press release

ArcelorMittal inaugurates flagship carbon capture and utilisation project at its steel plant in Ghent, Belgium

- **€200 million CCU plant first of its kind in the European steel industry**
- **Project part of multi-technology strategy to reduce carbon emissions at Ghent plant**

8 December 2022, 11:00 CET

At an event held at its steel plant in Ghent, Belgium today, attended by the Prime Minister of Belgium, Alexander De Croo, Flemish Minister-President Jan Jambon, members of the Belgian and Flemish governments, European Investment Bank Vice-President Kris Peeters, ArcelorMittal Executive Chairman, Lakshmi Mittal, and ArcelorMittal Europe CEO, Geert Van Poelvoorde, ArcelorMittal ('the Company') successfully inaugurated its flagship carbon capture and utilisation ('CCU') project.

The €200 million 'Steelanol' project is a first of its kind for the European steel industry. Utilising cutting edge carbon recycling technology developed by our project partner LanzaTech, the CCU plant uses biocatalysts to transform carbon-rich waste gases from the steelmaking process and from waste biomass into advanced ethanol, which can then be used as a building block to produce a variety of chemical products including transport fuels, paints, plastics, clothing and even cosmetic perfume, hence helping to support the decarbonisation efforts of the chemical sector. The advanced ethanol will be jointly marketed by ArcelorMittal and LanzaTech under the Carbalyst® brand name.

Once production reaches full capacity the Steelanol plant will produce 80 million litres of advanced ethanol, almost half of the total current advanced ethanol demand for fuel mixing in Belgium. It will reduce annual carbon emissions from the Ghent plant by 125,000 tonnes. Other partners involved in the Steelanol project are Primetals Technologies and E4tech.

ArcelorMittal Ghent will soon inaugurate another first for the European steel industry, with its 'Torero' project set to come on stream in the first quarter of 2023. The €35 million Torero project is designed to process sustainable biomass (initially in the form of waste wood that cannot be used in other applications) for use as a raw material input into the blast furnace, hence lowering the volume of fossil coal used. This project will reduce annual carbon emissions in Ghent by 112,500 tonnes. ArcelorMittal Ghent intends to add a second reactor to its Torero project over the next two years, hence doubling the size of the project.

Speaking at the event, Alexander De Croo, Prime Minister of Belgium, said:

"I am pleased to see ArcelorMittal is taking bold and innovative steps by decarbonising its steel production at its new installation in Ghent. This is an important step in the fight against climate change while safeguarding our future competitiveness and securing Belgian jobs. By investing in clean energy

technologies, ArcelorMittal is not only helping to lower carbon emissions, but it is also setting the standard for the industry. The only way forward is cleaner production that leads to better products."

Jan Jambon, Flemish Minister-President and Minister of Foreign Affairs, Culture, Digitalisation and Facility Management, said:

"Maintaining and enhancing heavy industry in Europe is of crucial importance for economic growth and strategic autonomy. The high ambitions of ArcelorMittal for sustainability and circularity fit within the climate targets of the Flemish government: a carbon neutral and circular society by 2050, while safeguarding industrial and economic activities in our region."

Lakshmi Mittal, ArcelorMittal Executive Chairman, said:

"ArcelorMittal Ghent is widely regarded as one of the finest steel plants in Europe, staffed by talented, committed and forward-thinking people. We intend to ensure that reputation endures into the future and I believe the work being undertaken here lays the ground for what the steel plant of the future will look like. This is a steel plant which is embracing the latest innovative technologies; which is using sources of circular carbon; which captures and re-uses as many of its waste products as possible, recycling them into something of value; and which is preparing for a future when green hydrogen will remove the need to use any fossil carbon. It is a strong example of what is possible with energy, effort and of course, brilliant scientific minds. It also demonstrates what can be achieved through partnership, so I must thank the Belgian and Flemish governments and the EIB for the support they are providing towards our efforts to transition to net-zero steelmaking."

ArcelorMittal CEO Aditya Mittal added:

"The imperative to accelerate the road to net zero has never been greater. Given the scale of the challenge, it's important to be open to all technology solutions and certainly, at ArcelorMittal we are open to all technologies that can take steelmaking to near zero. The investments we are planning here at Ghent are a great testament to that. It's also become abundantly clear that collaboration and partnership is essential to deliver the systems-wide change we need to reach zero, as this project demonstrates. We have worked closely together with a wide group of stakeholders here in Belgium and indeed also more broadly across Europe, on the conditions and infrastructure that support the investment in these types of technologies and the transition to net zero. I want to thank everyone who has supported our efforts and made today – the inauguration of the European steel industry's first carbon capture and utilisation plant – possible."

