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NIPPON STEEL

Nippon Steel's Green Transformation (GX) Initiatives

Update on Developments, Investments and Market Creation

NET ZERO

NIPPON STEEL Green Transformation initiative

May 14, 2026

Nippon Steel Corporation

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1. Nippon Steel's Policy on CO_2 Emissions Reduction

Nippon Steel's Initiatives to Address Climate Change

Our Mission

Nippon Steel Corporation Group will pursue world-leading technologies and manufacturing capabilities, and contribute to society by providing excellent products and services.

Response to Climate Change

- Reduce CO_2 emissions in the steelmaking process
- Contribute to CO_2 emissions reduction in society
  (CO_2 emissions reduction during steel processing and usage)

Ensure a sustainable supply of essential materials to build the social infrastructure while achieving continuous corporate value growth

Realize a carbon-neutral steelmaking process by 2050

GX Steel*

Supply products that contribute to CO_2 emission reductions in society

GX Solutions

Contribute to the customer's CO_2 reductions

Realize a carbon neutral society by 2050

* GX Steel: Defined as "Green Steel for Green Transformation Development" as stated in the summary of the Study Group on Green Steel for GX Promotion, organized by the Ministry of Economy, Trade and Industry (METI) in January 2025.

Support the International Competitiveness of the Manufacturing Industry

- **Nippon Steel has world-leading technologies in high-grade steel and have been supplying steel products with top-class performance and quality as solutions both in Japan and overseas.**
- **Nippon Steel will continue to fulfill our role to provide high-grade steel products using a carbon-neutral process that currently can only be made using the blast furnace process.**

✓ High-Performance, High-Quality, High Value-Added Product Portfolio

Automobiles and Home Appliances

- **Reduction of CO_2 emissions during product manufacturing**
- **Reduction of CO_2 emissions during product use, etc.**

NSafe™-AutoConcept

Achieves weight reduction of vehicles with solutions for using high-tensile materials and design and engineering proposals
▶Contributes to CO_2 reduction during both vehicle manufacturing and driving

Ultra High Tensile Steel Sheets

High-tensile steel sheets with a tensile strength of 1.0 GPa or higher.
Ensures safety in vehicle collisions by using high tensility steel while reducing vehicle weight to improve fuel efficiency and lower CO_2 emissions

High-Efficiency Electrical Steel Sheets

Achieves reduction of electrical energy loss (iron loss)
▶Contribute to CO_2 reduction during usage of automobile and home appliances
▶Improves the efficiency of transformers for power transmission

Energy

- **Contribution to society's energy transition**
- **Contribution to energy savings in power transmission and distribution, etc.**

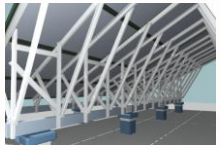
Cryogenic Steel for LNG Tanks

Ensures high safety even in cryogenic environments for storing LNG (liquefied natural gas)
▶Contributes to the expanded use of LNG, which emits less CO_2 during combustion

Stainless Steel for High-Pressure Hydrogen HYDREXEL™

Provides the strength and workability required for infrastructure buildout of hydrogen stations, etc.
▶Contributes to the realization of a hydrogen-based society

High Corrosion Resistant Coated Steel Sheet ZEXEED™



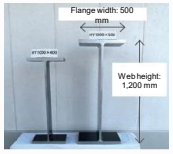
- Achieves excellent corrosion resistance under harsh environments
- Eliminates the need for post-coating

▶Extends the service life of solar power mounting structures
▶Reduces CO_2 emissions during coating process at customers' manufacturing and maintenance processes

Infrastructure

- **Reduction of CO_2 emissions during construction**
- **Improved energy efficiency in rail transportation, etc.**

Extra-Large H-Beam with Fixed Outer Dimensions MEGA HYPER BEAM™



Achieves design simplification and labor-saving fabrication of Hyper Beam for extra-large sizes
▶Enables construction with fewer materials in a shorter period, contributing to CO_2 reduction

Super High Tensile Bolt (SHTB)

Achieves ultra-high yield strength, approximately 1.5 times that of conventional products (S10T)
▶Contributes to CO_2 reduction by reducing materials for component manufacturing

Targeting Carbon Neutrality by 2050 Through Dual Focus on Technology Development and Market Creation

Installation of large-scale EAF

High-grade steel production in large-scale EAF

Executing the implementation projects at Yawata, Shunan, and Hirohata.

Reduction of total CO_2 emissions by 2030 (compared with 2013 baselilne)
30% reduction
▽31 million tons/year

Creation of GX Steel Market

Creating GX Steel market in which the value of CO_2 reduction is shared across the entire value chain

Development of Breakthrough Technologies (Hydrogen-Based Steelmaking)

Promoting world-leading technology development

Hydrogen blast furnace

Hydrogen shaft furnace

Establish commercialization technology by around 2040

Aim to achieve carbon neutrality by 2050

Challenges and Initiatives to Achieve Carbon Neutrality

Technology development

There is no readily available decarbonization technologies in steelmaking, unlike in the power sector (e.g., renewable energy and nuclear power)

Promotion of breakthrough technology development
[1] Government support (GI Fund)
[2] Strengthening industry-academia-government collaboration

Huge quantities of cost-effective hydrogen and decarbonized energy is required for carbon-neutral steel production process

Social infrastructure development
[1] Hydrogen and decarbonized energy
[2] CCUS

GX Steel market creation

Rules are required that incorporates the proper evaluation of the value of CO_2 reduction and GX Steel sales initiatives

Regulatory Framework Development and International Standardization of GX Steel

Necessary to build a social framework to recover rising costs and large-scale investments.

Predictability of CAPEX recovery
[1] Government support (CAPEX, OPEX)
[2] Creating the GX Steel market

Further demand creation through public procurement
Further expansion of procurement by private enterprises, etc.

Iron Ore Reduction is Required

Iron exists in its oxidized form as iron ore in nature.
Removal of oxygen from iron ore (reduction) is necessary for steel production.

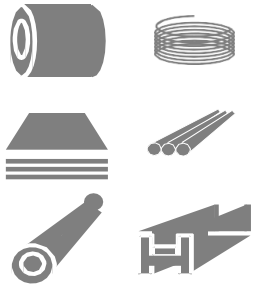
Chemical reaction of carbon (coal) and oxygen produces CO_2 emissions.

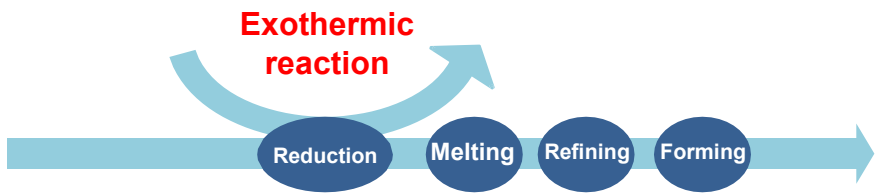
Using **Iron ore** which exists naturally as oxidized iron compounds (e.g., Fe_2O_3),

Oxygen (O) is removed from iron (Fe) by using carbon (C)

Approximately 2 tons of CO_2 is produced for every 1 ton of iron produced.

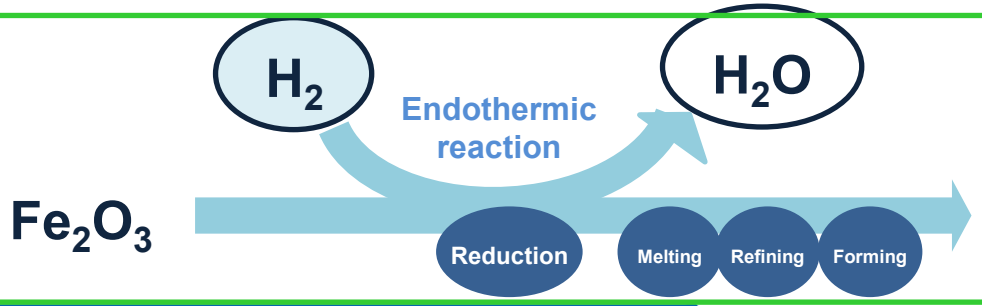
...to produce **steel**





Reduction using hydrogen

The challenge to develop carbon-neutral steelmaking

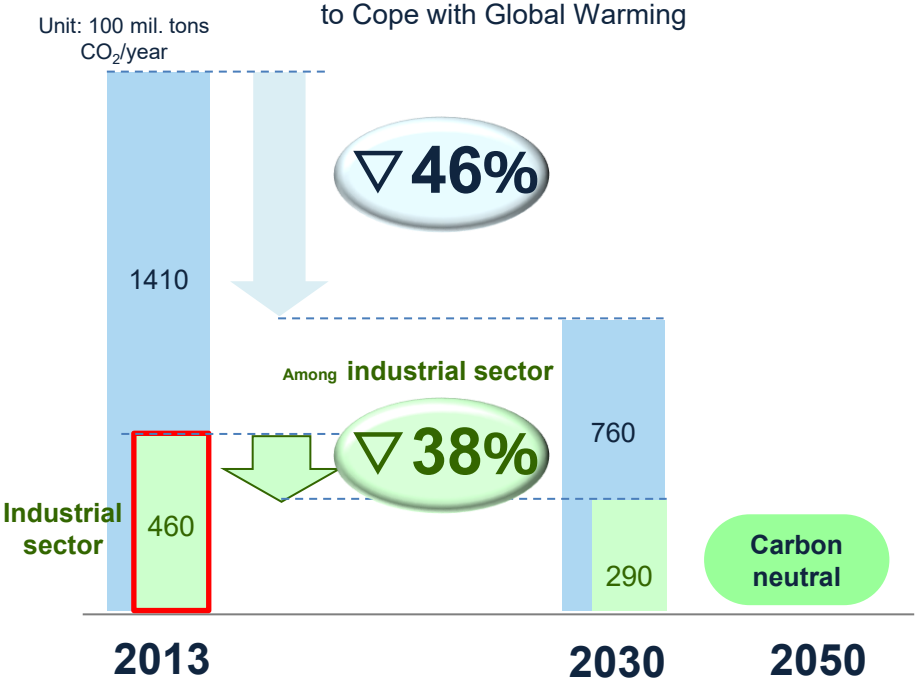


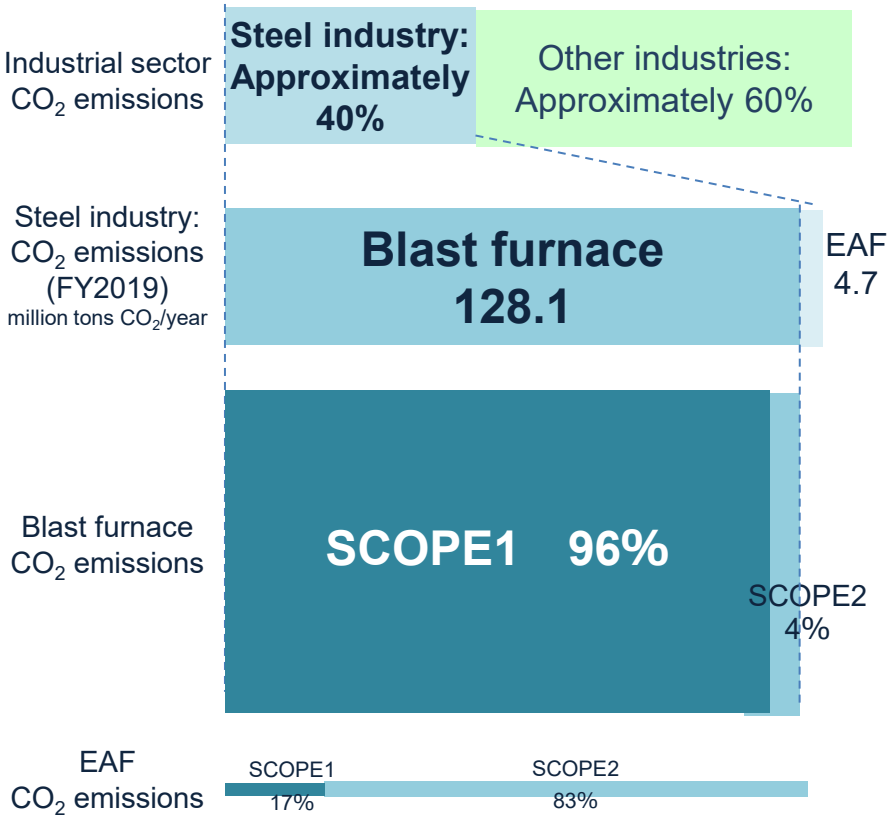
Reduction of CO_2 Emissions from Blast Furnace: A Key Challenge in Achieving Japan's Emission Reduction Target

Achieving Japan's 2030 Nationally Determined Contributions (NDC) requires a significant reduction in Scope 1 emissions from blast furnaces, which accounts for a substantial portion of the country's CO_2 emissions.

Japan's 2030 Emission Reduction Targets

under the Law Concerning the Promotion of Measures to Cope with Global Warming

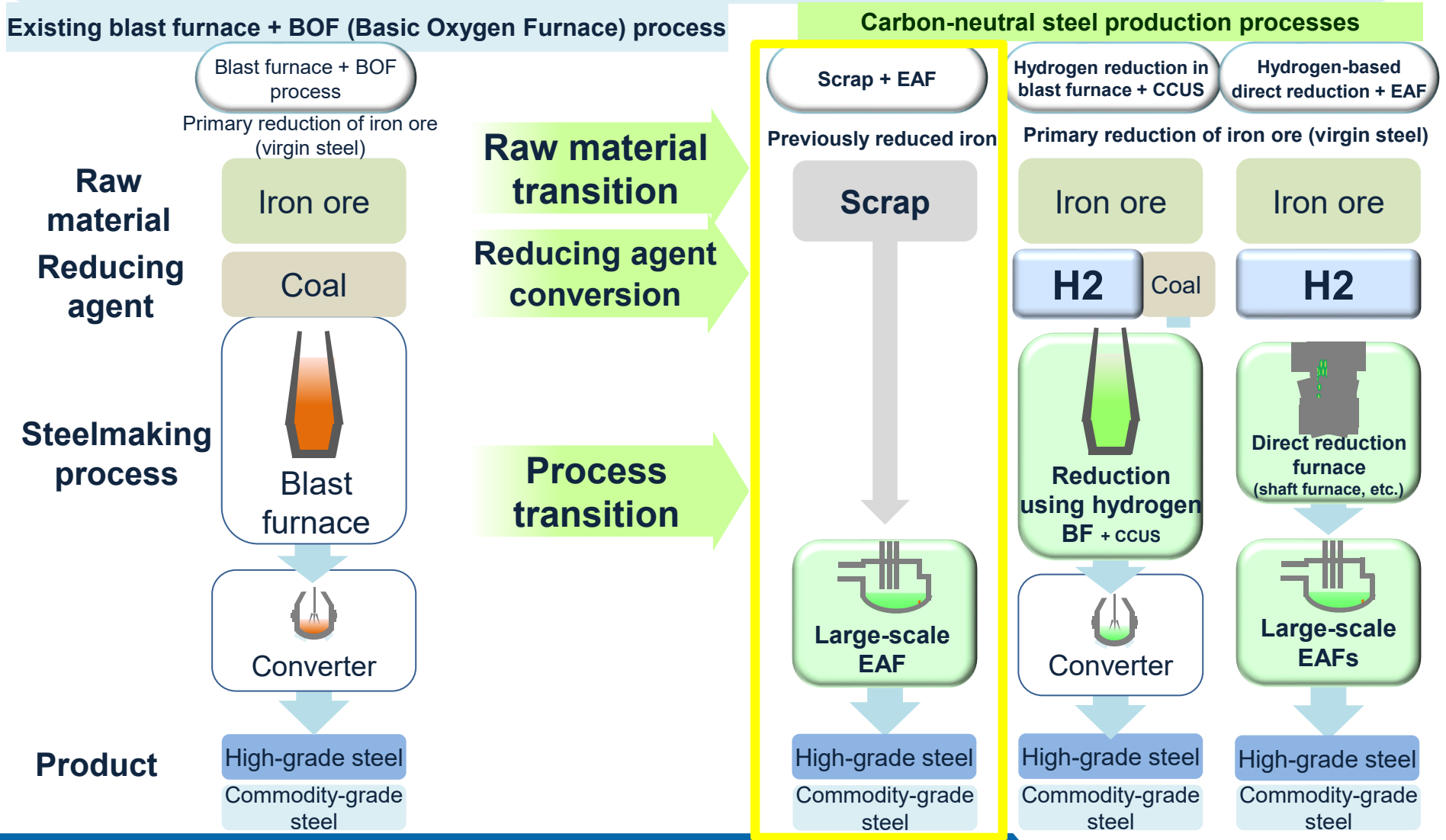




Calculations are based on estimates by the Japan Iron and Steel Federation.

