study

Steelmaking technologies

Original

- iron ore
- blast furnace
- Converter steel plant



Secondary

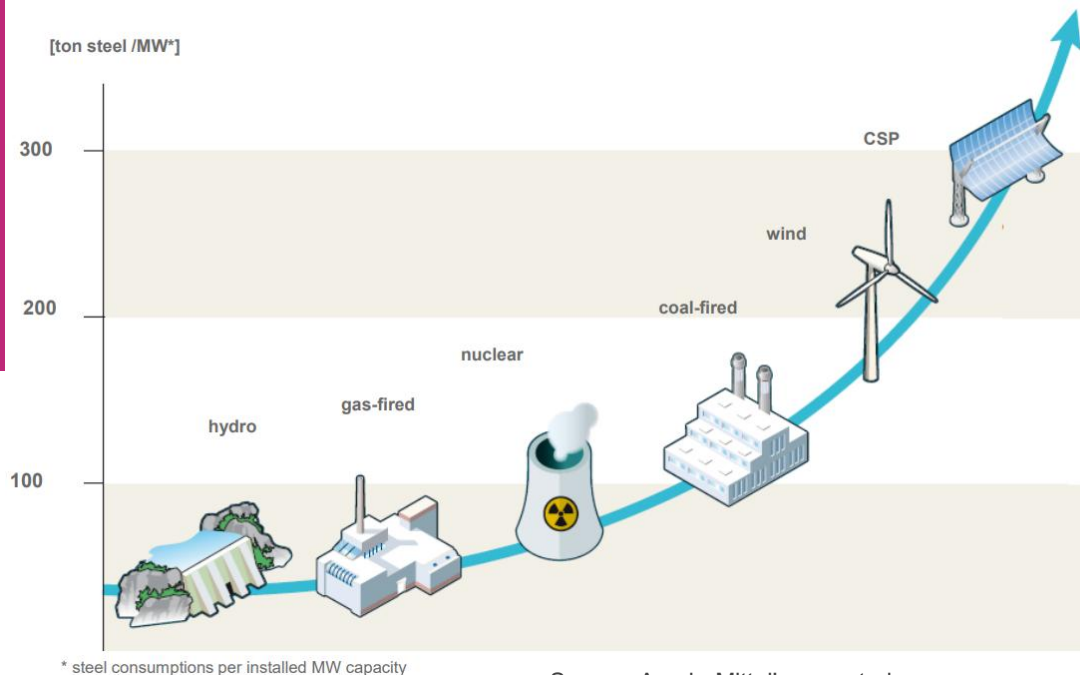
- steel scrap
- electrical energy
- electric furnace



The energy transition will not happen without steel

Steel consumption in the energy sector is increasing as the transition to zero-emission energy sources increases.

