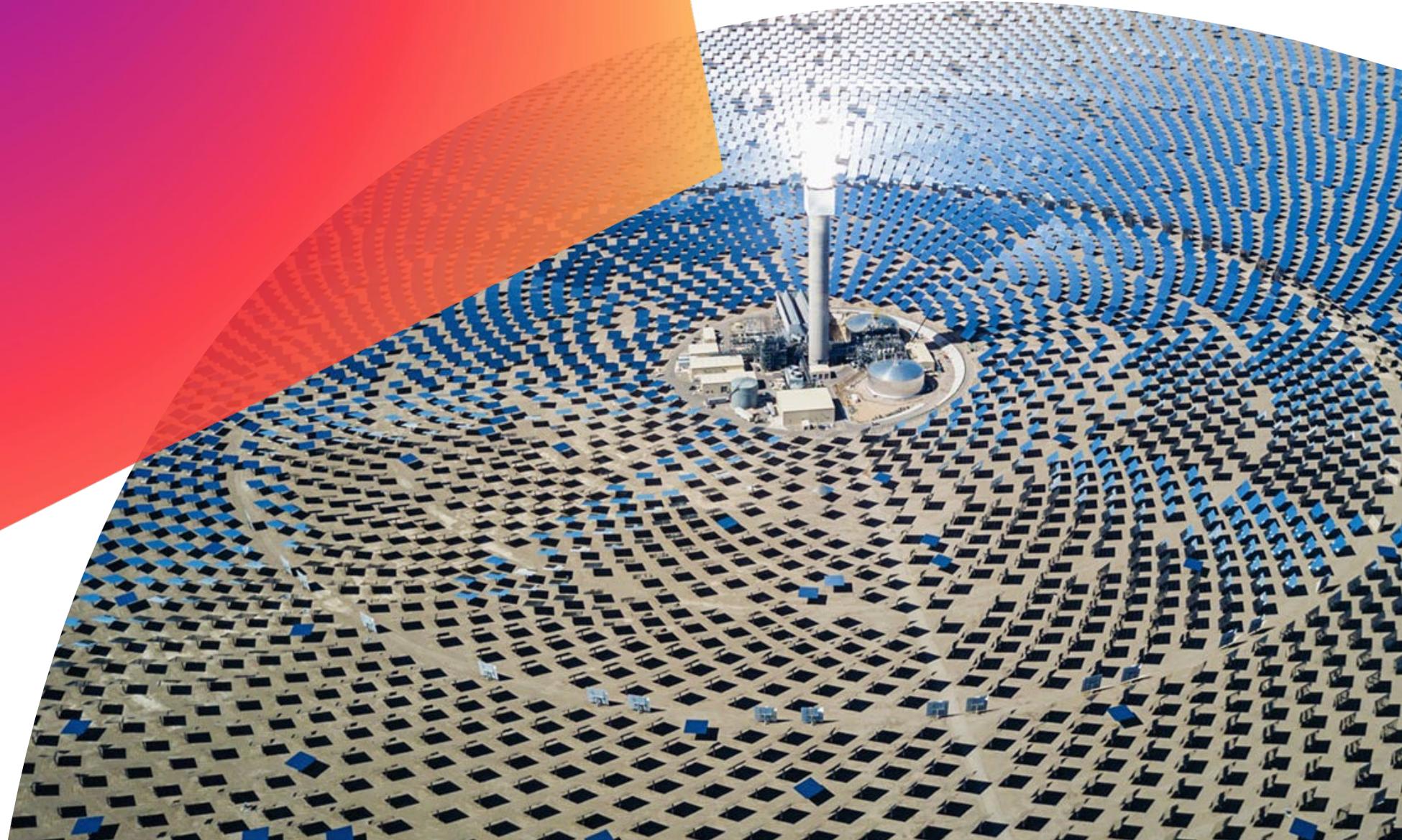


ArcelorMittal roadmap to net zero



Corporate Strategy

October 2022



Agenda

- About ArcelorMittal
- Decarbonisation roadmap
- Decarbonisation projects
- XCarb innovation fund
- Other initiatives to drive industry decarbonisation forward