Nippon Steel's Carbon-Neutral Steel Production Processes

A multi-path approach combining (i) scrap (previously reduced iron) + EAF, (ii) hydrogen reduction in blast furnaces + CCUS, and (iii) 100% hydrogen direct reduction + EAFs

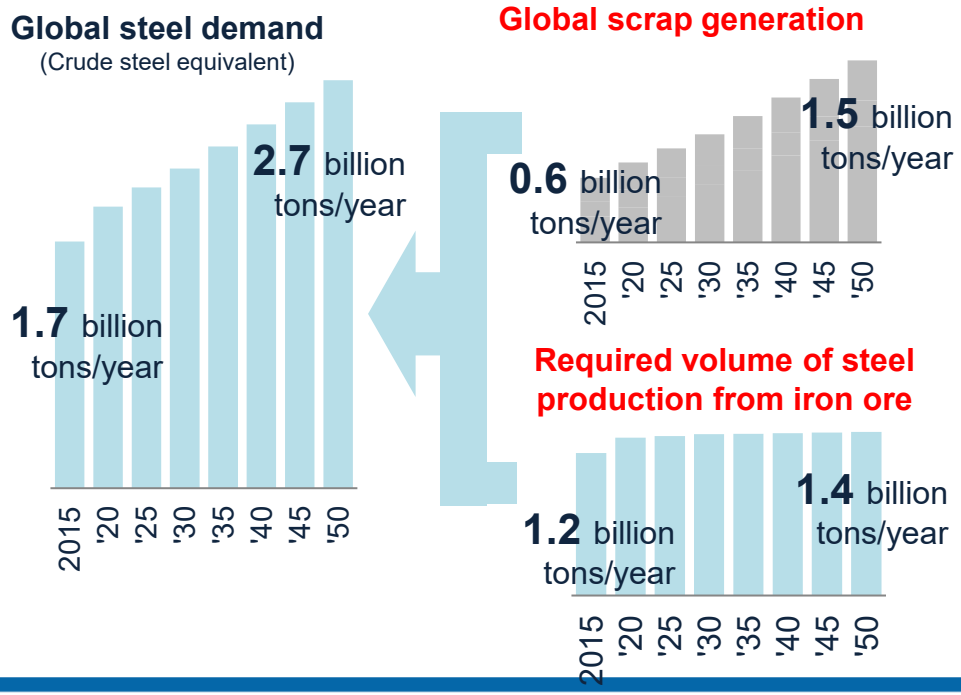


Iron Ore Reduction Process Still Remains Necessary

While the "Scrap + EAFs" process has superior decarbonization potential, a complete transition from current production process is unfeasible due to quantitative and qualitative constraints

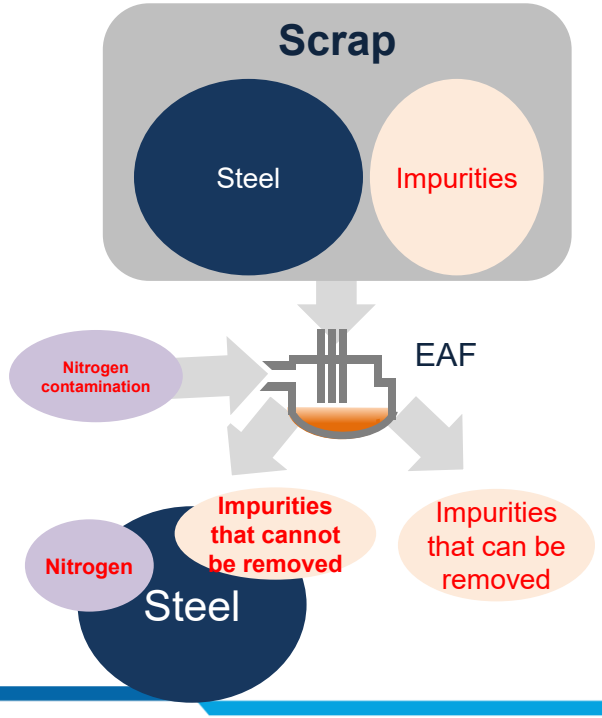
Quantitative:
Limited availability of scrap

Despite increasing scrap metal availability, iron ore reduction still remains necessary to meet global steel demand.



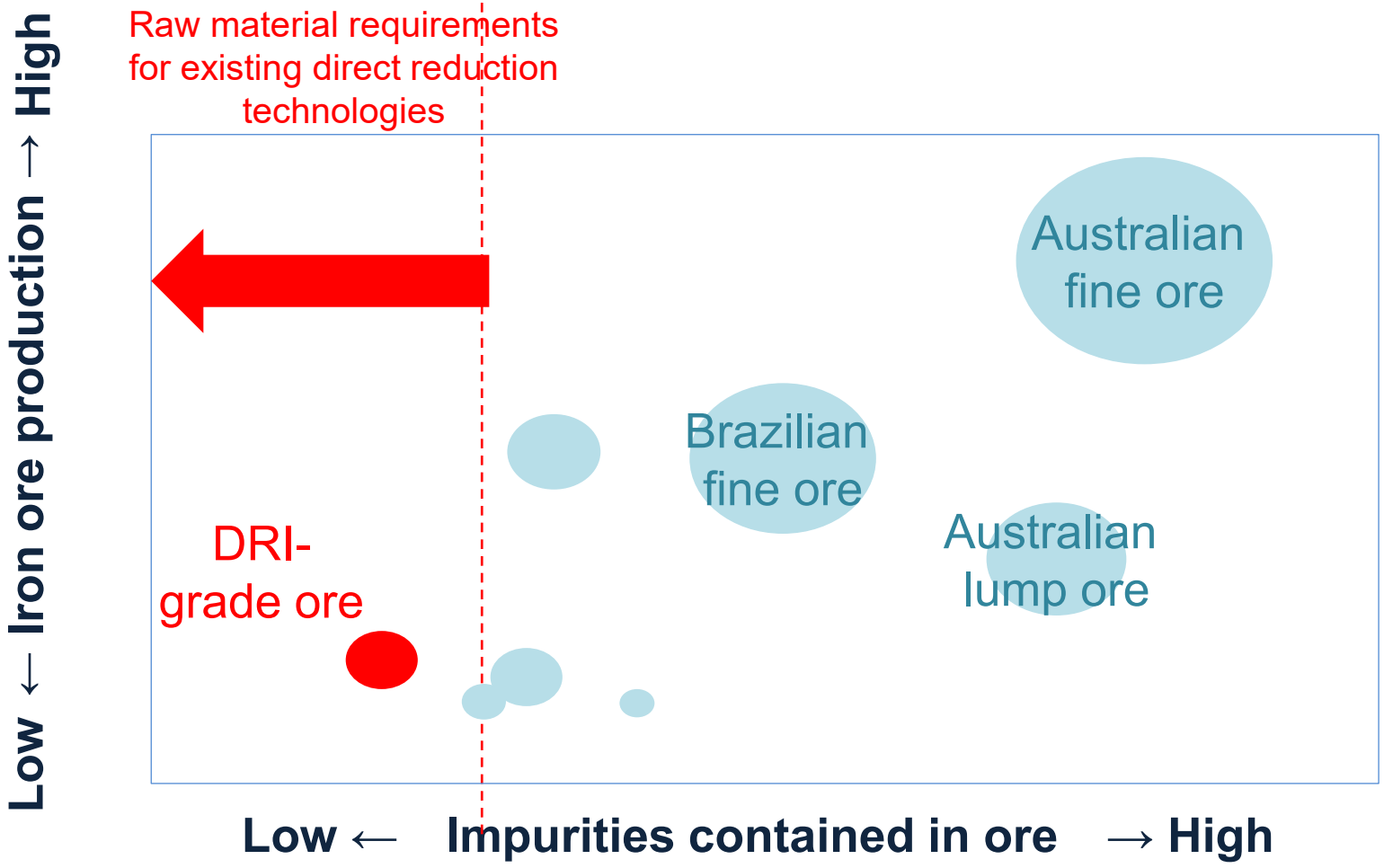
Qualitative:
Impurities in steel scrap

Impurities present in scrap and nitrogen contamination during EAF process make it difficult to produce high-grade steel in an EAF.



High-grade Iron Ore Suitable for Direct Reduced Shaft Furnace is Scarce and Constitutes Less Than 10% of Global Iron Ore Supply

The "hydrogen-based shaft furnace + EAFs" process is advantageous; however, it is necessary to overcome quantitative constraints caused by the scarcity of required high-grade iron ore.



2. Development and Installation of GX Innovative Technologies

1) Roadmap

2) High-Grade Steel Production in Large-Scale EAF
3) Procurement of Scrap and Direct Reduced Iron
4) Production of Direct Reduced Iron Using Hydrogen
5) Hydrogen Reduction in Blast Furnace
6) Decarbonization of Electric Power
7) Progress in Hydrogen Supply and CCUS Infrastructure Development

Carbon Neutral Vision 2050 Roadmap

present >>>>>>>>>>>>2030>>>>>2040>>>2050

High-grade steel production in large-scale EAF

2022 Hirohata No.1 EAF starts commercial operation

Accumulate expertise of high-grade steelmaking using EAF

2023 Commence in-depth study for EAF conversion

2025 Investment decision for EAF conversion

2029 Hirohata No.2 EAF starts operation

Yawata and Shunan EAF goes onstream

2024 Hasaki R&D Center Pilot-scale EAF (10t/ch) Commencement of testing

Hydrogen Shaft furnace

Hasaki R&D Center to carry out integrated technology development of both large-scale EAF and reduced iron production for use in EAF

2026.3 Pilot-scale reduction furnace at Hasaki R&D Center starts test operation

2027 Verification research for scaling up

by around 2040 Establish Implementation technology → Installation

Electric melting furnace

~2030 Establish implementation technology

Hydrogen blast furnaces

2008~ COURSE50 Start development

2022 Commence Super COURSE50 test at the Kimitsu pilot-scale furnace

Reduction in CO_2 emissions confirmed

Construction underway of hydrogen injection facility at Kimitsu No. 2 BF

2026 Start of COURSE50 demonstration test at Kimitsu No. 2 BF

~2030 Commenced COURSE50 Installation

Scale-up assessment

by around 2040 Super COURSE50 Establish implementation technology → Installation

CO_2 emissions reduction by 50% or more

2022	2023	2024	2026
▽22%	▽33%	▽43%	▽45%

Additional reduction with improved heat balance and other measures

Advance technological development with multiple testing

CCS

Advanced CCS project implementation survey (JOGMEC)

A 30% reduction

Achievement of Fully Carbon Neutral Production Process

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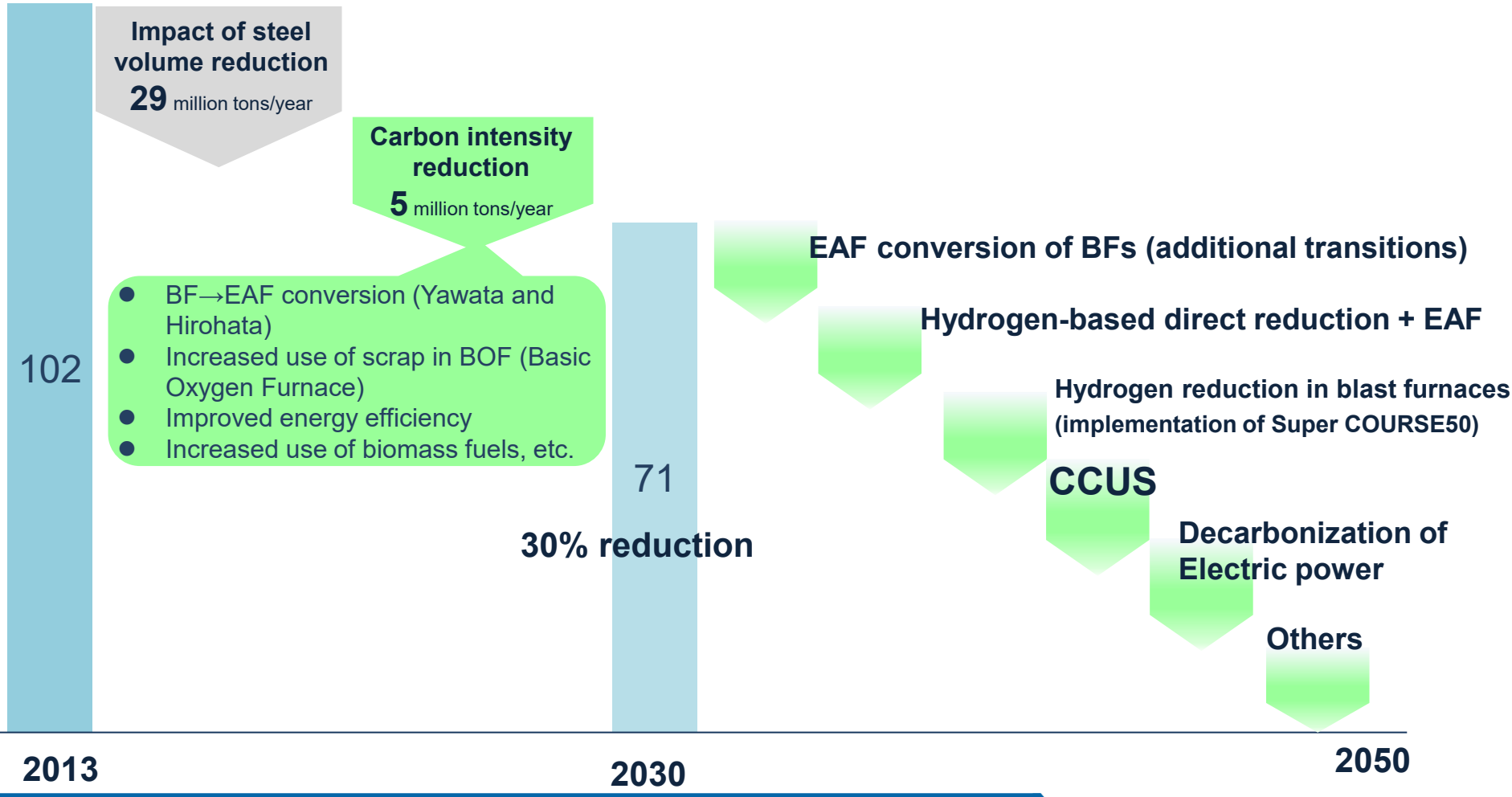
Technology Installation Roadmap to Achieve Carbon Neutrality by 2050

Steadily advancing towards full installation of the multi-pathway CO_2 reduction technologies to achieve 30% reduction by 2030 and carbon neutrality by 2050.



Commercial deployment of CN Steel Production Process

Phased execution of projects with higher realizability and predictability judged from both the Supply side (technology, infrastructure) and Demand side (predictability of investment recovery)

Evaluate govt. support for investment and OPEX

Will costs remain within a socially tolerable limit?

Supply-side

(1) Assess technological maturity

Development status of innovative technologies: Are technological issues resolved and reached commercial readiness?

