

# AMNS India targets 70% green steel production

Steel major puts in motion ₹60,000-crore capex plans at Hazira

*By Abhishek Law*

Indian steel majors are investing towards green steel making, that is, low carbon emitting steel-making processes. ArcelorMittal Nippon Steel (AMNS) India, amongst the top five steel-makers here, is targeting 70 per cent ‘green steel’ output beginning FY27, while scaling capacity by over 50 per cent to 15.6 million tonnes per annum (mtpa) from the existing 10-odd mtpa, with a ₹ 60,000 crore investment in the first phase of its Hazira plant expansion expected commissioning in Q4 of FY26.

To achieve cost-effective green steel-making – defined in India as steel with CO<sub>2</sub>e emissions intensity below 2.2 tonnes per tonne of finished steel, AM/NS is leveraging green electricity, expanding scrap usage through its Khapoli processing unit and four planned additional units, and optimising processes.

With 60 per cent of the metal currently produced via the gas route, AMNS India – a 60-40 JV between Arcelor Mittal and Nippon Steel (of Japan) – aims to be the first steel company to secure at least “three-star green steel rating” for majority of its production.

India has defined green steel as those where the emissions during the metal making process will be at a threshold or below 2.2 tonnes. Steel offerings

where emissions are between 2 tonnes and 2.2 tonnes is categorised at three-star, for 1.6-2.0 tonne emission levels they are categorised as four-star and for those below 1.6 tonnes, the offerings would be rated five-star.

“April 2026 onwards, 70 per cent of our production will have at least three-star ratings,” Ranjan Dhar, Director and Vice-President – Sales and Marketing, AMNS India, said.

The company has a target to increase capacity in India to nearly 40 mtpa by 2035, with an investment outlay of \$30 billion – that include expansion at existing unit at Gujarat, new plants at Odisha and Andhra Pradesh.

Pricing for green steel remains under discussion, with clarity expected by year-end, as AM/NS engages customers showing strong interest, Dhar said.

## **Ministry's Green Steel Push**

In fact, Steel Ministry officials told *businessline* that AMNS India is exploring the possibility of using hydrogen as an alternative in its direct reduced iron (DRI) production process to bring down carbon emissions; and move towards greener steel-making. Pilots are targeted at Hazira.

The company is focusing on using hydrogen, produced through renewable energy and plans to replace fossil fuels in DRI production, aiming for near-zero emissions.

“Detailed project report are currently awaited. AMNS India was selected amongst other players to see if steel-making — done through hydrogen — can be piloted. A part of the project will be funded by the Ministry,” an official said.

The pilot projects which the Ministry had mooted included the use hydrogen — produced through electrolysis — as an alternative to conventional coking coal. Using hydrogen instead of coal in the steel-making process, produces water vapour rather than carbon dioxide.

As part of the scheme, it was suggested that there could be 100 per cent hydrogen-based DRI production; the second pilot involves injecting hydrogen into an existing blast furnace; and third will see blending of hydrogen with natural gas in an existing DRI plant so as to gradually bring down fossil fuel usage.

## **JSW on-course**

In fact, the country's largest steel-maker JSW too has announced plans to invest ₹50,000–60,000 crore in putting up a 10 mtpa green steel plant at Salav in Maharashtra. This plant will cater to Europe which is in the process of implementing the Carbon Border Adjustment Mechanism (CBAM) – under which carbon taxes will be imposed. JSW Chairman, Sajjan Jindal, during an industry event said, the investment in the green steel plant will be made over 3 - 4 years. Initially, the plant will run on natural gas and switch over to hydrogen as the technology evolves.

Comments