About ArcelorMittal



The world's leading steel company

ArcelorMittal key figures

Steel manufacturing in

16

countries

Customers in

155

countries

Employees in 2021

155,000

Millions of tonnes of iron ore mined in 2021

50.9

Millions of tonnes of crude steel made in 2021

69.1

Steel shipment tonnes totalled in 2021

62.9

Trademarked products

200+

Active patent families

700+

New products and solutions launched 2021

51

Research centres

11

R&D programs

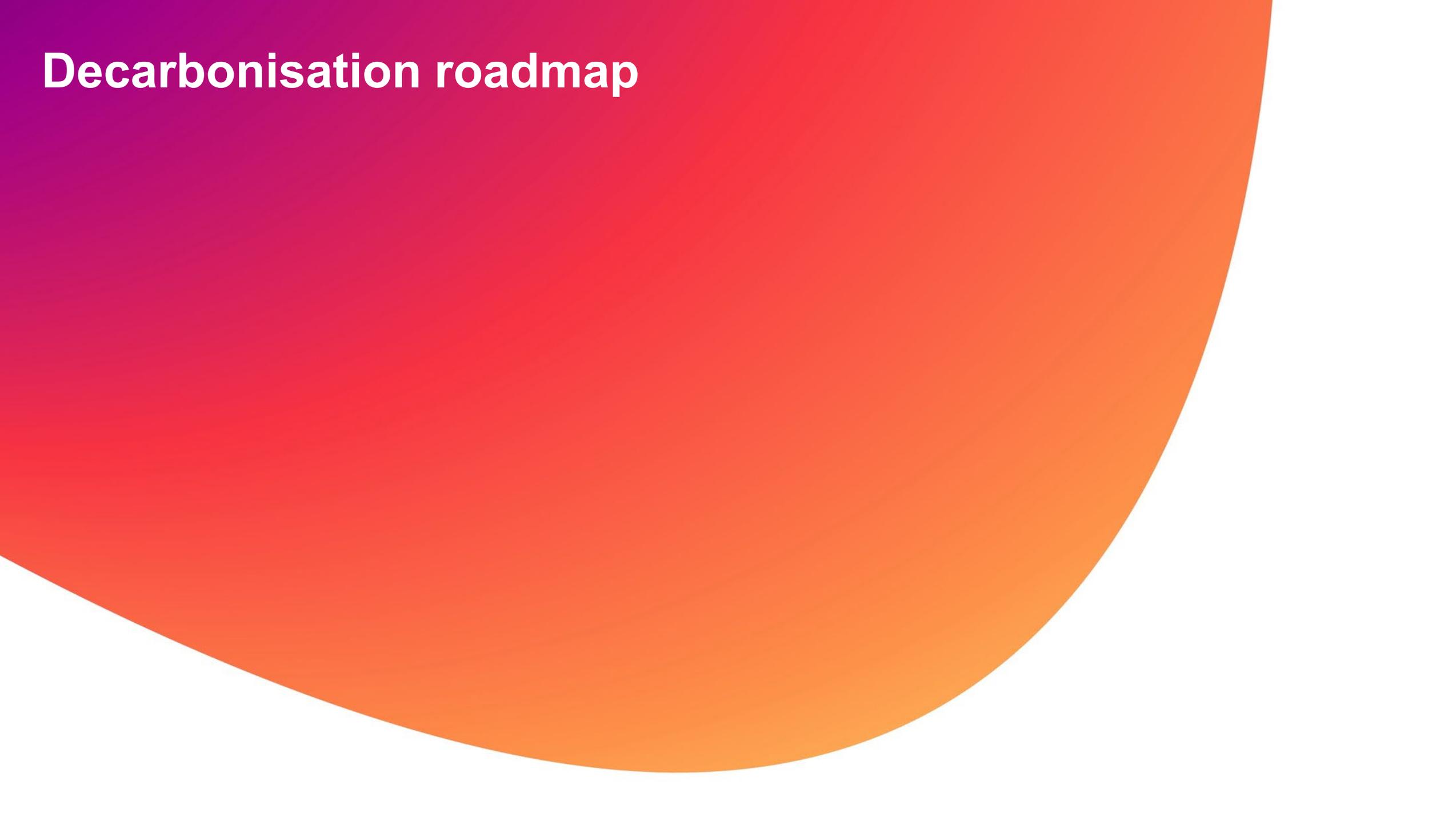
100+

in progress

LCA studies conducted in 2021

37

Decarbonisation roadmap



Highlights from ArcelorMittal's Climate Action Report

ArcelorMittal is at the forefront of the industry, developing clear industrial transformation plans and capturing commercial opportunities

Leading the industry

- New target of a 25% reduction in Group CO₂e per tonne of steel by 2030 (scopes 1+2, steel + mining)
- Europe target accelerated to 35% (from 30%) reduction of CO₂e per tonne of steel by 2030



reduction by 2030 in CO₂e emissions across global steel and mining operations



reduction by 2030 in CO₂e emissions across European steel and mining operations

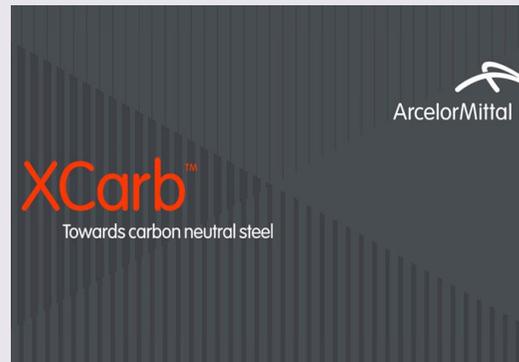
World's first full-scale zero carbon-emissions steel plant

- World's first full-scale zero carbon-emissions steel plant at Sestao by 2025
- Plans to produce a combination of physical zero carbon emissions steel and XCarb™ green steel certificates



First to market

- Customer appetite for “net zero” steel is real, as demonstrated by demand for our XCarb™ product offering launched in Q1' 21