(2) Assess infrastructure condition

- Usable power supply and cost
- Supply capacity and cost level of high- grade scrap
- Supply capacity and cost level of hydrogen
- Sequestration capacity and cost level of CCS

Inevitable cost increase

(3) Assess CAPEX and OPEX

Determine total cost by layering the above (1) and (2) points and infrastructure costs

Demand-side

(4) Assess if CO_2 reduction value is within justifiable and allowable cost level (i.e. assess socially acceptable cost limit)

- Economic loss based on damage caused by climate change
- Marginal cost of abatement of carbon emissions

(5) Verify GX Steel demand and recoverability of investment and OPEX

- Determine the GX Steel premium or “extra” price that references the above (4)
- Estimate GX Steel demand assuming the premium pricing
  → Key enablers are policies and measures for GX Steel market creation (e.g. public procurement, private sector demand measures)
- Verify cost recoverability based on price estimated above x demand volume

Examples of Supply-side issues in each decarbonization pathway

Pathway	Technological issues
Scrap + EAF 	① Resolve steel quality constraints arising from scrap quality ② Productivity improvements by enlarging EAF size and configure operational technology
H_2 direct reduction + EAF 	① Utilize low-grade iron ore ② Powderizing and sticking ③ Heat compensation to offset endothermic reaction of hydrogen reduction
Hydrogen reduction BF + CCUS 	① Raise CO_2 reduction rate using hydrogen reduction ② Heat compensation to offset endothermic reaction of hydrogen reduction ③ Confirm issues on operation and scaling-up through commercial-scale BF tests

Infrastructure buildout

Scrap	● Improvement of scrap quality ● Establish supply chain infrastructure for scrap procurement ● Realize conducive environment for domestic recycling policies and schemes to secure required scrap procurement volume ● Stable scrap price
Power	● Secure power generation and grid capacity to supply required electricity ● Realize competitive electricity price
Raw Material	● Establish stable procurement of high-grade iron ore
Hydrogen	● Achieve an acceptable hydrogen price ● Reduce renewable power cost ● Advance transportation and storage technologies ● Establish procurement routes/network for required hydrogen ● Develop hydrogen supply infrastructure
CCUS	● Secure storage sites for CO_2 volumes ● Realize infrastructure and low costs for transportation and storage of CO_2

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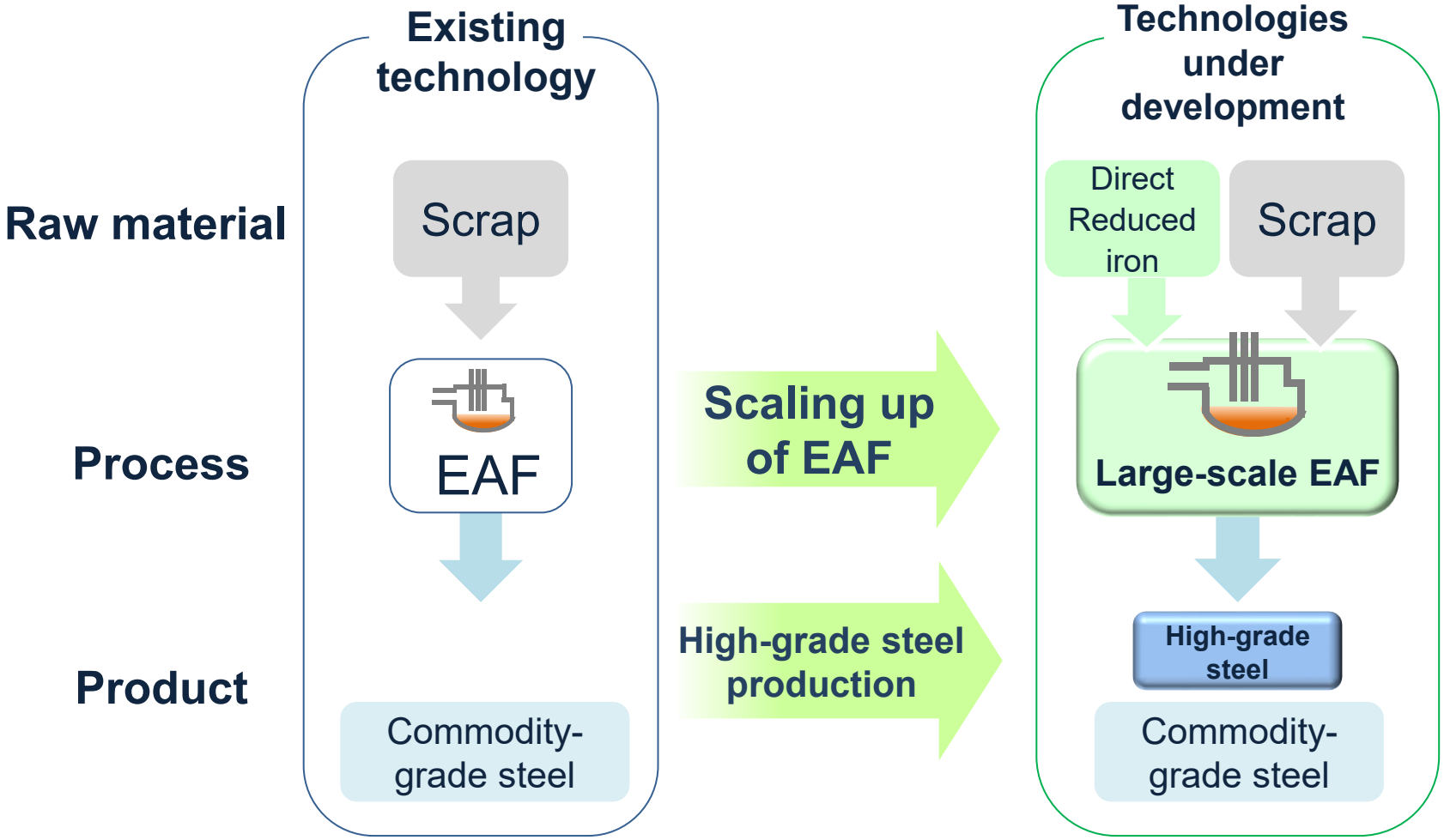
Technology Overview of High-Grade Steel Production in Large-Scale EAF

Development of EAF technology with similar productivity and steel product quality as blast furnace + BOF process



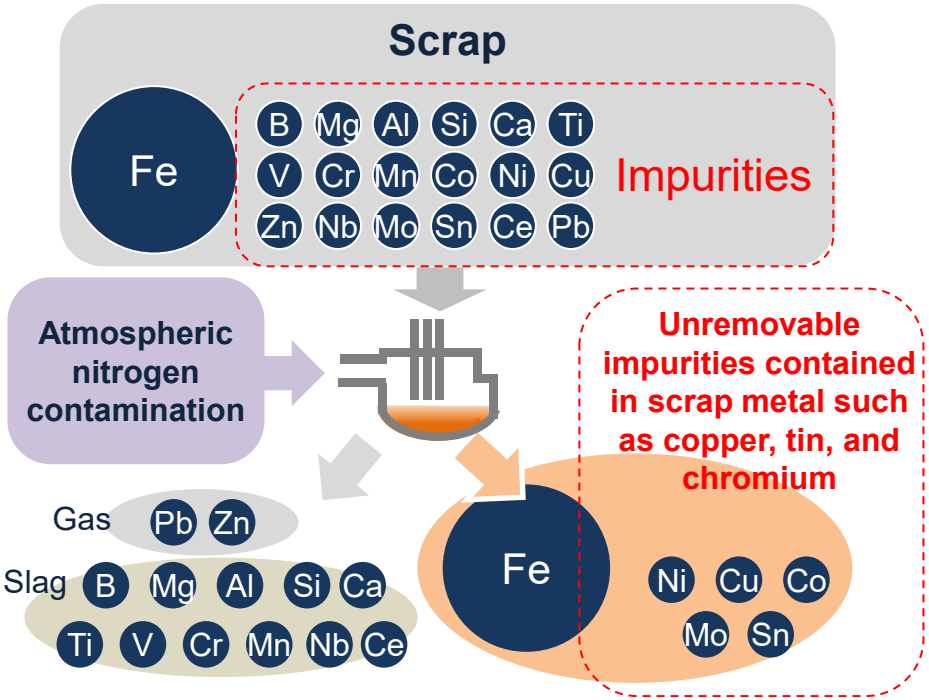
Overcoming Quality and Productivity Constraints of Existing EAFs and Moving Toward the Installation Phase of Innovative EAF

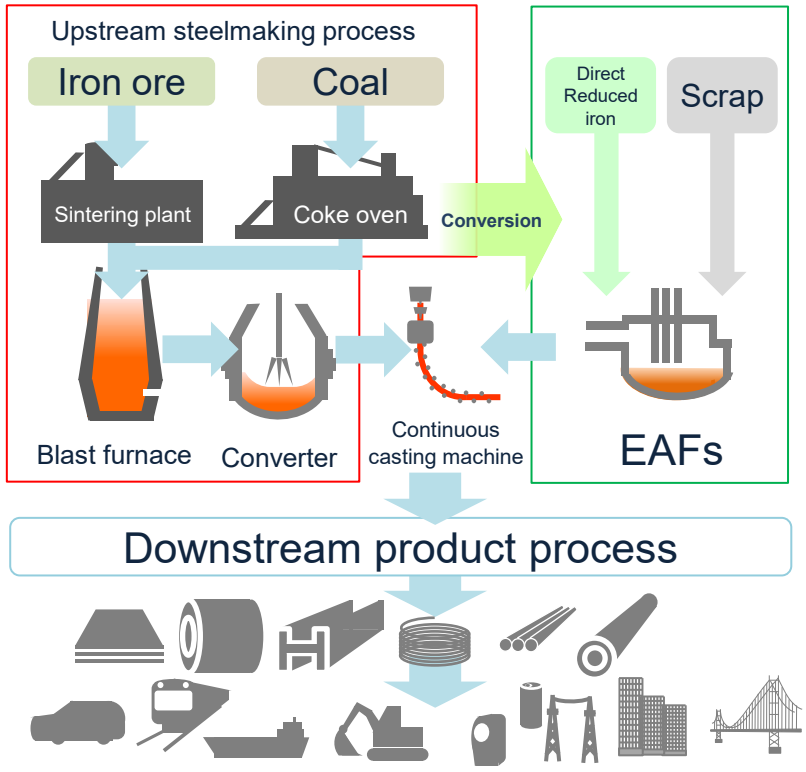
Quality constraints

Current EAF technology is substantially inferior to the BF + BOF process in terms of metallurgical control, including alloy composition adjustment and impurity removal. Difficult to manufacture high-grade steel of advanced processability and functionality.

Productivity constraints

In order to replace BFs, an EAF must achieve significantly higher productivity (i.e. large-scale EAF) to utilize the existing downstream processes and enable high-grade steel supply





Development of technologies that mitigate scrap quality constraints

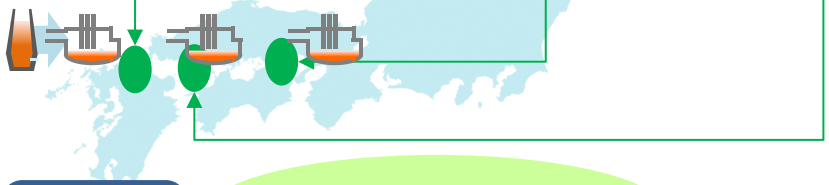
Development of equipment and operational technologies for large-scale EAF

Investment in BF to EAF conversion

(Announced on May 30, 2025)

Achieve target of 30% CO_2 reduction by 2030 with the EAF conversion at Kyushu Works (Yawata Area) by FY2029

	Construction of a new large-scale EAF at Yawata	Expansion of EAF capacity at Hirohata	Modification and restart of Shunan EAF
Facility capacity	300-ton/ch scale	100-ton/ch scale	160-ton/ch scale
Production capacity	**2** million tons/year	**0.5** million tons/year	**0.4** million tons/year
Start of production	**2nd half of FY2029**	**2nd half of FY2029**	**2nd half of FY2028**
Investment amount	¥**630.2**billion	¥**140.0**billion	¥**98.5**billion



The blast furnace and related facilities* in the Yawata Area will be shutdown with the installation of EAF

* Iron ore, coal yard, sintering machine, coke oven, raw material handling facility, and basic oxygen converter, etc.

Investment amount

¥**868.7**billion

CAPEX

Government support

Project selected for government support under the GX Promotion Act on May 30, 2025

Up to ¥**251.4** billion

OPEX

Plans to apply for Strategic Materials and Production Base Taxation System (OPEX support): Tax credit of ¥20,000/ton)

CO_2 emissions reduction effect

Reduction of **3.7** million tons/year

GX Steel supply capacity

NSCarbolex® Neutral

+1.6 million tons/year

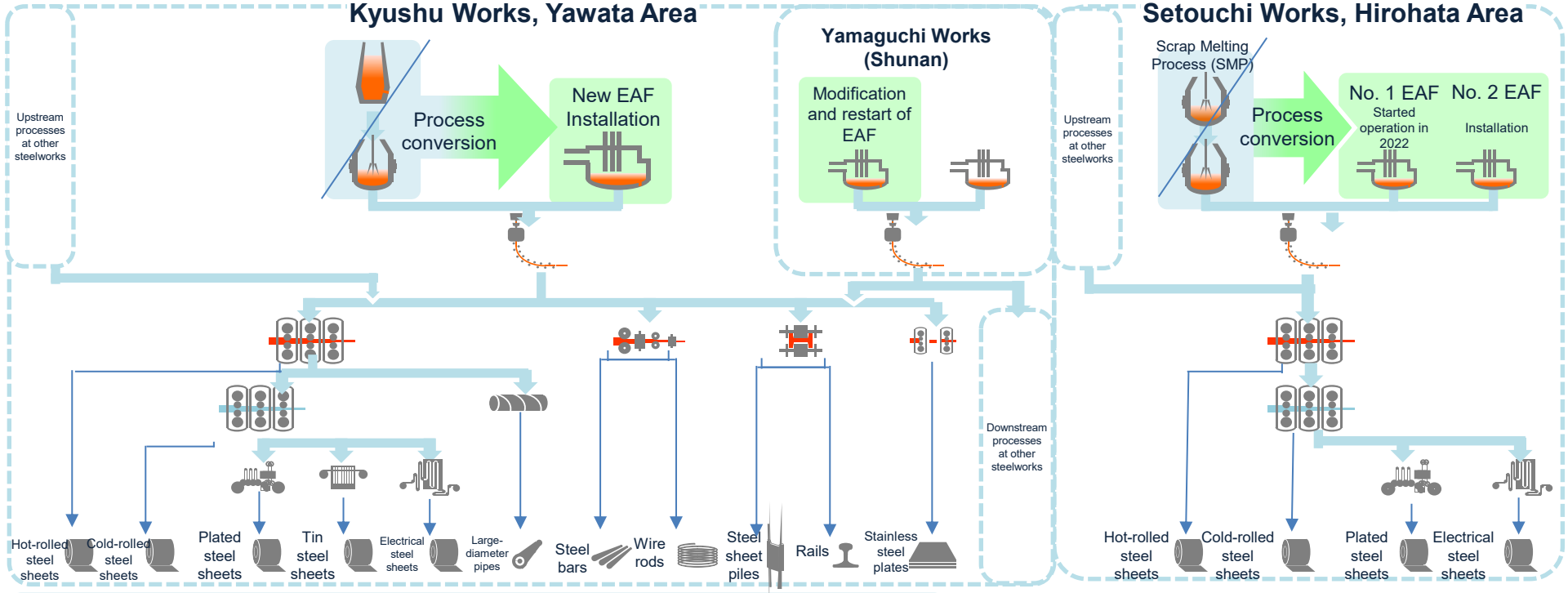
*SMP : Scrap Melting Process (SMP)

Realizing the World's First Integrated EAF High-grade Steel Manufacturing and Mass-production System to Support Japan's International competitiveness

Combine integrated high-grade steel manufacturing technology with EAF innovations to achieve high productivity and superior quality (workability and functionality) across a wide range of products.

Post-completion EAF product lineup

	Steel sheets					Bars and wires			Construction materials		
	Hot rolling	Cold rolling	Coating	Tinplate	Electrical steel sheets	Steel bars	Wire rods	Stainless steel	Large-diameter pipes	Steel sheet piles	Rails
Yawata	●	●	●	●	●	●	●	●	●	●	●
Hirohata	●	●	●		●						



Mass-production of high-grade steel—including automotive steel sheets, electrical steel sheets, rails, and steel sheet piles—using EAFs.