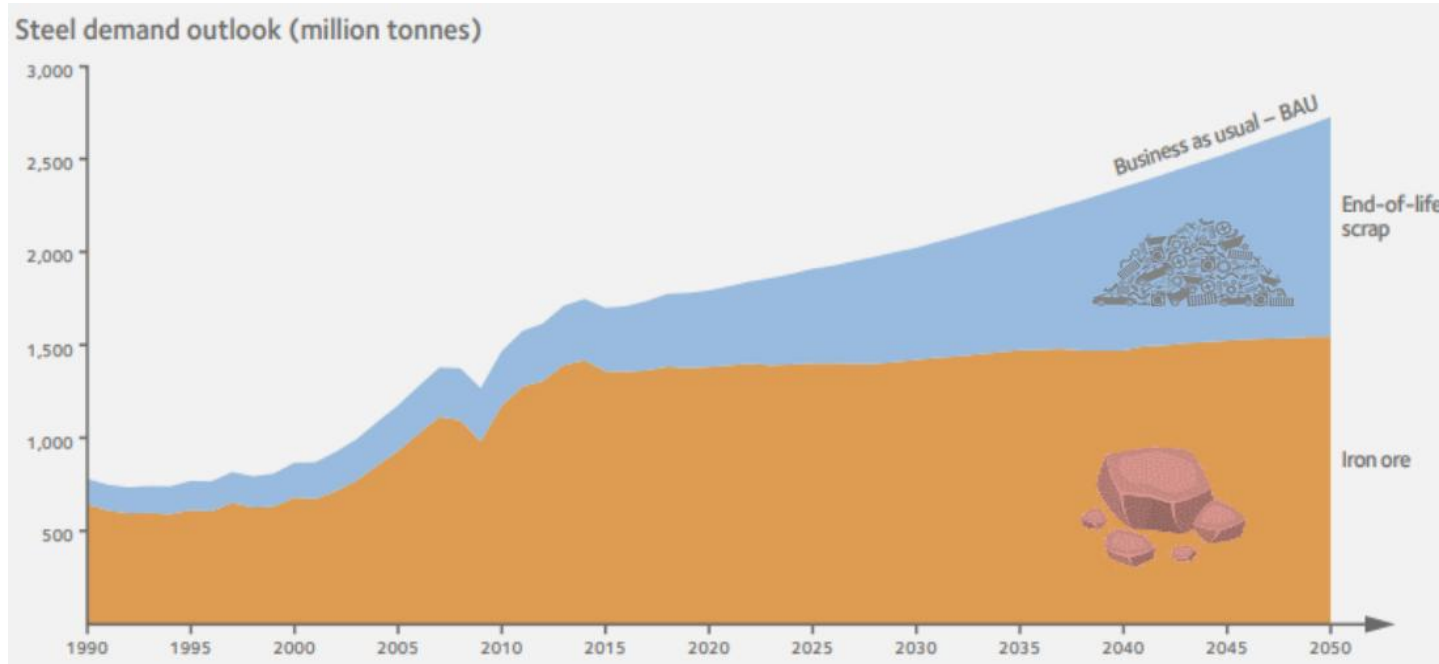
Amount of steel per 1 MW of production capacity in different electricity production technologies



Source: ArcelorMittal's own study

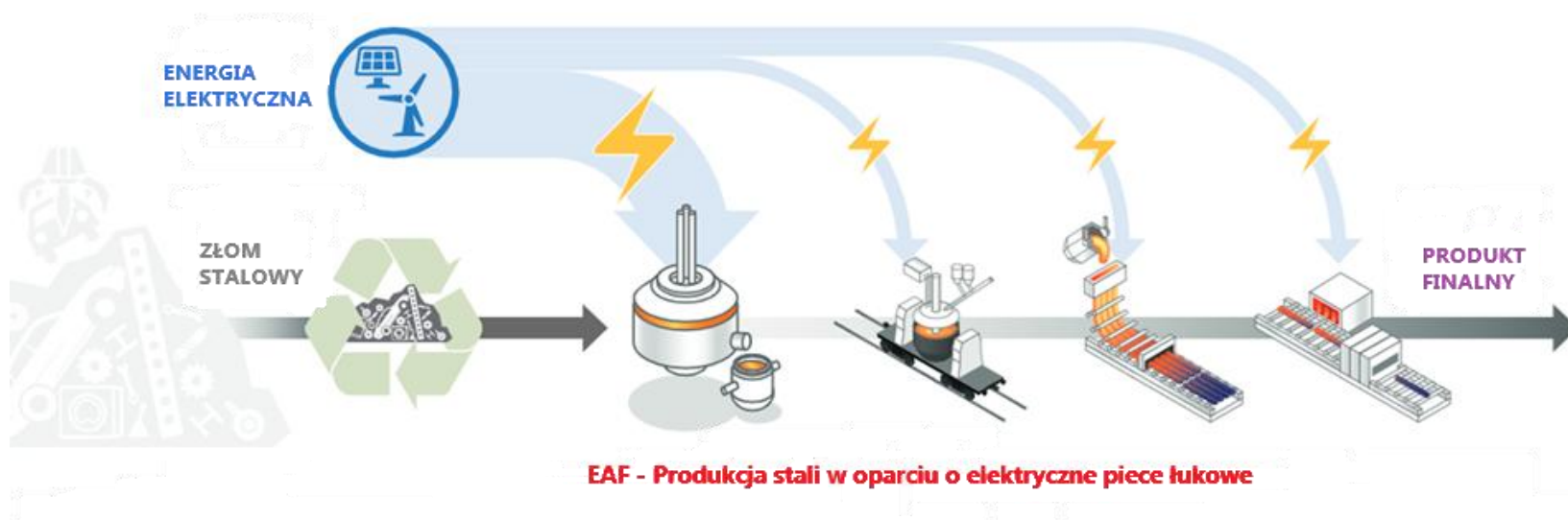
Steel demand forecasts

- The demand for steel will increase in the coming years and will exceed **2.5 billion tonnes per year in 2050**
- Electric furnace technology will gain popularity
- Primary methods of steel production using blast furnaces will remain in use (limited availability of scrap)