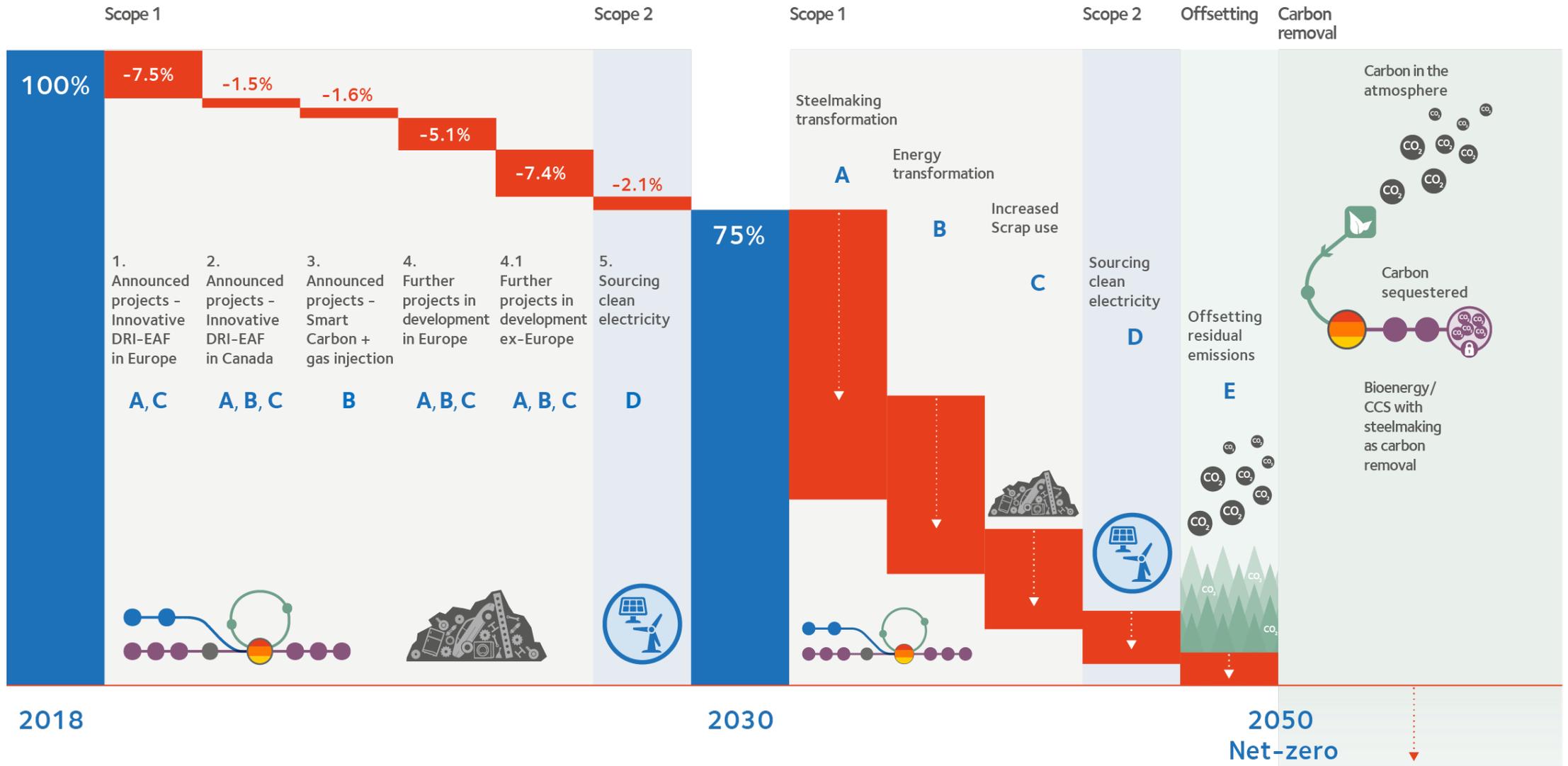
Funding

- \$10bn total investment required to achieve 2030 Group decarbonisation target; expectation public funding to cover 50%
- Securing public funding support is central to our plans and provides an opportunity to accelerate