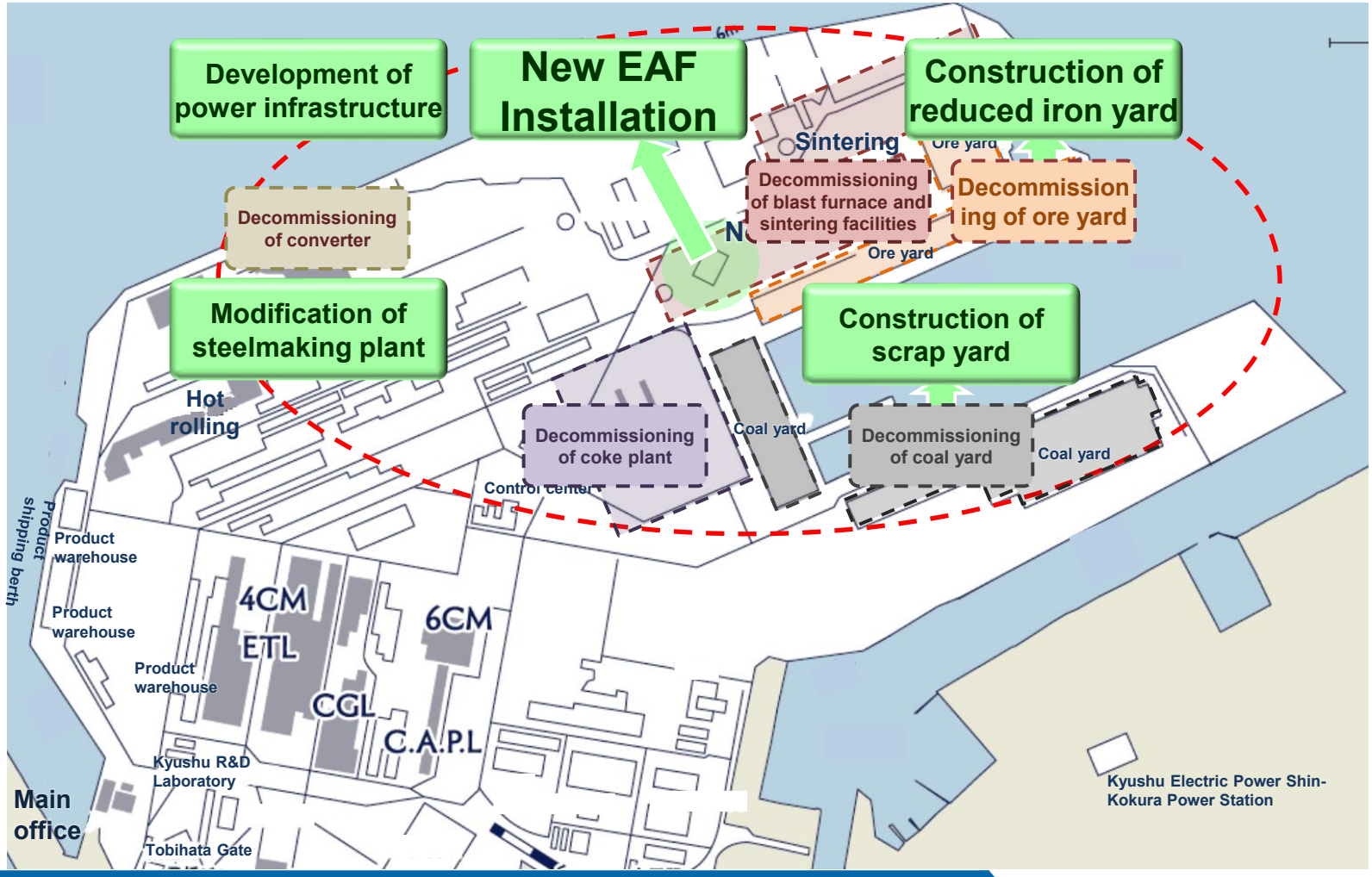
Expanding high-grade steel manufacturing technologies, such as for **electrical steel sheets**, which have proven successful at the No. 1 EAF commissioned in 2022.

Conversion from BF Steelmaking Process to the EAF Process at Kyushu Works, Yawata Area

A landmark project to transform the historic birthplace of Japan's modern steel industry.

Redeveloping 50% of the total land area of the Yawata Area

Total land area of Yawata Area: Approximately 7 million m^2 (equivalent to around 150 Tokyo Domes)



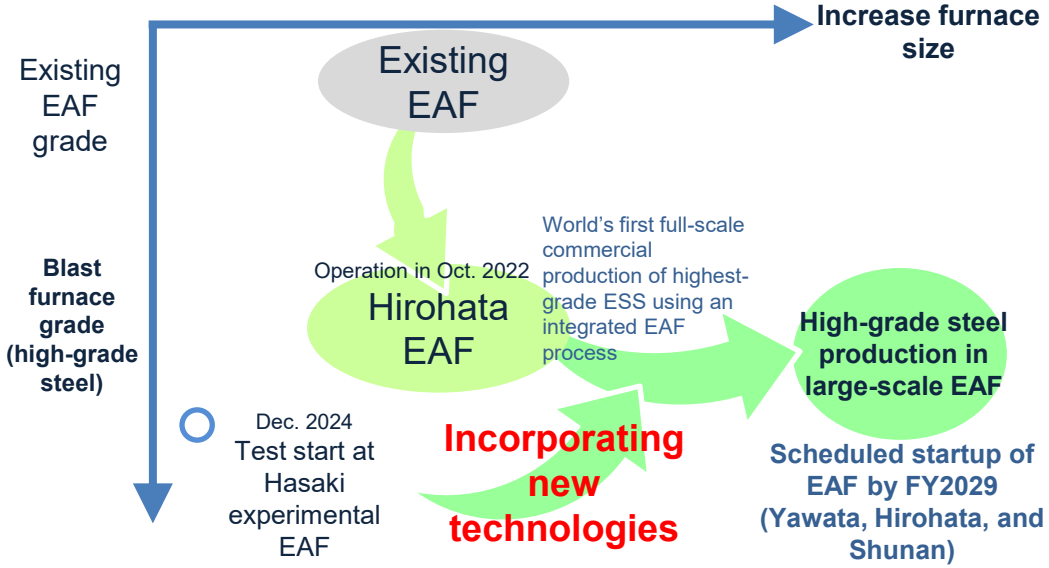
Construction Progress

Currently commencing construction of the new EAF after preparatory groundwork

Advancement of Technologies for High-Grade Steel Production in Large-Scale EAF

Green Innovation GI Fund Eligible Project

- **Utilizing the pilot-scale EAF installed at the Hasaki R&D Center to develop an high-efficiency dephosphorization and denitrification technologies.**
- **Test results to be reported for stage-gate review of the Green Innovation (GI) Fund on May 2026.**



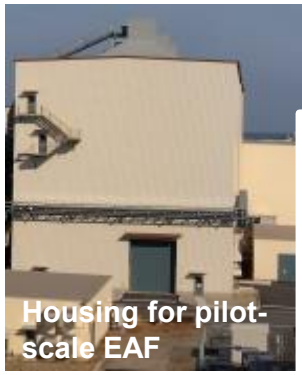
(Reference) Carbon-neutral R&D hub "Hydreams™"

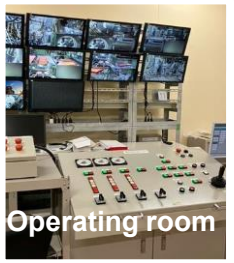
- Accelerate R&D by designating a carbon-neutral development hub named Hydreams™ in which a pilot-scale shaft furnace (described later) has been installed adjacent to the pilot-scale EAF at the Hasaki Research and Development Center
- Integrated technology development covering both large-scale EAF and the production of the raw material of Direct Reduced Iron.

Hydreams — **Hy**drogen **D**irect **R**educed Ironmaking and **E**lectric **A**rc **M**ulti-purpose furnaces for **S**teelmaking

- Constructed a pilot-scale EAF (10-ton/charge scale) at Hasaki Research and Development Center; testing commenced in December 2024.
- Development and verification of high-efficiency dephosphorization and denitrification technologies
  Test results to be reported for stage-gate review of the Green Innovation GI Fund on May 2026.

-> Shift to conduct studies to incorporate these new technologies into large-scale EAF


Housing for pilot-scale EAF


Operating room


Inside EAF building

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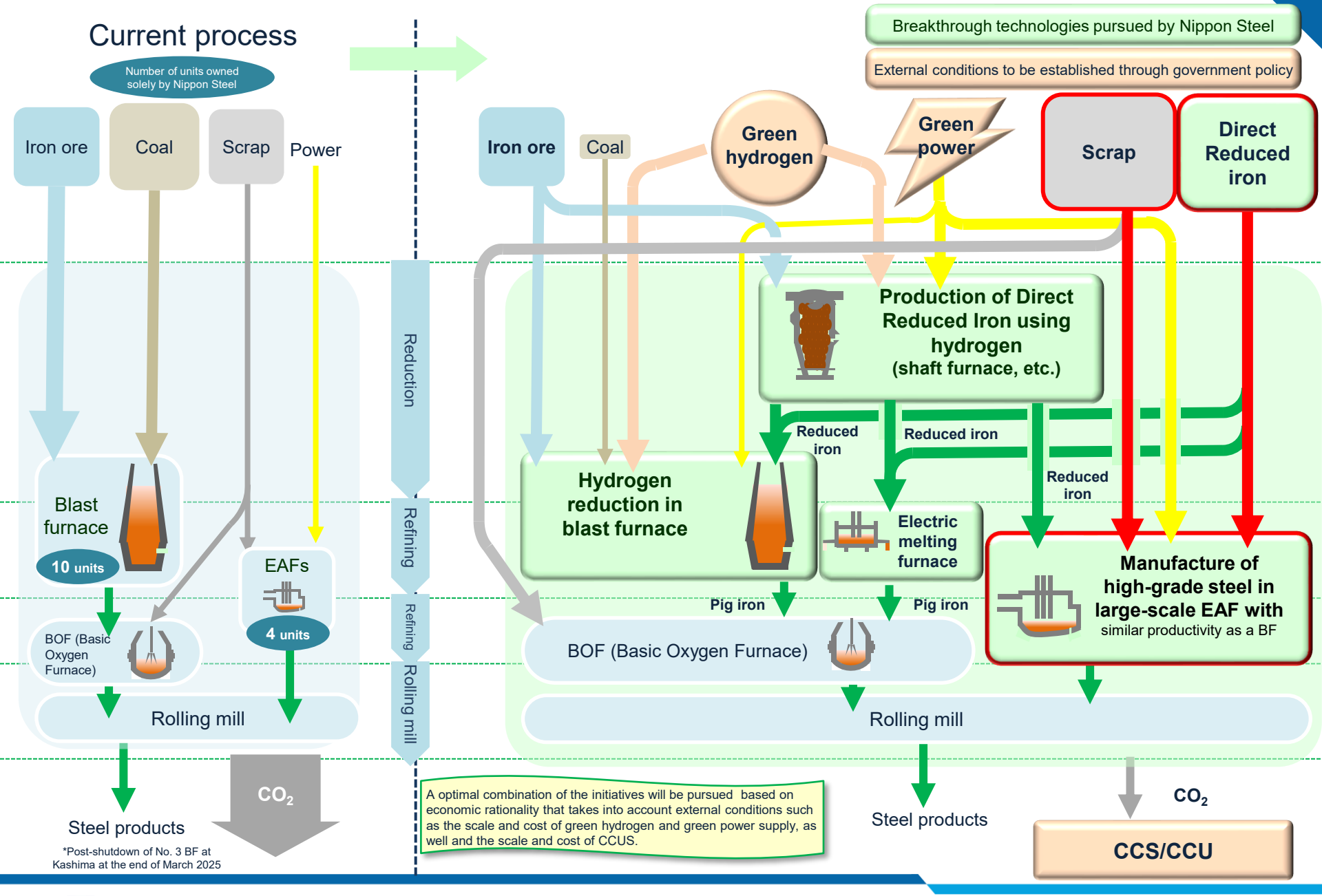
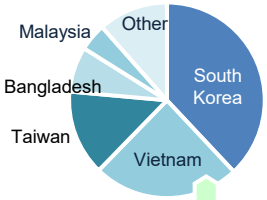
Carbon Neutral Production Process



Domestic Steel and Scrap Circulation

- **Steelmaking raw materials consists of the natural resource of iron ore (primary) and the recycled resource of scrap (secondary).**
- **All steel products are collected and recycled in an economically rational manner.**
- **A portion of domestically collected scrap is exported to countries such as South Korea and Vietnam, where it is used as raw material for steelmaking.**



FY2023
(Unit: million tons/year)

Ferrous scrap export
7 million tons/year

Primary production

Iron ore
101 million tons/year

Blast furnace pig iron production
63 million tons/year

Converter production
64 million tons/year

Crude steel production
87 million tons/year

Ferrous scrap consumption 38 million tons/year

EAF production
23 million tons/year

Casting production 3 million tons/year

Secondary production

Ferrous scrap generation 44 million tons/year

Steel product production
74 million tons/year

13.5% of crude steel production volume

Aged scrap
23 million tons/year
Automotive: 2
Shipbuilding & machinery: 7
Containers: 1
Secondary products: 3
Construction: 5
Civil engineering: 5

In-house originated 12 million tons/year

Processed industrial scrap 7 million tons/year

Steel imports
0.6 million tons/year

Imports of final products and components
(indirect steel imports) 5 million tons/year

15.6% of steel consumption

Domestic steel consumption
46 million tons/year

Domestic steel stock
1,430 million tons 11.5 tons per capita

Collection rate Approximately 90%

1.6% of accumulated steel stock

Loss: Approximately 10%

Domestic supply of final products

Automotive: 15
Shipbuilding & machinery: 10
Containers: 1
Secondary products: 2
Construction: 12
Civil engineering: 1

Steel exports
32 million tons/year

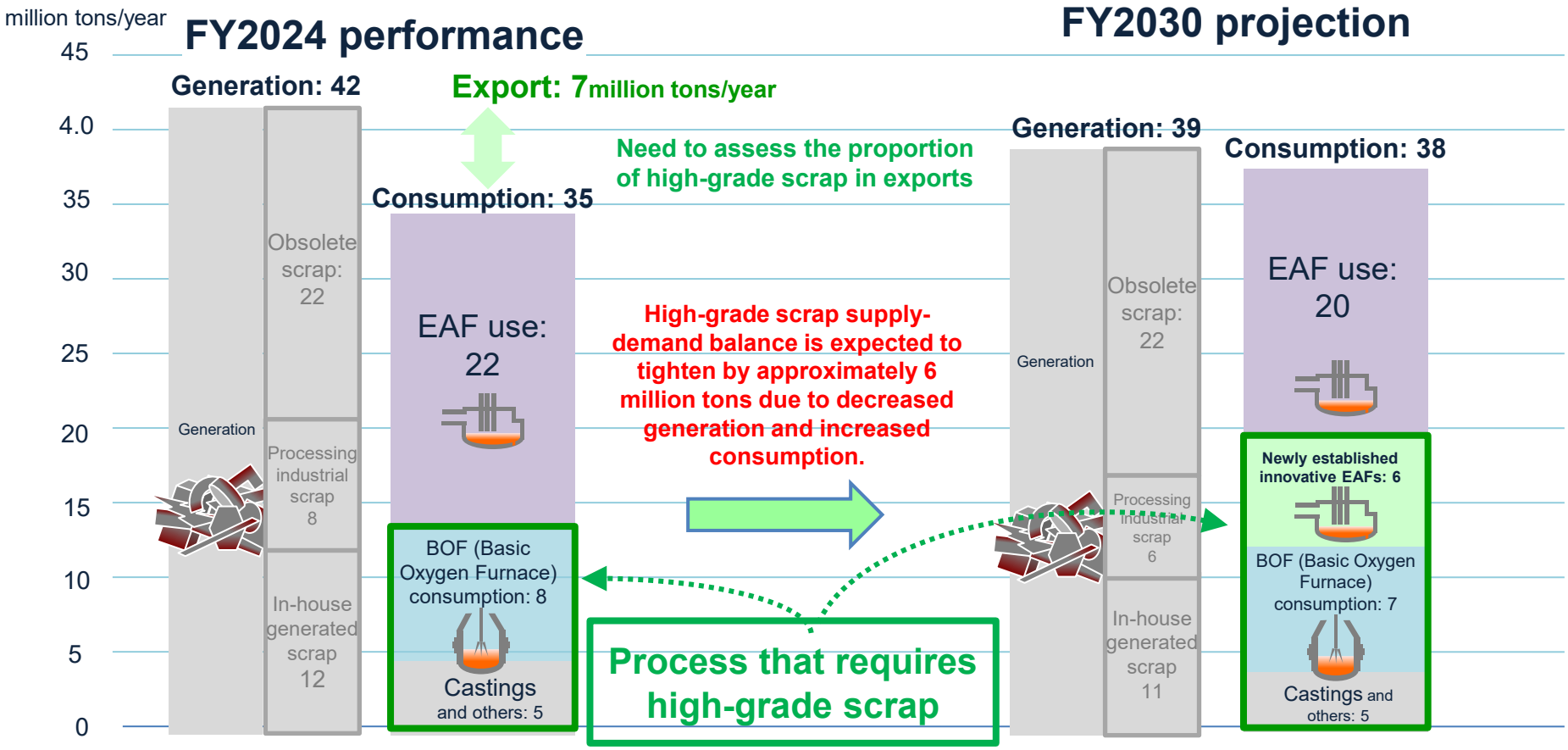
Exports of final products and components
(indirect steel exports) 19 million tons/year

Source: Adapted from "Steel Recycling" by the Japan Iron and Steel Federation

Domestic Scrap Supply and Demand Outlook

- No spare export capacity of scrap metal with the EAF conversion of BFs in the future, despite some exports in recent years.
- Supply-demand likely to particularly tight for high-grade scrap.