Source: ArcelorMittal's own study

Prerequisites for decarbonisation



ELECTRICAL ENERGY

Availability of green energy
Electricity price

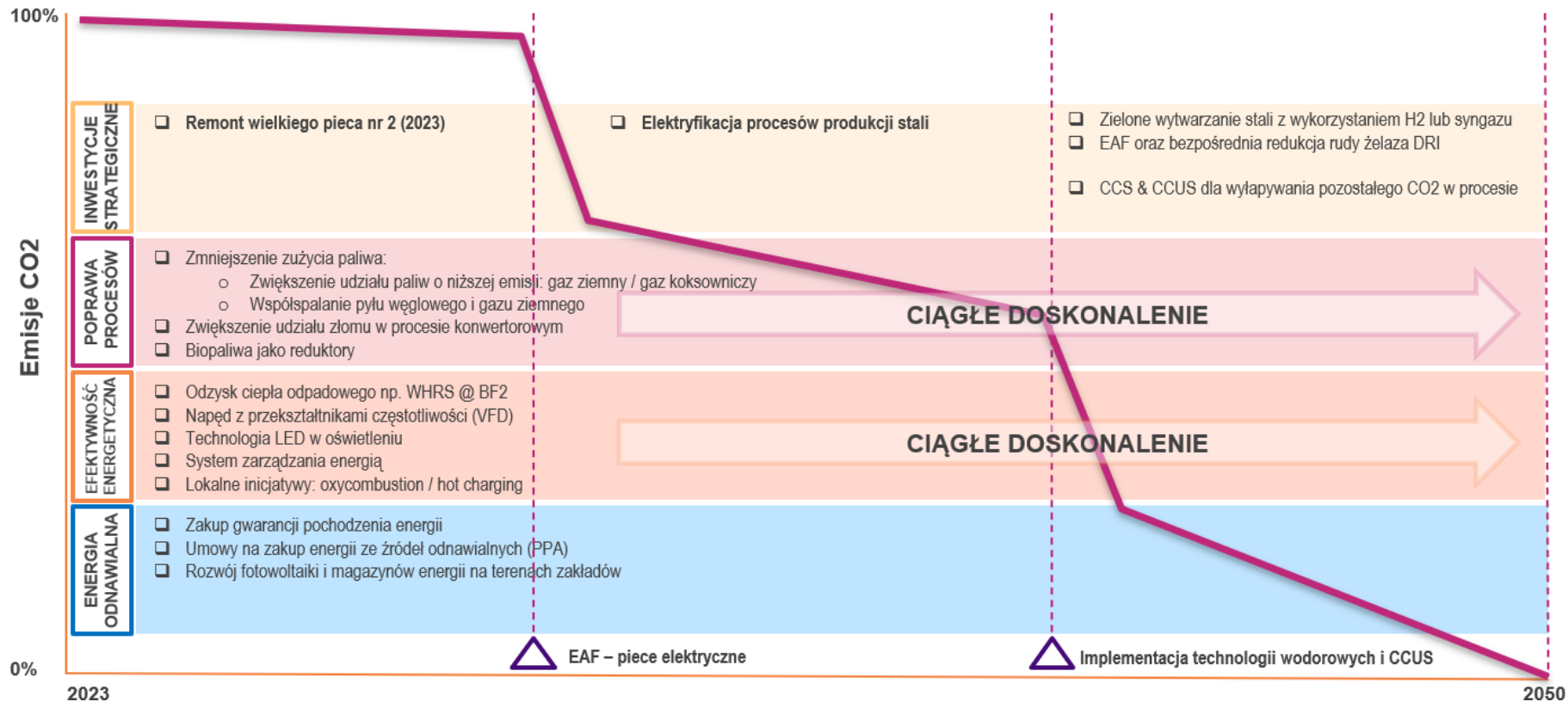
STEEL SCRAP

Availability of scrap metal
Scrap price

MARKET ENVIRONMENT

CBAM
Market protection measures

CO2 roadmap



Thank you