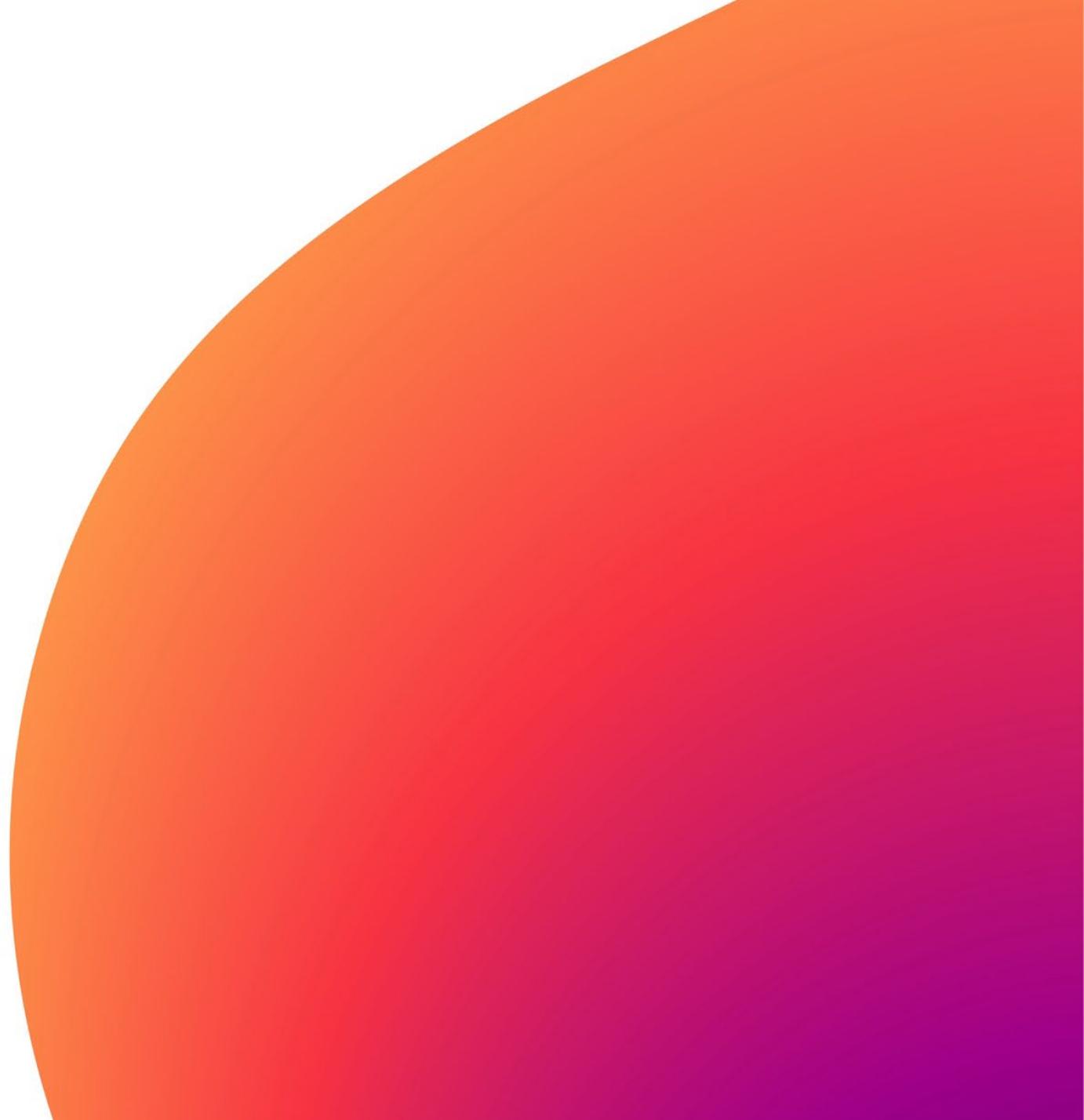
Net-Zero Roadmap

For the first time, we have disclosed a roadmap that shows our journey to net-zero



Decarbonisation projects

Primary steel decarbonisation

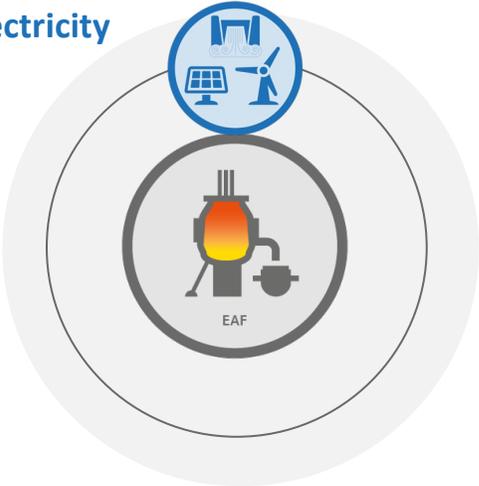


Need to transition both secondary and primary steel production to achieve carbon neutrality