Balance of domestic scrap generation and consumption



Comprehensive Strategy for Steel Scrap, DRI/HBI

Nippon Steel Group will adopt a comprehensive strategy for the procurement, utilization, inventory management and logistics of materials, given the significant increase in demand from the introduction of large-scale EAFs and the need to optimize procurement and material blending on a Group-wide basis.

Usage
- Establishment of usage standards based on technical and quality considerations

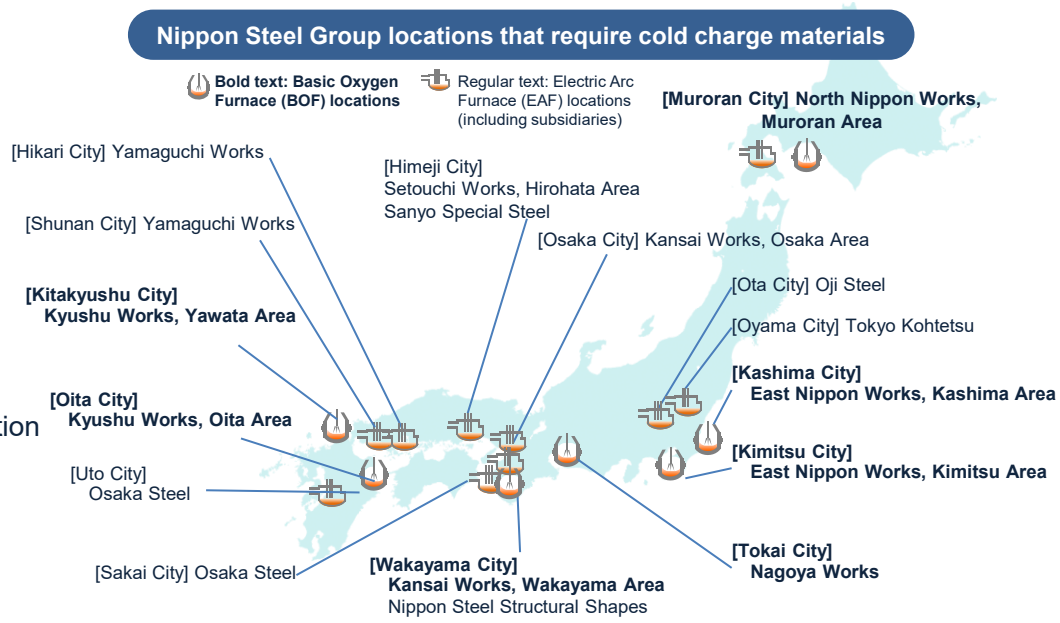
Procurement
- Buildout of a supplier network
- Upgrade lower-grade scrap to higher-grade scrap collected from customers

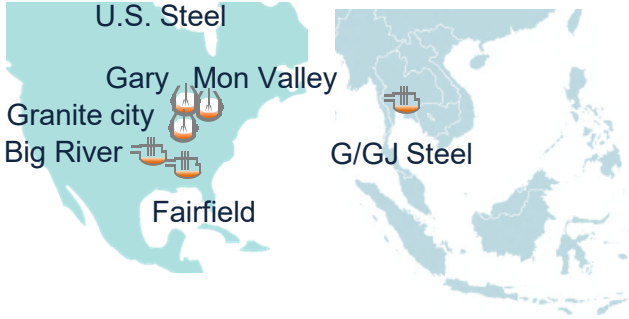
Logistics
- Buildout of transit sites and satellite yards
- Optimization of logistics across entire company

Established a specialized organization called Steel Scrap, & DRI/HBI General Planning Division on April 2025

Scrap

- Establish usage standards, procurement pricing, and inspection
- Engage in dialogue with steel customers on scrap recovery
- Centralize management of cold charge materials at headquarters
- Develop system infrastructure for more sophisticated operational management
- Supply cold iron sources to G/GJ Steel in Thailand
- The steel working group of CPs (Circular Partners) is to conduct domestic supply-demand surveys and research on high-grade scrap creation, under the auspices of METI





Direct Reduced Iron

- Conduct validation of EAF utilization technologies—including quality, melting rate, and in-furnace reactions—at lab-scale, pilot-scale furnace, and commercial-scale furnaces.
- Considering overseas procurement

Optimal and Maximum Utilization of Scrap

It is necessary to build a mechanism for the optimal and maximum utilization of scrap metal across Japan, given that steel scrap is a precious domestic resource that can be reused repeatedly as a "strategic critical material" in Japan so long as it remains within the country.

Establishment of a framework for improving scrap quality

Post-consumer scrap contains impurities, making it unsuitable for steelmaking in a as is form.

⇒ A framework to enhance scrap collection, processing, and sorting is required to upgrade scrap quality and expand usage.

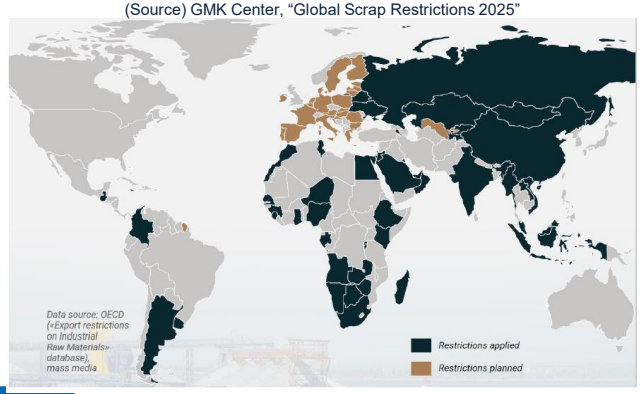
- Support measures to advance scrap collection, processing, and sorting such as precision sorting of construction and demolition waste and domestic ship recycling)
- Establishment of scrap quality standards and specifying appropriate price premiums
- Standardization of designs for simplified sorting, including the use of non-copper wires in ultra-small motors, etc.

Control of overseas outflow of scrap

Currently, 7 to 8 million tons of scrap per year are flowing out of Japan.
Development of policies and systems to control overseas outflow is necessary.

- Position scrap as a "critical material" of economic security
- Institute border measures on scrap exports
- Strengthen crackdown on illegal scrap yards

*Countries with scrap metal export restrictions
(Black: Implemented; Brown: Planned)
(Source) GMK Center, "Global Scrap Restrictions 2025"



Quality improvement alone will risk increasing the overseas outflow of scrap

Management of overseas outflow based on domestic supply and demand conditions for each scrap grade is required.

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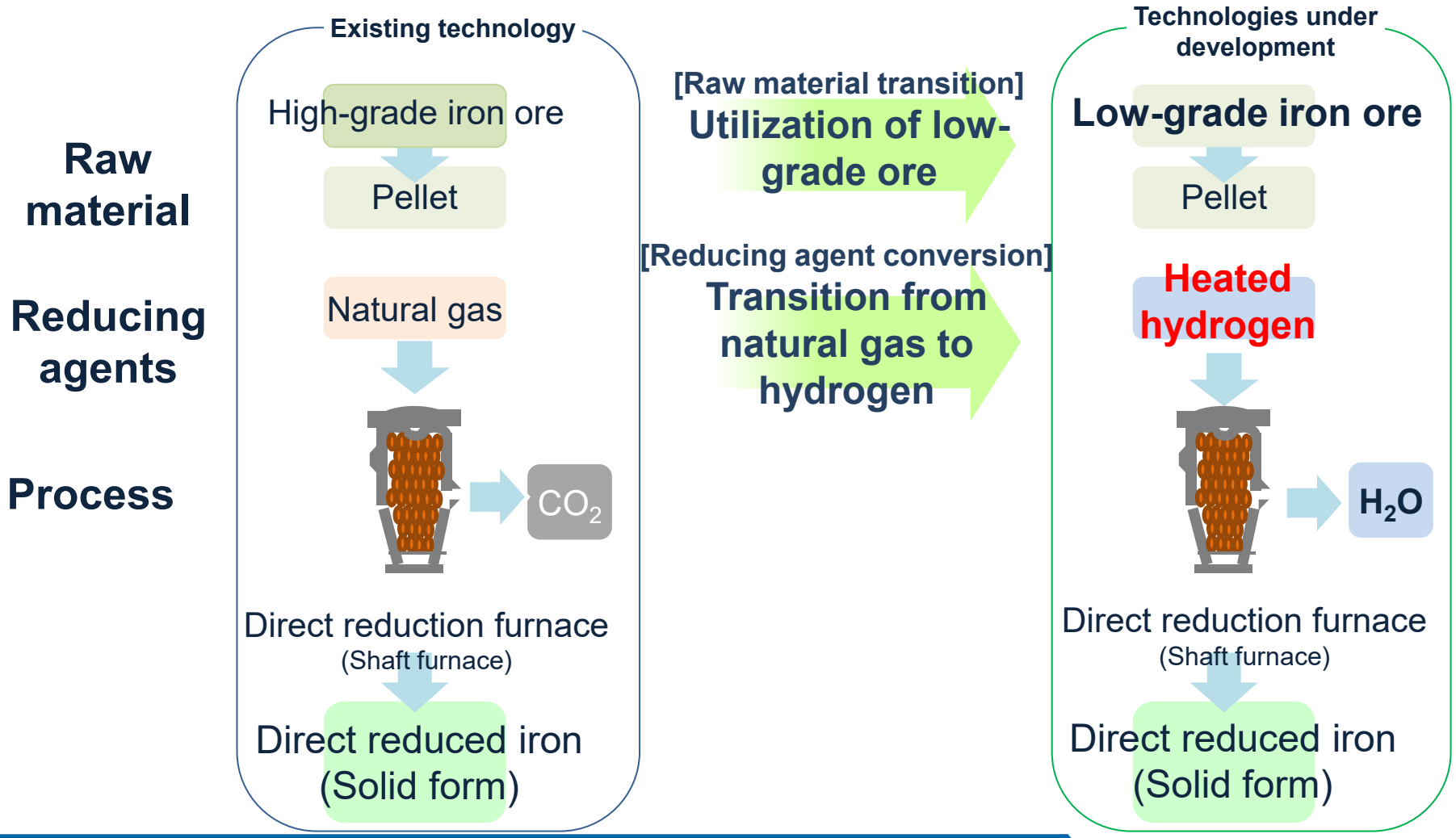
Overview of Technology for Producing Direct Reduced Iron from Low-Grade Iron Ore and Hydrogen

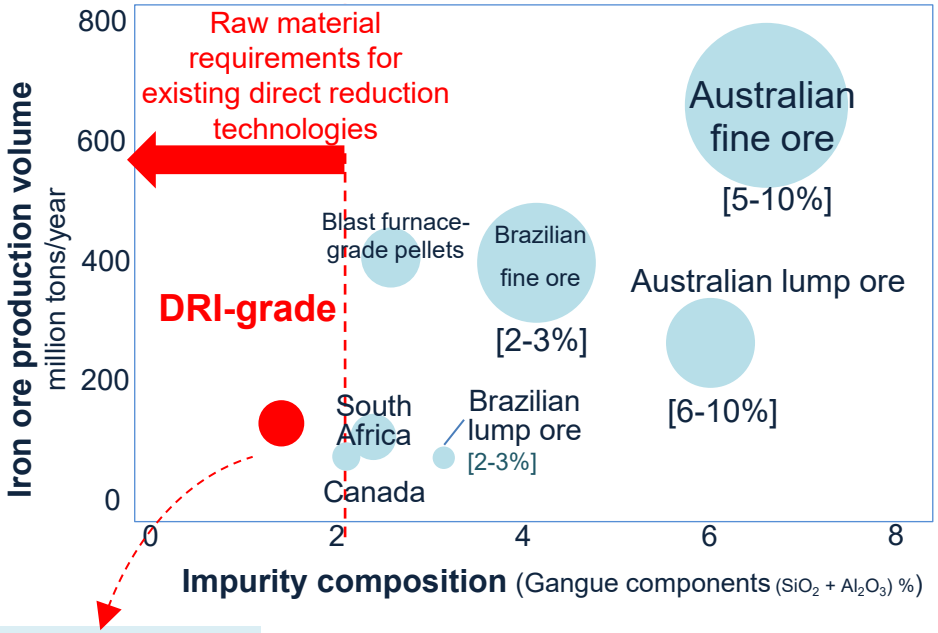
Technology development underway to: (a) convert reducing agent from natural gas to hydrogen and (b) utilize low-grade iron ore currently unsuitable for direct reduction



Technological Challenges of DRI Production Using Low-Grade Iron Ore and Hydrogen [1]

Raw material challenges

High-grade iron ore suitable for DRI production is a scarce resource that constitutes less than 10% of the global iron ore supply



Geographically concentrated in a few regions in Northern Europe and North America.

Source: Compiled by Nippon Steel based on CRU/AME data (2018 production/export volumes)

Productivity challenges

Using low-grade iron ore pose significant obstacles to productivity, stable operation, and the quality of DRI produced.

[Challenges in using Low-Grade Ore to Make Direct Reduced Iron]

[1] **High crystalline water content** (5-10%)
⇒Risk of pellet **explosion** during production
⇒**Low-strength** pellets

[2] **High slag content** (approx. 5× higher than standard)
⇒ Deterioration in the quality of reduced iron (DRI/HBI*): **low meltability**, **reduced reactivity**, increased **powdering**, and excessive **slag volume**, etc.