ArcelorMittal Europe CEO, Geert Van Poelvoorde, said:

"Inaugurating the European steel industry's first carbon capture and utilisation plant is an important moment for our European business, and for our target to reduce the carbon intensity of the steel we produce in Europe by 35 per cent by 2030. We have long held the view that multiple technologies will be required for our industry to reach net zero, and today is an important proof point of our commitment to developing and deploying those technologies as quickly as possible, and to making meaningful progress this decade. Our ambition is clear, to lead our industry's efforts to reach net zero. It is a huge challenge, but also a tremendous opportunity. A low-carbon European economy needs low-carbon emissions steel to build its renewable energy infrastructure, low-carbon buildings and electric vehicles. And our customers expect us to deliver low-emissions steel today. Projects such as Steelanol and Torero will help us to meet that demand through our suite of XCarb® products."

ArcelorMittal Belgium CEO, Manfred Van Vlierberghe, said:

"ArcelorMittal Belgium has a passion for sustainability and circularity. We are heading to become the sustainable steel company of the future through new breakthrough technologies such as Steelanol. This technology contributes to strengthening our global leadership in terms of CO_2 and energy efficiency in

the steel sector. Steelanol is a strong asset towards our Europe-wide goal of reducing CO_2 emissions by 35 per cent by 2030, and of achieving carbon-neutral steelmaking by 2050."

Jennifer Holmgren, CEO LanzaTech, said:

"The leadership and commitment of governments and large companies like ArcelorMittal is needed to ensure single use carbon becomes a thing of the past. This significant milestone brings us closer to creating a circular carbon economy at a time when all sustainable solutions are required to solve our climate crisis."

The projects being undertaken in Ghent form an important part of ArcelorMittal's 2030 climate action roadmap, in which the Company is targeting reducing the carbon intensity of the steel it produces by 25 per cent globally, and by 35 per cent across its European operations. In addition to the many decarbonisation technologies ArcelorMittal is developing and deploying, the Company is also investing in the best and brightest technologies which hold rich potential to accelerate the decarbonisation of steelmaking through its XCarb® Innovation Fund. To date, ArcelorMittal has committed to investments totalling $222.5 million, including an investment of $30 million in LanzaTech, the Company's partner in the Steelanol project. To learn more about the Company's climate action efforts visit https://corporate.arcelormittal.com/climate-action.

Additional quotes

Vincent Van Peteghem, Deputy Prime Minister of the Belgian Government and Minister of Finance, said:

"Today, we must have the courage to make clear choices for our economy of tomorrow. And Steelanol is a fine example of that. It makes me proud to see this sample of top innovation developed in our country and in Ghent. I am convinced that this European first will not only strengthen the reputation of the Ghent port area but will also be an inspiration far beyond our national borders. Inspiration to arrive at innovative investments that can offer a solution to the climate problem through thorough cooperation. This is how we build tomorrow together."

Tinne Van der Straeten, Belgian Minister of Energy, said:

"ArcelorMittal's climate investment is a tangible example of how circular industry is becoming a reality. Gas from blast furnaces is converted into the sustainable fuel bioethanol. A waste product thus becomes a raw material for industry and biofuel for heavy transport. By greening the production process, we anchor industry and jobs domestically, reduce our dependence on fossil fuels and cut CO2 emissions."

Jo Brouns, Flemish Minister of Economy, Innovation, Work, Social Economy and Agriculture, said:

"Innovation is the engine of progress, and I am proud to see that ArcelorMittal Ghent took those words to heart. They rose to the challenge and made remarkable progress on the road to our goals of carbon neutrality with this new breakthrough, Steelanol. Taking on the challenge to implement biotechnology on such a grand scale, ArcelorMittal Ghent has rightly earned their place as one of the biggest innovators in steel production."

Matthias Diependaele, Flemish Minister of Finance and Budget, Housing and Immovable Heritage said:

"Flanders is taking the lead in keeping strategic industries in Europe, this is important to make our industry and the whole economy resilient against external events and calamities. Furthermore, the Steelanol projects secures jobs in the port of Ghent, providing an income to thousands of households in the region and career possibilities to white and blue collar employees."