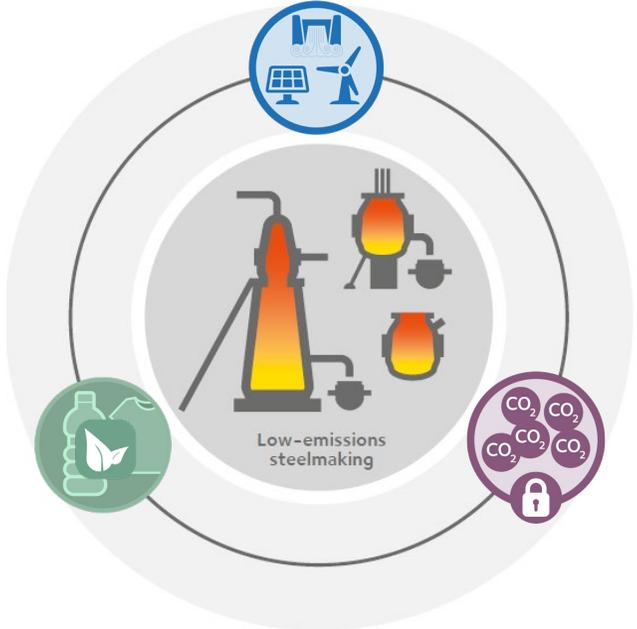
SECONDARY STEEL PRODUCTION

Clean electricity



PRIMARY STEEL PRODUCTION

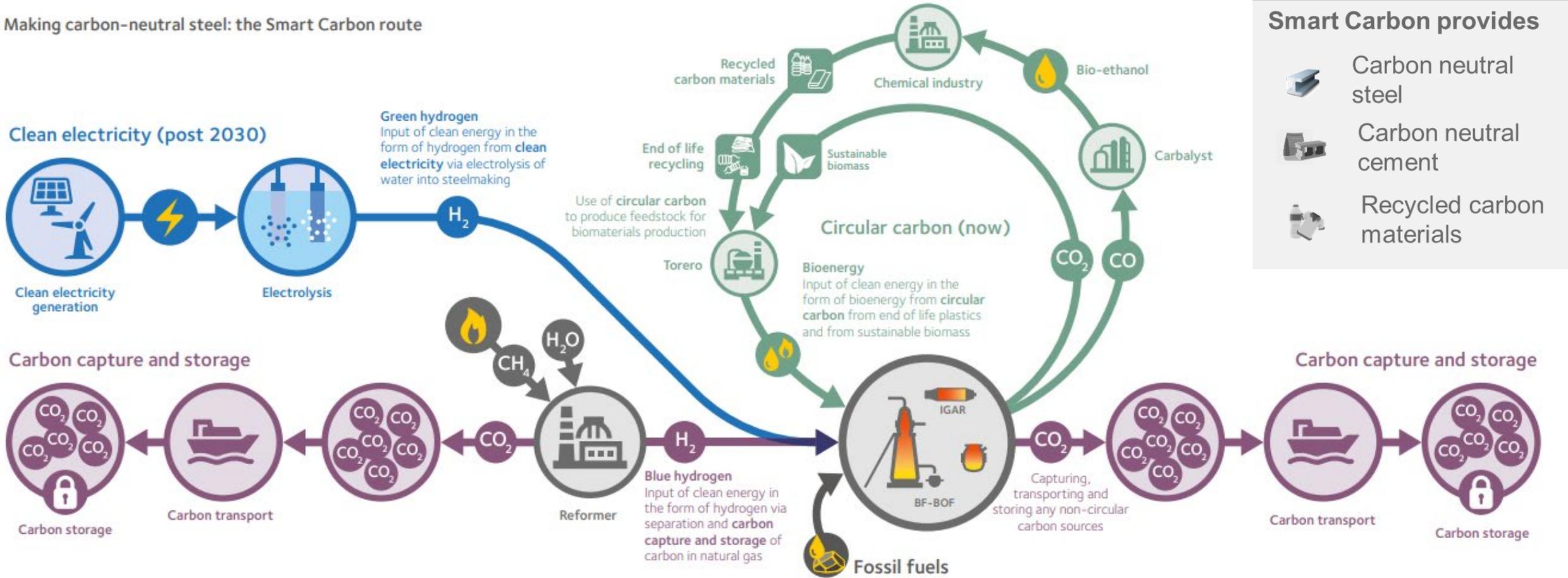
Clean electricity
Directly or via green hydrogen



Making Carbon-Neutral Steel: 1) The Smart Carbon Route

Evolving existing Blast Furnace technology with use of circular carbon and incorporating carbon capture, storage and use; longer term incorporating clean hydrogen as reductant

Making carbon-neutral steel: the Smart Carbon route



- Smart Carbon provides**
- Carbon neutral steel
 - Carbon neutral cement
 - Recycled carbon materials

Belgium: using innovative technology to leverage circular carbon and achieve net-zero steel

Transforming waste into energy and off-gases into renewable fuels and chemicals

Torero

The pyrolysis of biomass and waste at low temperature (2-300°C) to produce renewable energy in form of biocoal, biofuels, biogases.

This source of waste wood is considered hazardous material if burnt in an incinerator as it emits harmful gases. However, in a blast furnace no such pollutants can be formed.

Status Industrial scale demonstration plant

Cost €55m gross investment

Capacity 2 reactors will each produce 40,000t of bio-coal pa for use in the blast furnace as a substitute for coal

Expected completion 2022 (reactor 1) & 2024 (reactor 2)

Total cost Carbalyst/Torero	€235m
Annual emission savings	Up to 350kt CO ₂ eq

Carbalyst

A family of technologies involving gas-fermentation technology using microbes to convert waste gases into advanced bioethanol for use in transport and to make plastics.

Bioethanol

Status Industrial scale demonstration plant

Cost ~€180m gross investment

Capacity 80 million liters of bioethanol

Expected completion 2022

Combined EBITDA contribution from both projects to generate €40m a year (from the sale of bioethanol fuels)

CarbHFlex – bioplastics

A technology that uses microbes to produce from its waste carbon acetone and isopropanol, both basic chemicals used to make plastics.

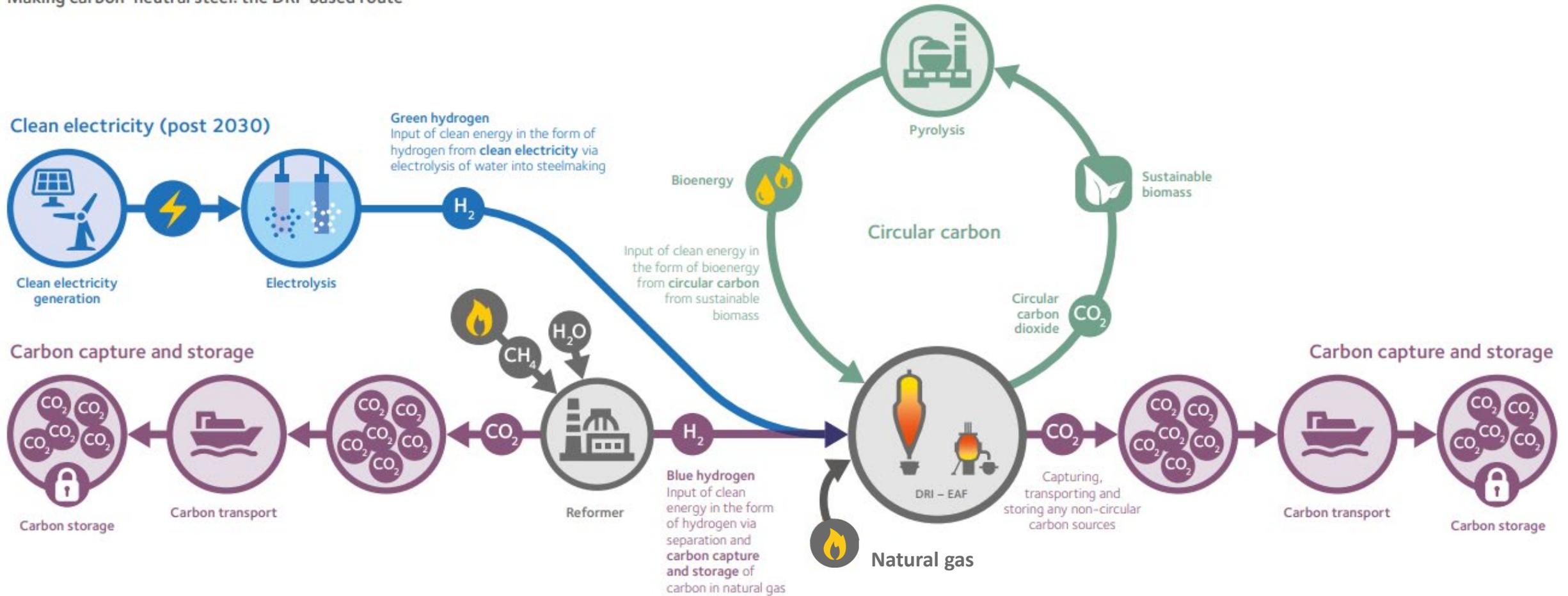
Status Shortlisted for IPCEI funding in 2021