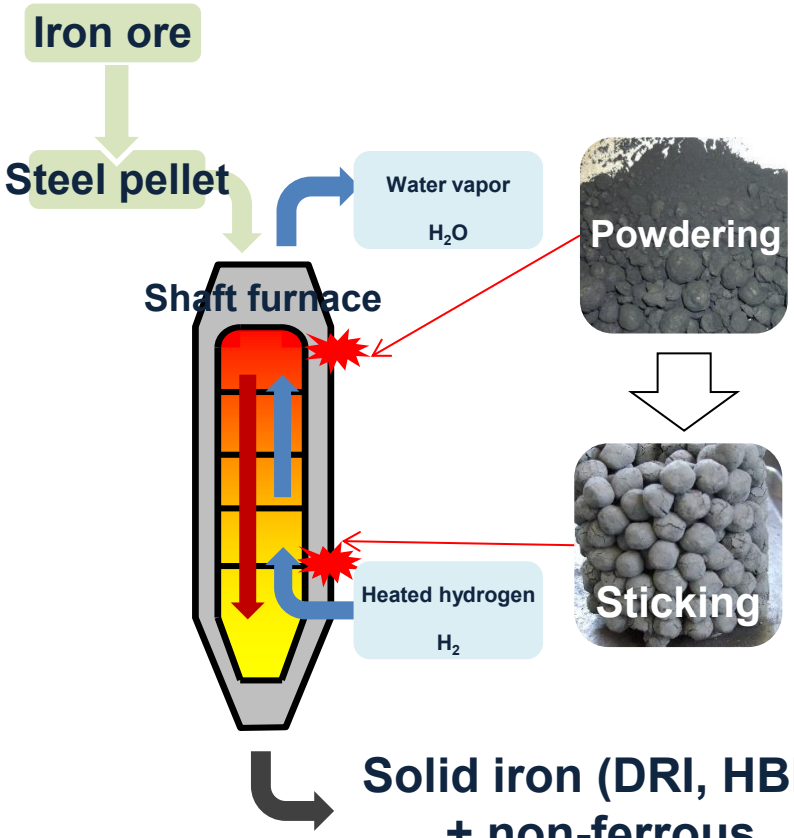
[3] **High phosphorus content**

*DRI = Direct Reduced Iron
HBI = Hot Briquetted Iron

Technological Challenges of DRI Production Using Low-Grade Iron Ore and Hydrogen [2]

Challenges in using hydrogen

Hydrogen reduction is an endothermic reaction, requiring thermal compensation which exacerbates the powdering and sticking of iron ore, a condition that becomes more pronounced with low-grade iron ore.



*DRI = Direct Reduced Iron
HBI = Hot Briquetted Iron

Thermal compensation

Natural gas reduction is an exothermic reaction, whereas **hydrogen reduction is endothermic**, **requiring thermal compensation for the absorbed heat**.
Ensuring safe operation is critical.

Powdering and sticking

Changes in furnace temperature patterns exacerbate iron ore powdering.

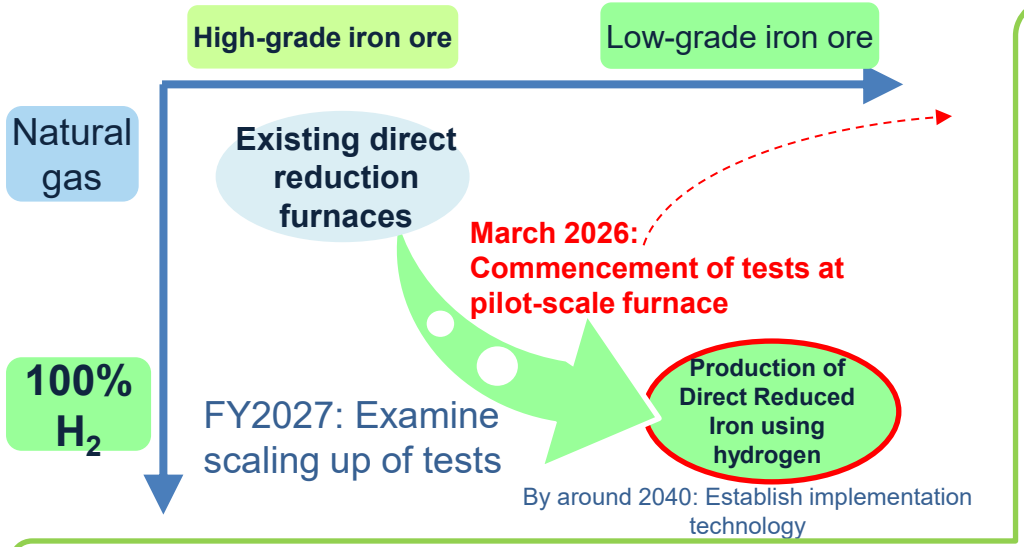
Likely problems are: lack of flow of reductant gas and sticking of the produced materials inside the shaft furnace.

Only high-grade iron ore is resistant to powdering and sticking, but scarcity is an issue.

GX Innovative Technology Development: Production of Direct Reduced Iron Using Hydrogen

GI Fund Eligible Project

Operations commenced on March 2026 at the pilot-scale shaft furnace for DRI production using low-grade iron ore and hydrogen, built adjacent to the pilot-scale EAF at Hasaki R&D Center. Aim to complete industrial-scale hydrogen-based DRI production technology by around 2040.



Started production of Direct Reduced Iron using hydrogen at the pilot-scale shaft furnace on March 2026

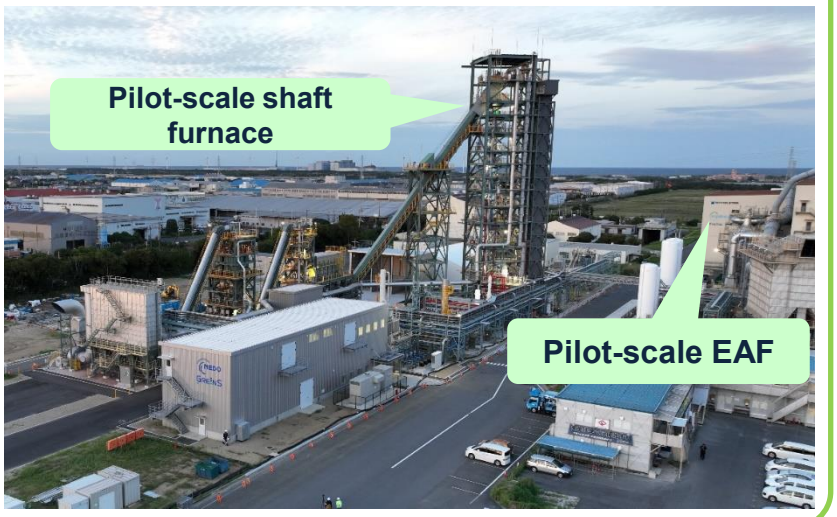
Continue to identify/ascertain the optimal operating conditions.

Direct Reduced Iron produced through hydrogen reduction at the Hasaki pilot-scale shaft furnace

Pilot-scale shaft furnace

- Production capacity: 1t/h
- Site dimensions: Approximately 80 m × 200 m
- Height: Approximately 60 m (Cf. commercial plant: approx. 100-150 m

Full process evaluation (reduction, cooling, molding) is conducted **that mimics the process flow and equipment/system configuration in a commercial plant.**



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Overview and Challenges of Hydrogen Reduction in Blast Furnace Technology

Reduce CO_2 emissions by over 50% by converting reducing agent from coal to hydrogen. Carbon neutrality is expected to be achieved with the combined use of CCUS.

	Existing technologies		Technologies under development
Raw material	Iron ore		Iron ore
Reducing agents	Coking coal	[Reducing agent conversion] Reduction using hydrogen	Coking coal Heated hydrogen
Process	Reduction with coal → CO_2 Blast furnace	**Thermal challenges** Hydrogen reduction is an endothermic reaction which leads to a drop in furnace temperature, which causes: **[1] Reaction to be interrupted/discontinuous; and** **[2] Insufficient melting of iron** **Hydrogen-specific challenges** Handling of heated hydrogen	CO_2 emissions reduction Over 50% Reduction with coal → CO_2 → CCUS Reduction using hydrogen → H_2O Blast furnace

CCUS = Carbon Capture, Utilization and Storage

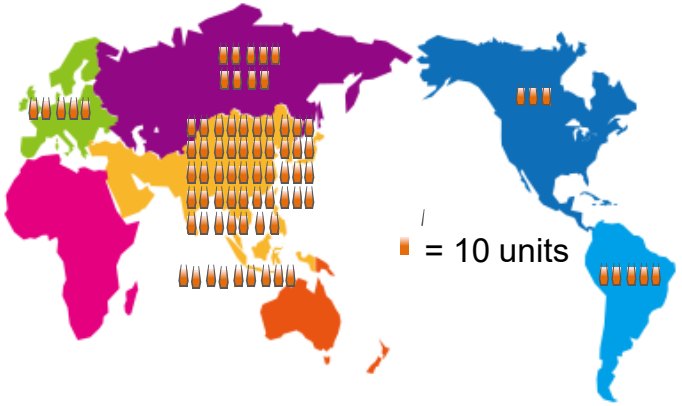
Advantages and Potentiality of Hydrogen Reduction in Blast Furnace Technology

Nippon Steel's technological advantages for hydrogen reduction in blast furnaces

- **The global pioneer** in research and development using a test blast furnace **since 2016**.
- **Leveraging Nippon Steel's comprehensive expertise** to advance technology development:
  - World-class BF operational expertise gained through a longstanding practical experience
  - Advanced analytical technology accumulated by the R&D division, including blast furnace mathematical modeling
  - Cutting-edge equipment technology
- **Massive potential to reduce global CO_2 emission** by successfully deploying hydrogen reduction blast furnace technology

Potential for global CO_2 reduction using hydrogen reduction in blast furnace

Over 70% of global steel production uses the blast furnace process.
Approximately **800** blast furnaces exist worldwide



If the hydrogen reduction in blast furnace technology is applied to all 800 blast furnaces worldwide and achieves a 50% reduction in CO_2 emission, **the potential CO_2 emissions reduction would be approx. 1.4 billion tons per year, equivalent to approx. 4% of global emissions.**

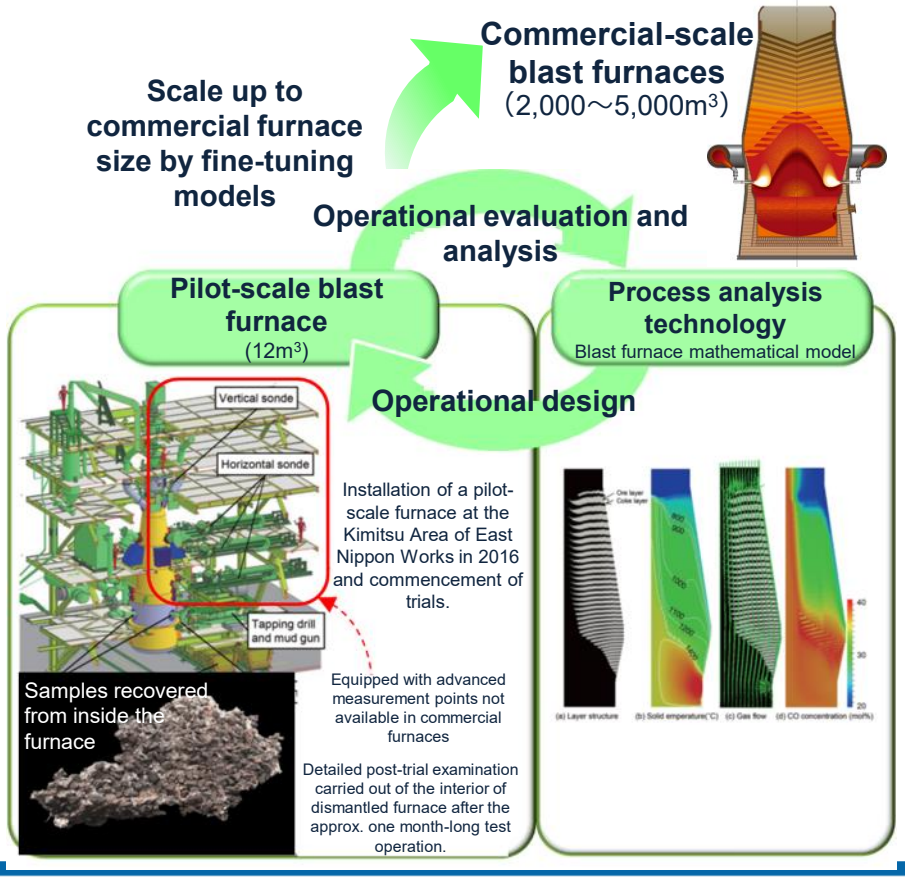
- Global CO_2 emissions: approx. 33.2 billion tons (2021)
- Estimated CO_2 emissions from blast furnaces: approx. 2.8 billion tons
  = Global blast furnace crude steel production (2021): approx. 1.4 billion tons/year
  × CO_2 emission/ton of blast furnace-based steel production: approx. 2 tons

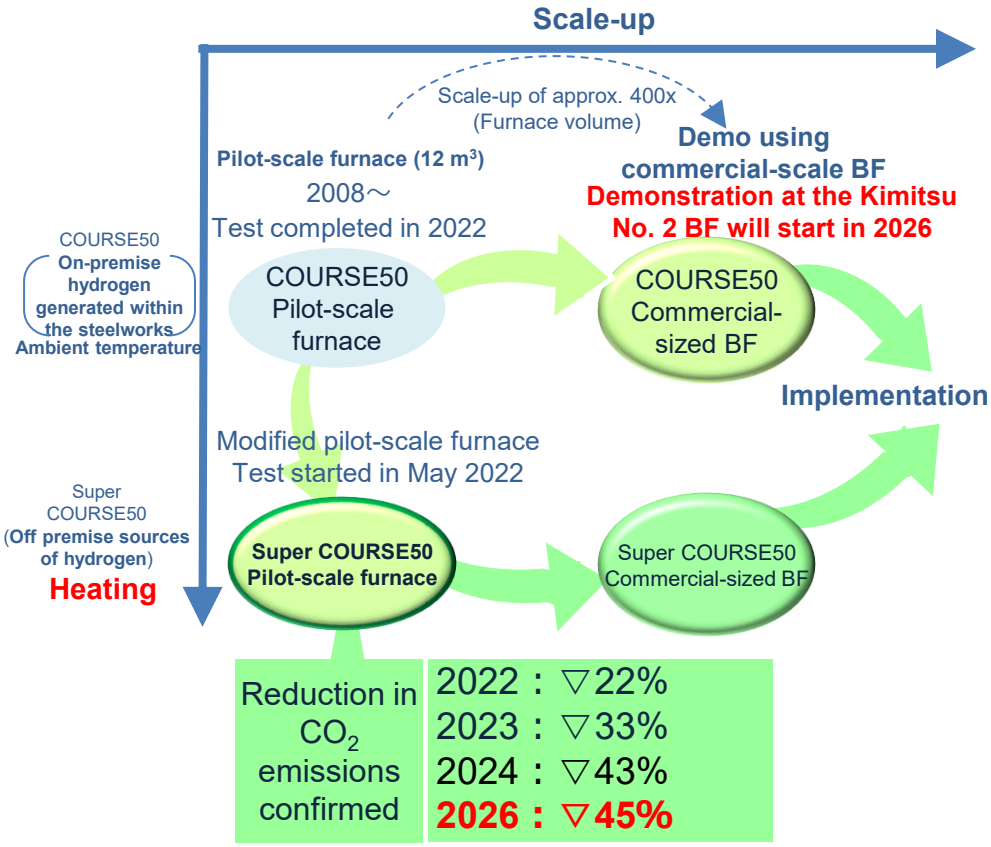
GX Innovative Technology Development: Hydrogen Reduction in Blast Furnaces

GI Fund Eligible Project

- **Achieved a 45% CO_2 emission reduction – a new world record – in test conducted at the pilot-scale blast furnace using heated hydrogen in February/March 2026.**
- **Commercial-scale tests will commence at an actual blast furnace using ambient-temperature hydrogen at Kimitsu No. 2 BF from FY2026.**

Accelerate development for commercialization into life-size BFs by creating a virtuous feedback effect between mathematical modeling and experimental verification to achieve target of over 50% CO_2 reduction, including scaling-up initiatives.