Lydia Peeters, Flemish Minister of Mobility and Public Works, said:

"It's great to see a company like ArcelorMittal taking up the gauntlet to do even more work on the transition to greater sustainability. Through innovation and technology, we can significantly reduce emissions, which is good for the climate. The opening of the Steelanol plant is a great example of how cooperation between ports, universities and private partners can lead to innovative and state-of-the-art results. ArcelorMittal provides a lot of jobs in the port of Ghent. From my powers I am working on improving road and water access in and around the Ghent canal zone, just think of the R4WO project where we are tackling the road and bicycle infrastructure. At the same time, we are betting on the future with the continued construction of the new lock in Terneuzen. The lock should provide better access and smoother flow of the increasing shipping traffic."

Kris Peeters, Vice-President European Investment Bank, said:

"The European Investment Bank is very glad to support ArcelorMittal, which is of major economic importance for local communities in Belgium, in its drive to really cut its emissions. Steel is used all around us and plays a key role in our economies, meaning that making the production process greener is of vital importance for both our climate and local employment. As the climate bank of Europe, we know how important this project is for ArcelorMittal but also for the steel sector as a whole. Saving energy and switching to renewables cannot achieve our climate goals by themselves, innovation will be key."

Carina Van Cauter, Governor East-Flanders, said:

"North Sea Port district is a frontrunner in sustainability, with companies and governments working together across borders. ArcelorMittal is a crucial partner and catalyst within the Canal Zone to achieve a sustainable basic industry. As a government, we need to provide an enabling regulatory framework. Sustainable growth at the border, no limits to growth."

Mathias De Clercq, Mayor City of Ghent, said:

"Ghent is fast becoming a continental hub for clean tech innovation. We want to make Ghent and our port a worldwide forerunner in terms of the circular economy and ArcelorMittal plays a very important role in this. We must see our industry as a part of the solution, not as a problem. Together we can reduce carbon emissions and work towards a climate neutral society."

Dr. Alexander Fleischanderl, Head of Green Steel, Primetals Technologies, said:

"The steel sector's goal to achieve net-zero by 2050 definitely requires breakthrough CCU technologies. The Steelanol project is an incredible showcase for carbon recycling in Europe, ready to be rolled out in heavy industry. We are extremely excited having been a strong partner since the very first days and proud of being a shareholder in LanzaTech."

Dr. Ausilio Bauen, ERM Partner, said:

"Since 2015, E4tech, an ERM Group company, has been proudly supporting the Steelanol Consortium in evaluating how the concept of flue gas recycling could improve the greenhouse gas footprint of steel production by creating a petrol substitute from recycled carbon. E4tech remains committed to supporting sustainable innovations in the industrial and energy sectors and to promoting a circular economy. It has been an inspiring journey to work alongside forward-thinking companies like ArcelorMittal, LanzaTech and Primetals and we hope the Steelanol Ghent plant will pave the way for further decarbonisation of the steel and energy sectors."

ENDS

Steelanol project partners

LanzaTech is the global leader in gas fermentation technology. The company provides novel and economic routes to ethanol, jet fuel and high-value chemicals from gas streams.

Primetals Technologies, Limited, headquartered in London, United Kingdom, is a pioneer and world leader in the fields of engineering, plant building, and the provision of lifecycle services for the metals industry.

E4tech is an international strategic consultancy focused on sustainable energy. Since 1997 they have worked with companies, governments, and investors to help them understand the global opportunities and challenges of clean energy.

About ArcelorMittal

ArcelorMittal is the world's leading steel company, with a presence in 60 countries and primary steelmaking facilities in 16 countries. In 2021, ArcelorMittal had revenues of $76.6 billion and crude steel production of 69.1 million metric tonnes, while iron ore production reached 50.9 million metric tonnes.

Our purpose is to produce ever smarter steels that have a positive benefit for people and planet. Steels made using innovative processes which use less energy, emit significantly less carbon and reduce costs. Steels that are cleaner, stronger and reusable. Steels for electric vehicles and renewable energy infrastructure that will support societies as they transform through this century. With steel at our core, our inventive people and an entrepreneurial culture at heart, we will support the world in making that change. This is what we believe it takes to be the steel company of the future.

ArcelorMittal is listed on the stock exchanges of New York (MT), Amsterdam (MT), Paris (MT), Luxembourg (MT) and on the Spanish stock exchanges of Barcelona, Bilbao, Madrid and Valencia (MTS).

For more information about ArcelorMittal please visit: http://corporate.arcelormittal.com/

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