Making Carbon-Neutral Steel: 2) The Innovative DRI-Based Route

Replacing traditional Blast Furnace technology with natural-gas based DRI-EAF (Direct Reduced Iron-Electric Arc Furnace) solutions to further innovate and decarbonise through the use of green hydrogen, and potentially bioenergy and carbon capture, transport and storage

Making carbon-neutral steel: the DRI-based route



Spain: the world's first full-scale zero carbon-emissions steel plant at Sestao

New DRI installation in Gijón coupled with EAF in Sestao will allow the plant to become carbon-neutral by 2025

Project summary

ArcelorMittal's Sestao plant in Spain will become the world's first full-scale zero carbon-emissions steel plant. Central to this development will be the construction of a 2.3Mt green hydrogen DRI unit in Gijón. Around 1Mt of DRI will be transported to Sestao to be used a feedstock for its two EAFs.

Funding

ArcelorMittal signed a memorandum of understanding (MoU) with the Spanish Government in July 2021 that will see a €1bn investment in decarbonisation technologies at ArcelorMittal Asturias' plant in Gijón, including a 2.3Mt green hydrogen DRI plant and hybrid EAF.

Asset plan and strategy

- ✓ Metallic input into EAFs from zero carbon emission sources
- ✓ Increased % of circular, recycled scrap
- ✓ Green hydrogen-produced DRI from Gijon in Sestao's two existing EAFs
- ✓ Powering all steelmaking assets (EAFs, rolling mill, finishing lines) with renewable electricity, either by establishing a renewable energy power purchase agreement (PPA) or buying renewable energy guarantees of origin certificates (GOOs)
- ✓ Several key emerging technologies to replace the remaining use of fossil fuel with carbon-neutral energy inputs, e.g. sustainable biomass or green hydrogen



Cost	€1bn
Annual emission savings by 2025	4.8Mt CO ₂ eq

Hamburg: Europe's only DRI-EAF facility, with ambitions to produce zero carbon emissions

Commitment of €55 million from Federal Government brings Hamburg closer to zero carbon-emissions steel production

Project summary

Europe's only DRI-EAF plant where the switch to using hydrogen instead of natural gas in the iron ore reduction process is being prepared. Further project underway to test the ability of hydrogen to reduce iron ore and form DRI on an industrial scale, as well as testing carbon-free DRI in the EAF steelmaking process. Aiming to reach industrial commercial maturity by 2025, initially producing 100,000 tonnes of DRI/year.

Funding

The Federal Government has expressed its intention to provide €55 million of funding support towards the construction of the plant, which is half of the €110 million total capital expenditure required.

Asset plan and strategy

- ✓ Collaborating with Shell, Mitsubishi and other cross-industry companies to form the Hamburg Green Hydrogen Hub, with the goal of generating energy from renewable sources
- ✓ The process of reducing iron ore with hydrogen will first be tested using grey hydrogen generated from gas separation
- ✓ In the future, the plant should also be able to run on green hydrogen when it is available in sufficient quantities at affordable prices, with the clean energy for hydrogen production potentially coming from wind farms off the coast of Northern Germany



Canada: ArcelorMittal's first major decarbonization announcement outside of Europe

CAD\$1.8 billion investment at site in Hamilton will reduce 2.9Mt CO₂ within the next seven years

Project summary

ArcelorMittal Dofasco to reduce annual CO₂ emissions at ArcelorMittal's Hamilton, Ontario operations by approximately 3Mt, within the next seven years. July 2021 the Government of Canada announced it would invest CAD\$400m in the project and on Feb 15, 2022, the Government of Ontario announced it would invest CAD\$500m in the project. This secured project funding and enabled ArcelorMittal to firm up the investment.