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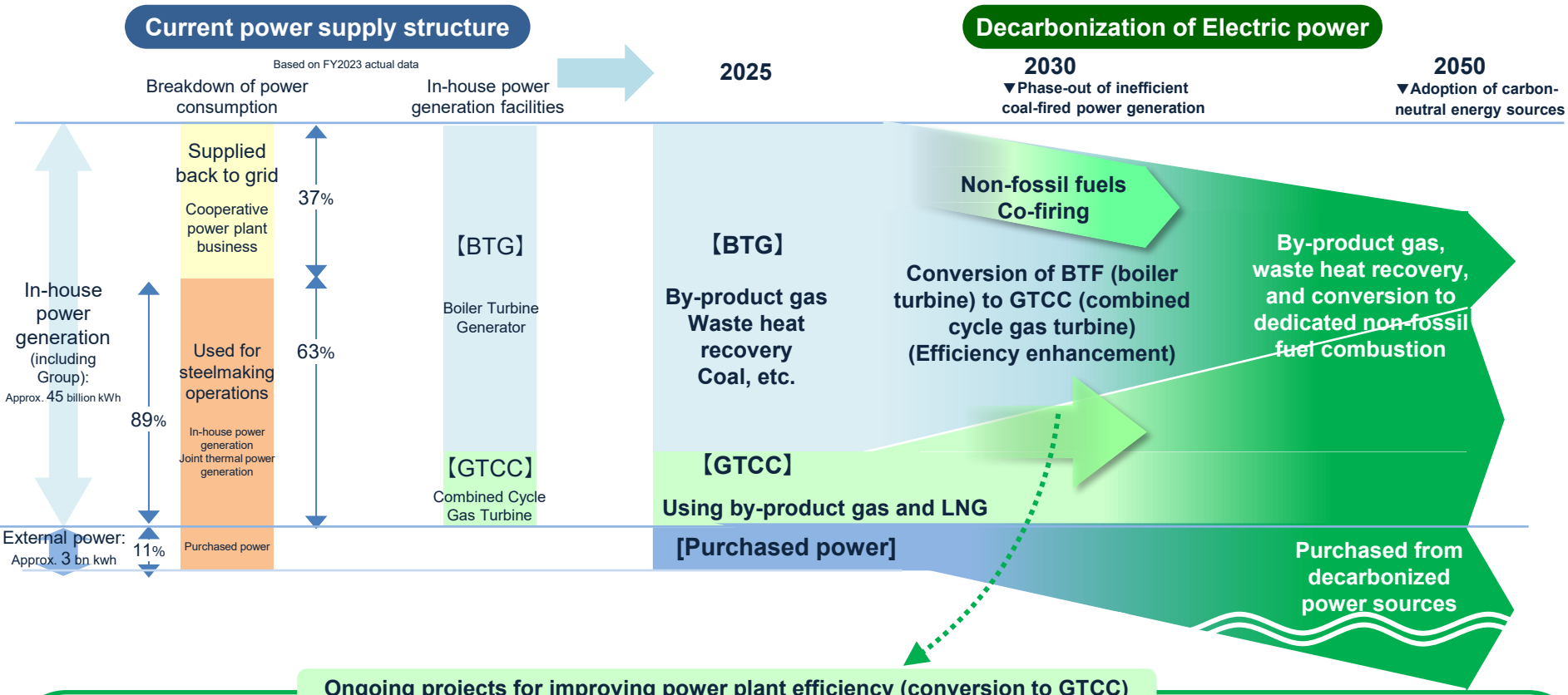
Decarbonization of Electric power

Pursuing efficiency improvements, **fuel conversion to non-fossil fuels** (such as hydrogen, ammonia, and biomass) at the in-house power generation facilities as well as **purchasing decarbonized power** to drive CO_2 reduction towards 2050.



Ongoing projects for improving power plant efficiency (conversion to GTCC)

Kansai Works, Wakayama Area: Conversion to GTCC, under construction (operation scheduled to start in 2027)
New GTCC (80-MW scale) using by-product gas and LNG will be installed, and existing BTGs will be decommissioned.
Reducing CO_2 emissions by improving power generation efficiency and converting auxiliary fuel from heavy oil to LNG.

Kyushu Works, Yawata Area: Conversion to GTCC, environmental assessment in progress (looking to start operations post-2030)
New LNG mono-fuel GTCC (2-GW scale) will be installed, and the existing coal, LNG, and by-product gas co-fired BTGs will be decommissioned.

Future transition to non-fossil fuels such as hydrogen and ammonia.

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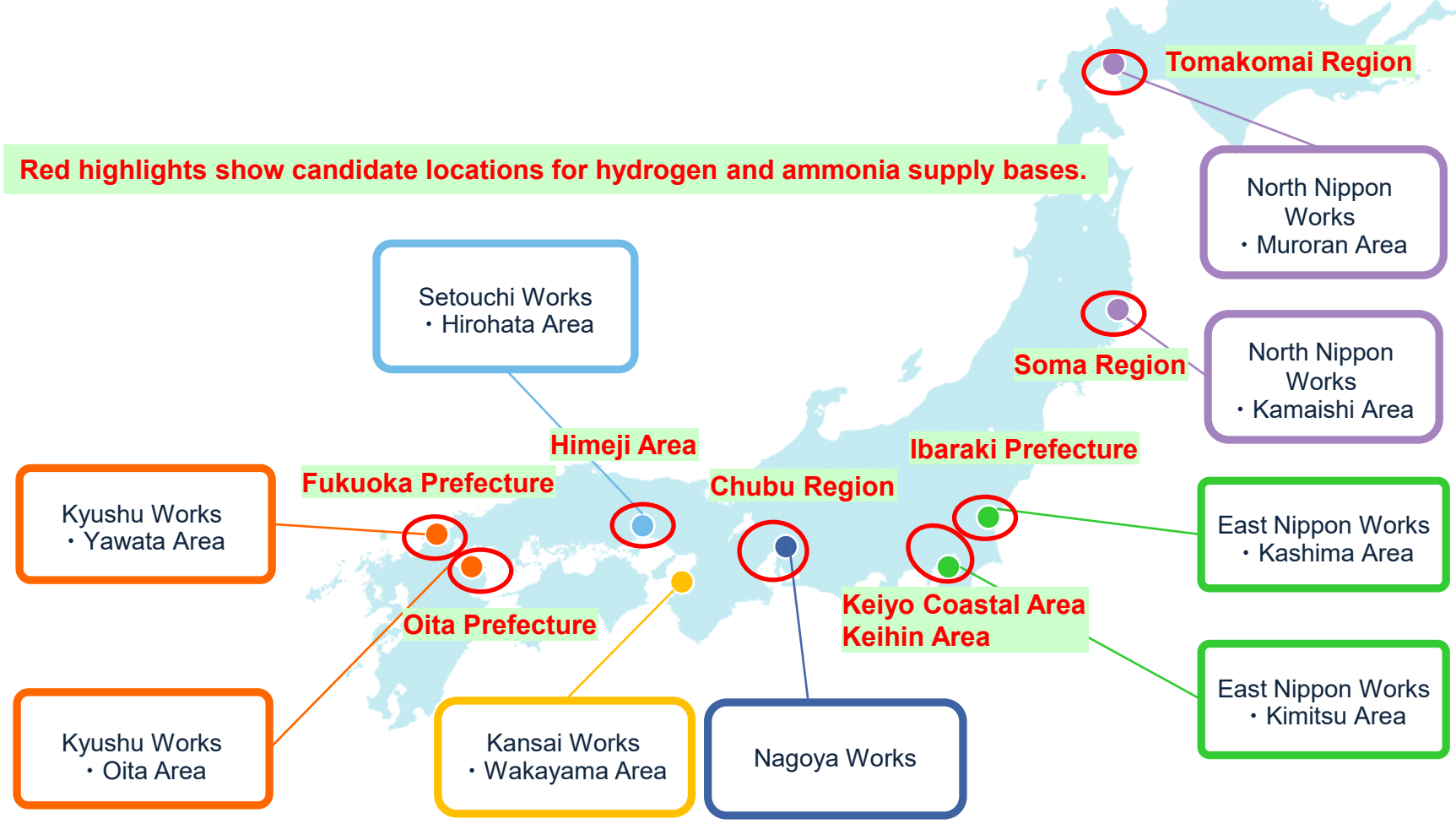
Nippon Steel's Manufacturing Sites and Proposed Hydrogen Supply Base Locations in Japan

Nippon Steel's hydrogen demand to increase post-2030 and reach full-scale use from around 2040

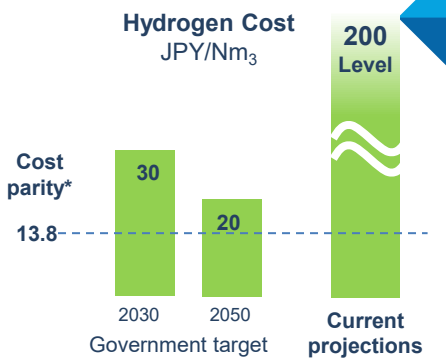
Critical need to establish hydrogen supply bases in various regions throughout Japan



Challenges in Securing Cost-Effective and Stable Supplies of Hydrogen

Significant reduction of green hydrogen cost is required as the current cost is higher than fossil fuel raw materials used in the carbon reduction process. Furthermore, **large-scale production, transportation, and storage of hydrogen is still in the technological development stage.**

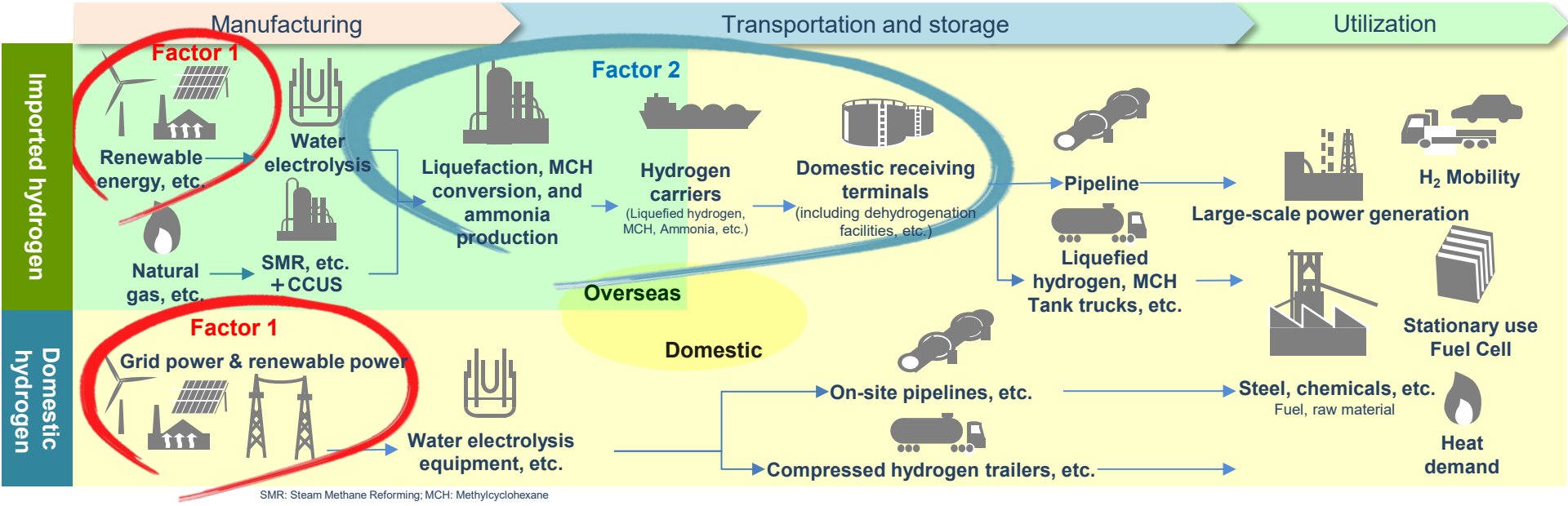
Nippon Steel is actively collaborating with government agencies, local municipalities, and hydrogen supply-related companies to address the challenges in securing a stable and low-cost hydrogen supply.



* Cost parity is the price level equivalent to the current cost of fossil fuel raw materials.

Factors behind high hydrogen prices

Factor 1: Extremely high costs of renewable electricity, which accounts for the bulk of production costs
Factor 2: Hydrogen's liquefaction temperature of -253°C significantly raises transportation and storage costs.
- Deterioration in energy efficiency (30–40%) due to liquefaction and reforming
- Transportation and storage processes involve technologies and facilities currently in development and/or verification phase.

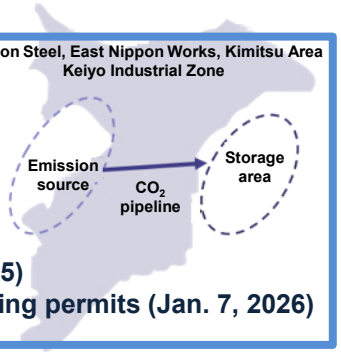


SMR: Steam Methane Reforming; MCH: Methylcyclohexane

Participation in Advanced CCS Projects

- **Nippon Steel is participating in three joint projects under JOGMEC's Engineering Design Work for Advanced CCS Projects**
- **Among these, the "Metropolitan Area CCS" pipeline-based project aims to be implemented in the early 2030s. We are currently conducting Front-End Engineering Design (FEED) for the entire CCS value chain and assessing storage potential.**

Project	Participating companies	Project characteristics
Metropolitan Area CCS	INPEX Co., Ltd. **Nippon Steel** Metropolitan CCS, LTD. Kanto Natural Gas Development Co., Ltd.	➢ Pipeline transportation ➢ Storage in aquifers off the coast of Sotobo **[Key Progress]** **・Designation of specific areas off Kujukuri (Sept. 15, 2025)** **・Public notice and inspection regarding exploratory drilling permits (Jan. 7, 2026)**
Tohoku Region Japan Sea Side CCS	Itochu Corporation **Nippon Steel** Taiheiyo Cement Corporation Mitsubishi Heavy Industries, Ltd. Itochu Oil Exploration Co., Ltd. INPEX Co., Ltd. Taisei Corporation	➢ Transportation of liquefied CO_2 via ships and pipelines ➢ Storage in aquifers off the coast of the Tohoku region of the Sea of Japan
Oceania CCS	Mitsubishi Corporation **Nippon Steel** ExxonMobil Asia Pacific Pte.Ltd. Mitsubishi Chemical Corporation Mitsubishi Corporation Clean Energy Corporation	➢ Collection and liquefaction of CO_2 emitted from multiple industries in the Ise Bay/Chubu region ➢ Transport and storage in depleted offshore oil and gas fields and/or deep saline aquifers in the Oceania region

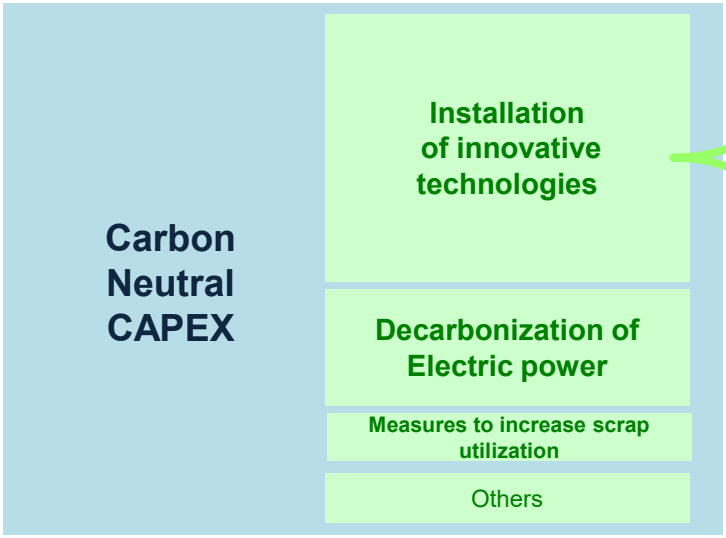


CCS = Carbon Capture and Storage

3. Creation of the GX Steel Market

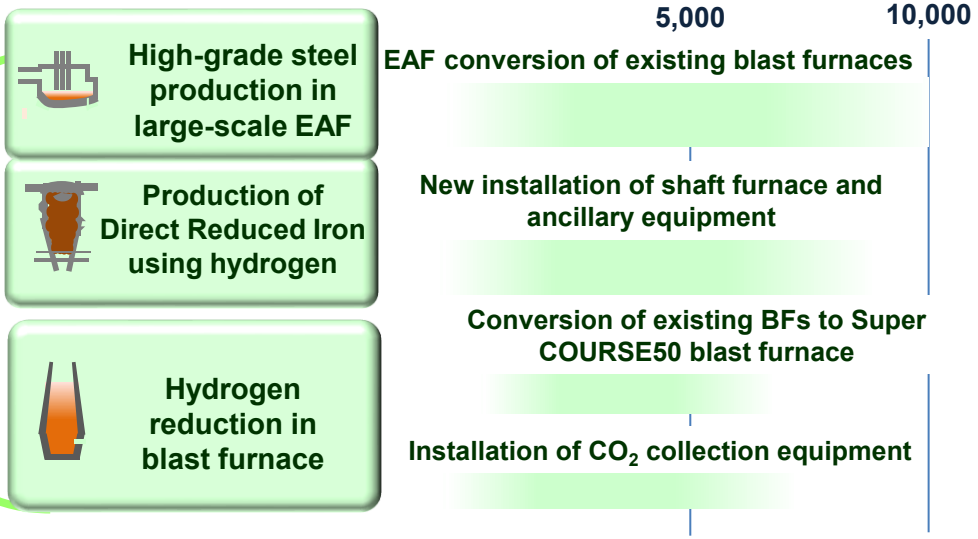
CAPEX CAPEX Estimate for Commercial Installation

