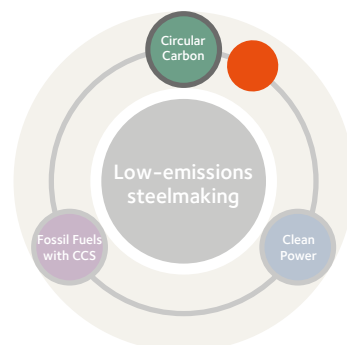


## ArcelorMittal strategy towards low-emissions steelmaking

With its high-tech gasification technology, the modern steel industry is the ideal sector to advance the circular economy by reusing bio-waste, plastic waste, and agricultural and forestry residues.



### Torero: reducing iron ore with waste carbon

Today, most blast furnaces reduce iron ore using a high-temperature, synthetic gas derived from coal and coke. This makes the modern blast furnace with its high-tech gasification technology ideal for replacing fossil fuels with 'circular carbon' inputs, such as bio-waste, including agricultural and forestry residues, and even waste plastics.

Our Torero project targets the production of bio-coal from waste wood to displace the fossil fuel coal that is currently injected into the blast furnace. We are developing our first large-scale Torero demonstration plant in Ghent, Belgium. In this €40 million project (with €12 million funding from EU Horizon2020) we aim to convert 120,000 tonnes of waste wood annually into bio-coal. This source of waste wood is considered hazardous material if burnt in an incinerator as harmful gases would be emitted, but in the blast furnace no such pollutants can be formed.

Future projects would see expansion of sources of circular carbon to other forms of bio-based and plastic waste.

Figure 6: the Torero process

