

May 30, 2025 Nippon Steel Corporation

Decision is Made to Invest in the Conversion from the Blast Furnace Steelmaking Process to the Electric Arc Furnace Steelmaking Process

-Selected for government support project business based on the GX Promotion Act-

In March 2021, Nippon Steel Corporation ("Nippon Steel") announced to achieve carbon neutrality with the use of the three breakthrough technologies: "high-grade steel production in large-sized electric arc furnaces," "production of direct reduced iron using hydrogen," and "hydrogen injection into blast furnaces." With regard to its investment in "the conversion from the blast furnace steelmaking process to the electric arc furnace steelmaking process" ("the Investment"), today, Nippon Steel was selected for the "2025-2029 Energy and Manufacturing Process Transformation Support Business (Business I (Steel))" based on the Green Transformation (GX) Promotion Act, and as such has made the decision to carry out the Investment.

Outline of the Investment

Places of Construction	Kyushu Works Yawata Area	Setouchi Works Hirohata Area	Yamaguchi Works (Shunan)	Total
Description of Investment	Construction of 1 new electric arc furnace	Expansion of 1 electric arc furnace	Modification and restart of 1 electric arc furnace	3 electric arc furnaces New construction/expansio n/modification and restart etc.
	Ancillary/related equipment including that for high-grade steel manufacturing measures, logistics measures, power supply measures and downstream process energy measures			
Amount of Investment	¥630.2 bn	¥140.0 bn	¥98.5 bn	¥868.7 bn
Government Support Amount (Maximum)	¥179.9 bn	¥42.8 bn	¥28.7 bn	¥251.4 bn
Production Capacity	Approx. 2.0 million tons/year	Approx. 0.5 million tons/year	Approx. 0.4 million tons/year	Approx. 2.9 million tons/year
Commencement of Production	Fiscal 2029 2H	Fiscal 2029 2H	Fiscal 2028 2H	By fiscal 2029

While the conversion from the blast furnace steelmaking process to the electric arc furnace steelmaking process would work to significantly reduce CO₂, it would require substantial capital investment and lead to considerable increases in production costs, including costs for raw materials and electricity. It





is therefore necessary for Nippon Steel, as a private enterprise, to ensure predictability of investment recovery to carry out such an investment. In addition to the government-supported business that Nippon Steel was recently selected for, establishing a robust GX steel market in which "CO₂ reduction values" are properly compensated is the most significant challenge in ensuring the predictability of GX investment recovery.

At meetings of the "Study Group on Green Steel for GX" organized by the Ministry of Economy, Trade and Industry, Nippon Steel has proposed measures involving both the public and private sectors to help develop and grow the market for GX steel. The elements indicated in the GX2040 Vision, which was decided on by the Cabinet this February, include "the visualization of GX values," "the procurement of GX products and services," and "the expansion of demand for GX products." Nippon Steel will continue to strongly urge that these measures be concretized at an early stage and that efforts be made to promote the formation of the GX market.

Nippon Steel has also continued to play an active role in the development of the first edition of guidelines issued by worldsteel (The World Steel Association), which were based on the "Guidelines on Green Steel" established by the Japan Iron and Steel Federation. We have also promoted understanding of GX steel among ISO and other international organizations. Through such international standardization efforts, the company is taking the initiative towards establishing social infrastructure that will allow our customers to use GX steel with peace of mind.

While ensuring the predictability of GX investment recovery through such initiatives, Nippon Steel will push forward with the development and implementation of three breakthrough technologies and, in doing so, we will realize the "Nippon Steel Carbon Neutral Vision", which aims to achieve carbon neutrality by the year 2050.

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