

# ArcelorMittal Ghent steel plant

### Key information

#### ArcelorMittal Belgium's CO2 roadmap:

1. Increase scrap use & advancing the development of improved material and energy efficiency
2. Substituting carbon with hydrogen as a reductant
3. Implementation of Smart Carbon technologies & RES

**Company:** Arcelor Mittal Ghent

**Founded:** 1962 as Sidmar

**Located:** Ghent-Terneuzen canal

**Products used in:** building industry, domestic appliances, tubes, bottles, and radiators

**Target:** Reduce CO<sub>2</sub> emission by 3.9 Mt/y by 2030



### Technical aspects

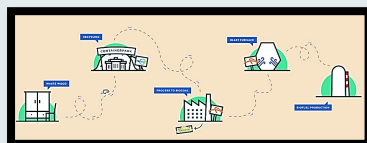
**Wind energy:** 12 wind turbines, rotor diameter 162 m, height 230m & capacity 6 MW/turbine.  
Energy production: 45 GWh/year. CO<sub>2</sub> emissions avoid.: 11,225 tons / year.

**Solar energy:** more than 27,000 solar panels, since 201. It is the 3rd-largest park in Belgium of an area of 100,000 square meters. 9. Energy production: 10 GWh/ year

### On-site renewable electricity generation

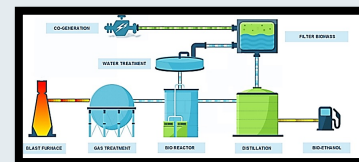
#### Torero Project

An industrial-scale demo plant that uses torrefaction process to turn waste wood into bio-coal (use of blast furnace)



#### Carbon2Value

A cost effective CCU technology that captures & separates CO<sub>2</sub> from waste gases, for transport & storage/ reuse



#### Carbalyst/Steelanol Project

**Carbalyst®:** group of technologies for basic chemicals production (e.g. bioethanol) using steelmaking waste gases

### The future

**SMART:** Steelmaking with Alternative Reductants". Collab. with Vanheede Environment Group, Ghent University & CRM → A cutting-edge process to chemically recover end-of-life plastics & other waste to reduce CO<sub>2</sub> emissions, <https://www.life-smart.eu/>  
**Ghent Carbon Hub project**, an open-access CO<sub>2</sub> storage and liquefaction hub in the Ghent part of North Sea Port : Operational in 2027 with a capacity 6 MTPA of CO<sub>2</sub>-eq to around 15% of industrial CO<sub>2</sub> emissions in Belgium