Funding

Low emissions steelmaking in Canada; finalizing Government of Canada support and in discussions with Government of Ontario

Employment

- ✓ Sustaining well-paying skilled positions in advanced manufacturing
- ✓ Approximately 160,000 training hours required to transition our workforce to the new footprint.
- ✓ Up to 2,500 jobs during the engineering + construction phases

Asset Plan

- ✓ New 2Mt DRI plant and 2.4Mt EAF
- ✓ Modification of existing EAF and continuous casters to align productivity, quality and energy capabilities of all assets
- ✓ New DRI and EAF will be in production before the end of 2028
- ✓ High-quality steel products for automotive and packaging



Hon. Chrystia Freeland, Deputy Prime Minister and Minister of Finance, Government of Canada at the Dofasco announcement

Cost

CAD\$1.8bn

Annual emission savings by 2028

2.9Mt CO₂eq

Belgium: €1.1bn project for decarbonisation technologies at Gent

ArcelorMittal Belgium to reduce CO₂ emissions by c.3.9Mtpa by 2030*

Project summary

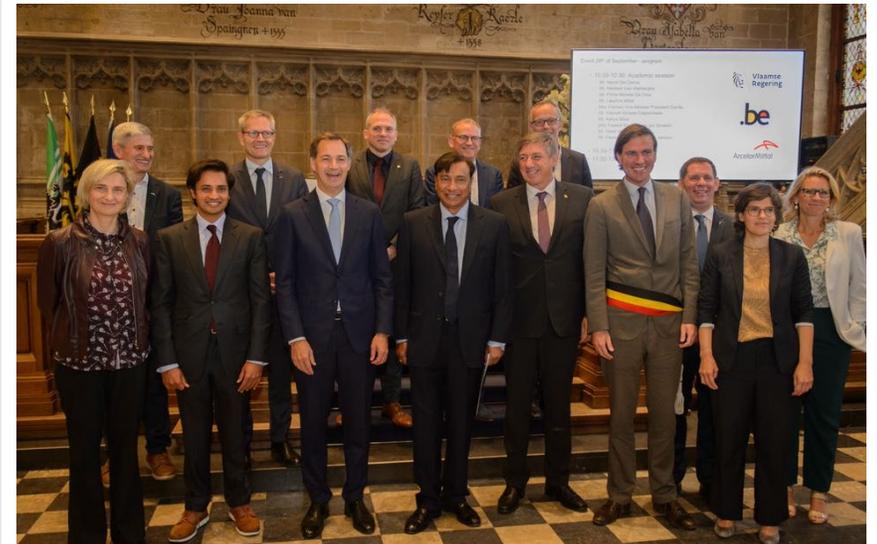
ArcelorMittal Belgium will reduce CO₂ emissions by 3.9Mtpa by 2030, by building a 2.5Mt direct reduced iron (DRI) plant and two electric furnaces at its Gent site, to operate alongside its state-of-the-art blast furnace that is ready to take waste wood and plastics as a substitute for fossil carbon.

Funding

ArcelorMittal has signed a letter of intent with the Governments of Belgium and Flanders, supporting a €1.1bn project (EC approval still required).

Asset Plan

- ✓ New 2.5Mt DRI plant and 2 new electric furnaces (EF)
- ✓ Gradual transition from BF to the DRI & EF (replacing one BF reaching end of life by 2030) resulting in 3Mt of CO₂ emissions reduction each year
- ✓ New capacity to operate alongside Gents state-of-the-art BF B (restarted Mar'2021 with €195m investment). BF B ready to take waste wood and plastics as a substitute for fossil carbon
- ✓ DRI plant to operate alongside various decarbonisation projects including Gent's Steelanol/Carbalyst and Torero projects (commissioned in 2022) – annual CO₂ emissions reduction of ~900Kt by 2030
- ✓ Hybrid model of Smart Carbon and Innovative DRI steelmaking in Gent fits into ArcelorMittal Belgium's CO₂ roadmap



Cost of DRI/EAF shift	€1.1bn
Annual emission savings by 2030 for DRI/EAF	3.0Mt CO ₂ eq

*3.9mt reduction includes 0.9mt CO₂ reductions of Smart carbon initiatives

Canada: ArcelorMittal Mines Canada to produce 10Mtpa DRI pellets by end 2025

Announcement of a CAD\$205m investment with the government of Quebec to create one of world's largest DRI pellet plants

Project summary

ArcelorMittal Mines Canada (AMMC) to invest CAD\$205m in its Port-Cartier pellet plant, enabling this facility to convert its entire 10Mtpa annual pellet production to direct reduced iron (DRI) pellets by the end of 2025, delivering 200,000t direct CO₂ savings for AMMC - important role in ArcelorMittal's efforts to reduce our group's CO₂e emissions intensity by 25% by 2030

Funding

The Government of Quebec will contribute through an electricity rebate of up to CAD\$80m

Employment

~250 jobs are expected to be created during the construction phase, from mid-2023 - end 2025

Asset Plan

- ✓ expands ArcelorMittal's ability to produce high-quality DRI-ready pellets
- ✓ shift from current mix of 7Mtpa blast furnace pellets / 3Mtpa DRI-ready pellets to 10Mtpa DRI-ready pellets annually
- ✓ will feed significant demand for DRI pellets in ArcelorMittal's planned DRI-EAF steelmaking plants in Canada and Europe

Carbon reduction

- ✓ direct annual CO₂e reduction of ~200,000 tonnes at Port-Cartier pellet plant via reduction in the energy required during the pelletizing process
- ✓ equivalent to >20% of the plant's total annual CO₂e



Cost	CAD\$205m
Annual emission savings by 2028 (tCO ₂ e _q)	200,000

XCarb innovation fund

What are we looking for?

- Companies that are developing a technology which holds strong potential to decarbonise steelmaking
- Commercially scalable technologies
- Any geography will be considered
- There are no restrictions or limit to the number of companies we can hold in the portfolio; we are looking to invest in the best and brightest companies and ideas on the market
- Similarly, there is no set limit on the monetary figure of individual investments. Each potential investment opportunity is assessed on its own merits
- We prefer to be amongst the only strategic investors to the business

Our target technology domains:

- ❖ Disruption in steelmaking
- ❖ Waste to gas or biocarbon
- ❖ Gases reforming/Gases transformation technologies
- ❖ Disruptive hydrogen technologies
- ❖ Carbon capture, utilisation and storage
- ❖ Long-duration, large-scale energy storage technologies
- ❖ Clean energy technologies



Carbon neutral by

2050

Annually investing...

\$100m

To date committed...

\$180m



ArcelorMittal's XCarb™ Innovation fund was launched in early 2021. The Company anticipates investing up to \$100 million annually through the fund.

Aligned with ArcelorMittal's purpose, '**Smarter steels for people and planet**', the XCarb™ Innovation Fund invests in companies with the potential to accelerate the transition to low, and ultimately zero, carbon emission steelmaking, enabling them to develop more quickly and achieve the scale needed for their technologies to become commercially viable.

To date, ArcelorMittal has invested \$80 million across four targets:

- Heliogen, a renewable energy company which focuses on unlocking the power of sunlight to replace fossil fuels
- Form Energy, which is working on the development of its breakthrough energy storage technology
- LanzaTech, a carbon recycling company
- H2Pro, which is developing a disruptive way of producing hydrogen from water.

ArcelorMittal is also an anchor partner in the Breakthrough Energy Catalyst, committing to an equity investment of \$100 million over the next five years.



“The fund adds an exciting new element to our CO₂ technology strategy. It is a further sign of our commitment to aiding the development of technologies which can help to support the decarbonisation of our company and our industry.”

Aditya Mittal, Chief Executive Officer, ArcelorMittal

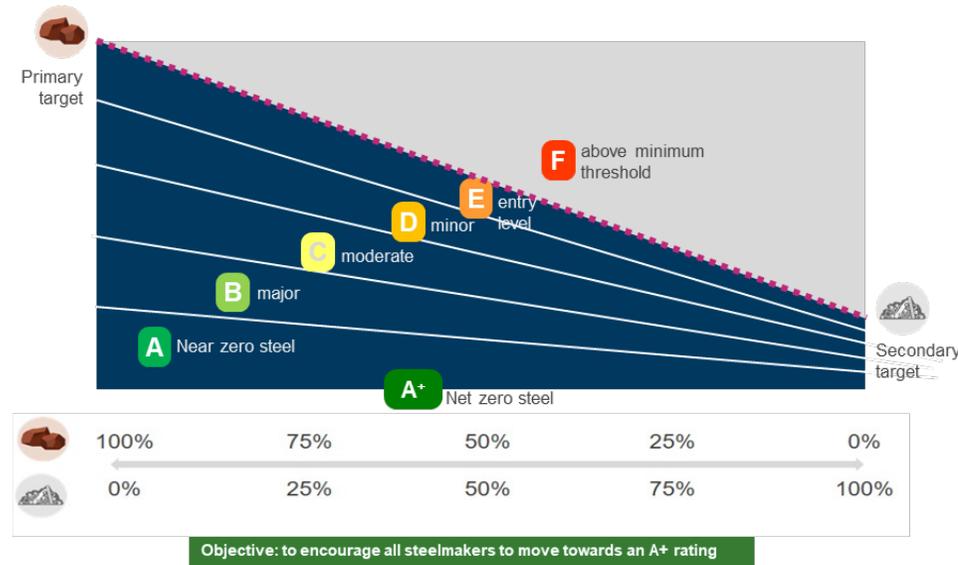
Other initiatives to drive industry decarbonisation forward



We are helping to define the low-carbon emissions steel standard

Supporting the creation of market demand for physical steel products which would be classified as lower, and ultimately near-zero, carbon emissions steel

Supplier Identifier	
Product Identifier	
Carbon Steel Decarbonisation Progress	
A+ net zero	
A near zero	
B major	
C moderate	
D minor	
E entry level	
F above minimum threshold	
Embodied carbon emissions: Method: ISO 14040/44 etc	Scrap Content (%)



3 core principles:

1. Dual score system

- LCA value for finished products (EPD for construction products)
- Decarbonisation progress rating system

2. Sliding scale based on the % of scrap used in production

- Focuses decarbonisation on technology shifts rather than just increasing scrap rates with existing technology
- Aligns with ResponsibleSteel™ and International Energy Agency ('IEA') low-carbon emissions steel models

3. Clearly defined system boundary for decarbonisation rating, including

- All iron and steelmaking processes up to hot rolled product
- Upstream material inputs, excluding ferroalloys

Engaged in internal initiatives and external forums to advance progress towards net zero steel

- TCFD compliant climate scenario analysis
- Just transition planning
- Preparing for new mandatory and voluntary disclosure requirements
- Scope 3 development
- SBTi science-based target setting methodology
- Supporting multi-stakeholder initiatives on steel decarbonisation



Thank you



ArcelorMittal