Image of investment size

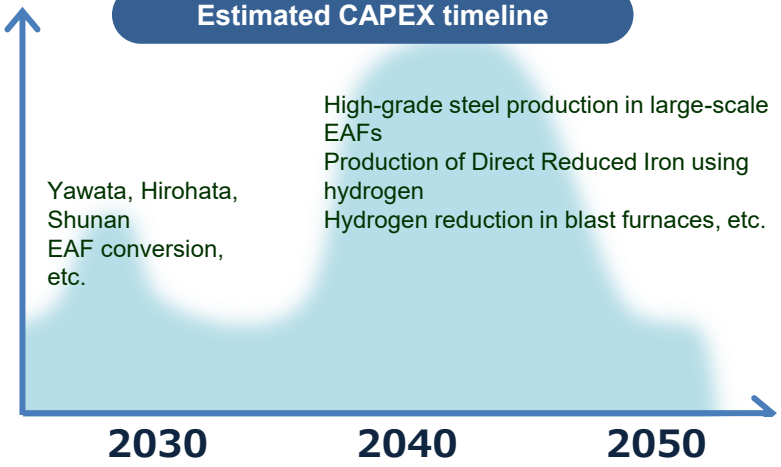


Estimated cost per unit for the introduction of innovative technologies

(Unit: ¥100 million per unit)



Estimated CAPEX timeline



As plans for the installation of innovative technologies take shape, CAPEX for commercial installation is **expected to exceed initial estimate** (**JPY 4–5 trillion*** range).

* Total investment excluding subsidies

OPEX

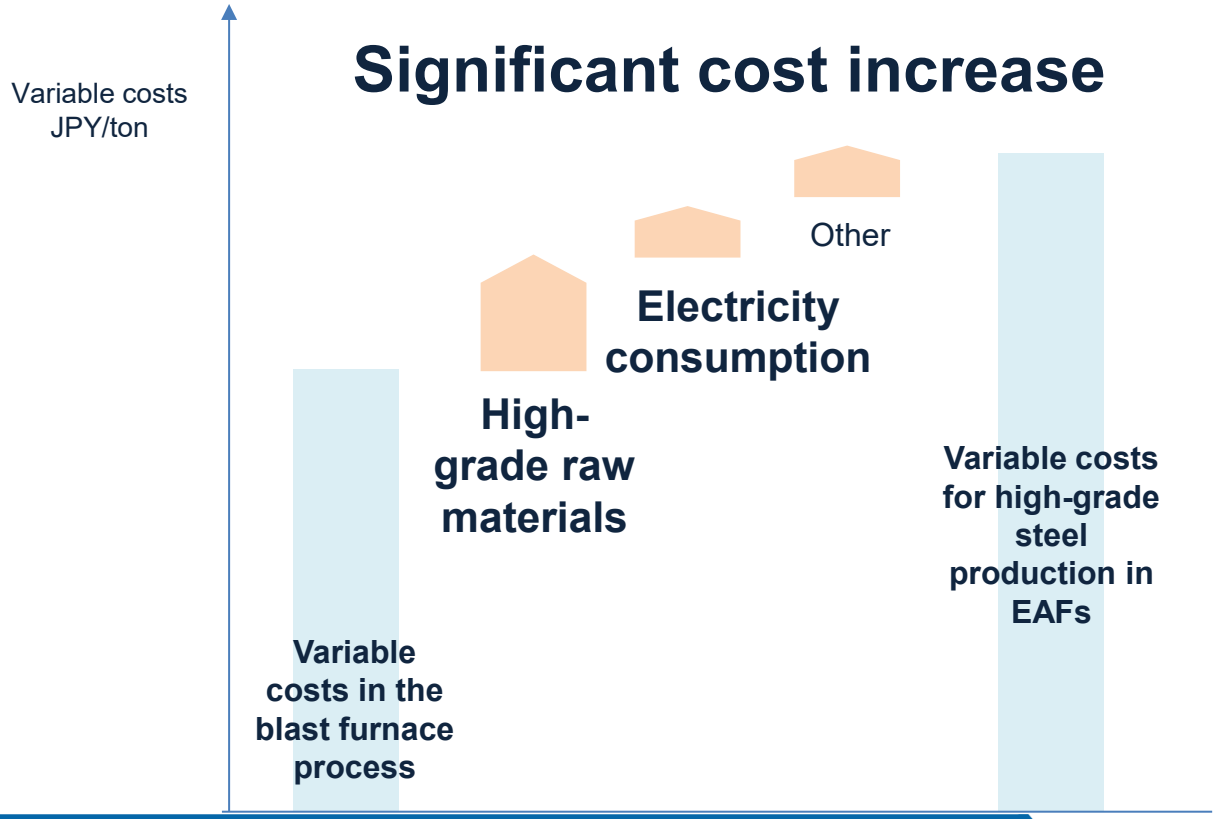
(Case example)
The Significance and Cost Increase of EAF conversion of BFs

Blast furnace process

- Enables use of diverse raw materials
- Most efficient energy use of low-cost by-product gases

Innovative EAFs

- Requires high-grade scrap and HBI input
- Requires new procurement of electricity



Key to Ensuring Predictability of GX Investment Recovery

The biggest challenge is the creation of a sound GX Steel market that shares and bears the "value of CO_2 reduction" across the entire value chain in order to raise the predictability of recovering the massive investments and significant OPEX increase this transition entails.

Visualization of CO_2 reduction value

It is essential for customers to be able to "visualize the GX value" to accurately reflect the "environmental value of emissions reduction" into their products that use GX Steel.

Pass-through of "CO_2 reduction value" to GX steel price

Increased cost of GX Steel must be recouped through appropriate pricing in order to ensure that GX investments are commercially viable.
The price of GX Steel needs to increase to a level that reflects its fair "CO_2 reduction value."
Foster a conducive environment where the cost of CO_2 reduction is recognized and shared across the entire value chain by society as a whole.

Incentive mechanisms to promote GX Steel adoption

Although GX Steel embeds the value of CO_2 reduction, the functional properties remain the same as conventional steel.
Effective and impactful incentives are needed to encourage customers to migrate to GX Steel during the transition period when both conventional steel and GX Steel coexist.

Environmental Value (CO_2 Reduction) Monetization – Toward Creating the "GX Steel" Market

Proposed measures to create a GX Steel market involving pulic-private joint efforts at the Study Group on Green Steel for Green Transformation (GX), organized by the Ministry of Economy, Trade and Industry (METI).

Discussions were held among experts and representatives from the steel industry and demand-side industries to examine the necessity of GX in the steel industry, the necessity of quantifying GX value, and the necessity of ensuring consistency with international discussions (convened five times from October 2024 to January 2025)

Referenced the Summary of the 5th Study Group on Green Steel for GX Promotion by METI in January 2025

Basic views on Green Steel (≒GX Steel) to drive GX

Green Steel for GX

Defined as steel products that incur a significant price increase compared to conventional products, when the costs associated with emission mitigation actions are included and that significantly lowers the environmental burden from such actions undertaken on a company-by-company basis

Eligible for **market expansion policies**, such as:
Priority procurement by the government (e.g., Green Procurement Law)
Measures to support purchases (incorporate into the subsidy criteria)

Low CFP* steel
* Carbon Footprint of Products

→ Encouraging CFP adoption

Comprehensive public-private measures

- **Promoting GX value and incorporation into international standards**
- **Enhancing the utilization of CFPs for steel products**
- **Demand-side support**
- **Supply-side support**

Early-stage Demand Creation Measures for GX Steel Already in Place

The Study Group on Green Steel for GX, organized by METI, included GX Steel as a key target for demand-side support.

Progress has been made for preferential procurement and purchase support for GX Steel by the government.

Revision of the Basic Policy of the Act on Promoting Green Procurement
(Revision approved by the Cabinet on January 28, 2025)

Prioritized procurement of products utilizing Green Steel in accordance with the Japan Iron and Steel Federation Green Steel Guidelines.

Additional CEV subsidy* measures for vehicles using GX Steel
(Announced by METI on January 27, 2025)

Added subsidies of up to ¥50,000 pre vehicle to stimulate demand for steel to promote GX (includes steel produced from innovative EAFs).

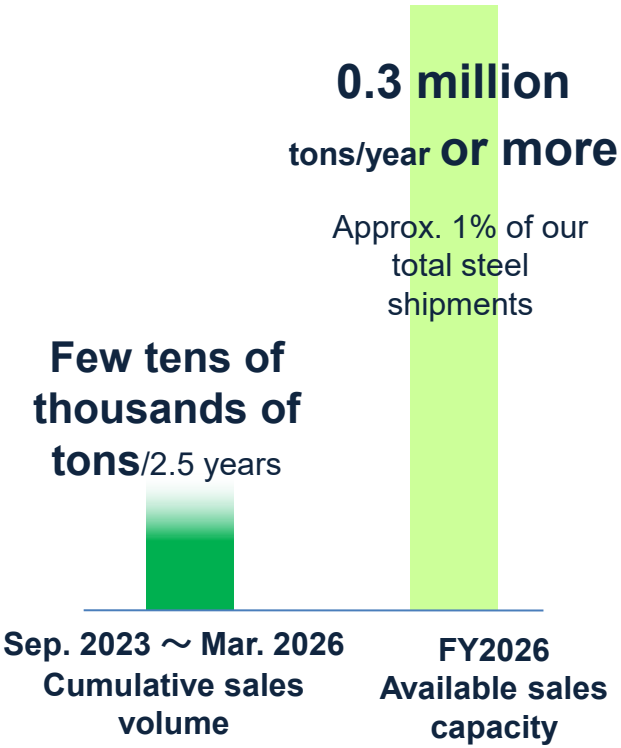
*CEV subsidy: Subsidy program to promote the introduction of clean energy vehicles. (EVs, PHEVs, FCVs, etc.) .

Contribute to customer's Scope 3 emissions reduction through stable supplies of GX Steel by deploying GX investments to advance decarbonization of the steelmaking process.

NSCarbolex® Neutral Current Order Status

Green-shoot demand to adopt "NSCarbolex™ Neutral" is emerging across various demand sectors following the government's early-stage demand creation measures, including for use in mass-produced items.
While this is encouraging, significant sales volume availability still exists.

Nippon Steel's GX Steel NSCarbolex™ Neutral volume



Key examples of NSCarbolex™ Neutral adoption

Automotive	Nissan Motor	Adopted for mass-produced vehicles	2025.2
Shipbuilding	Yamanaka Shipbuilding	Adopted for domestic vessels	2024.2
Machinery	GE Vernova	Transformers	2025.5
	AIRMAN	Compressors/Generators	2025.5
	Hitachi, Ltd.	Motors	2024.12
Containers	Sobajima Can Company	CANDAY cans	2023.9
	Bankaku Co., Ltd.	Yukari cans	2025.9
Construction	QatarEnergy	Blue Ammonia Production Plant Construction Project	2024.6
	Sumitomo Corporation/Swarovski	Shinsaibashi Minami-Semba 3-chome Project	2025.9
	Hokkaido Electric Power Co., Inc.	Construction work to prevent outflow of drifting vehicles at Tomari Power Station	2026.2
Civil engineering	Yokogawa Bridge Corp.	Kagamiyama Overpass in Kawara-machi, Tagawa-gun, Fukuoka Prefecture	2024.2

Cumulative: few tens of thousands of tons

Latest Measures for Stimulate Demand Creation of GX Steel

GOJ decided to implement the following measures for additional demand creation from the fall through the end of the year of 2025, over and above existing measures,

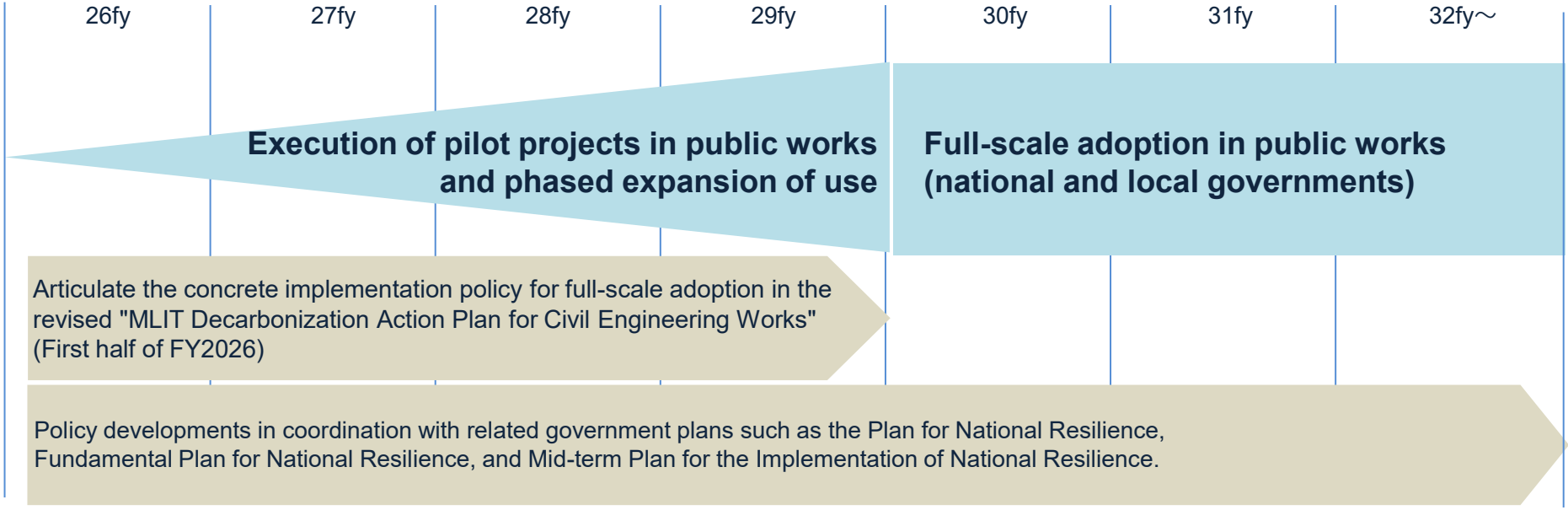
<Additional demand creation measures>

Civil Engineering Sector	**Utilization of GX Steel in public works**
Construction Sector	**Introduction of the life cycle carbon assessment system for Buildings**
Construction Sector	**Introduction of subsidies for GX Steel use included in the support measures for new ZEBs utilizing low-carbon building materials**
Shipbuilding Sector	**Introduction of subsidies for GX Steel use included in the support project for introduction of zero-emission ships**

Utilization of GX Steel in Public Works

The policy for utilizing GX Steel in public works was announced in the "Sector-Specific Investment Strategy Ver. 3," decided at the GX Implementation Council in December 2025. **Pilot projects** using GX Steel **are planned** for public works **from FY2026 onward with a phased expansion of use, to achieve full-scale adoption from FY2030 onward.**

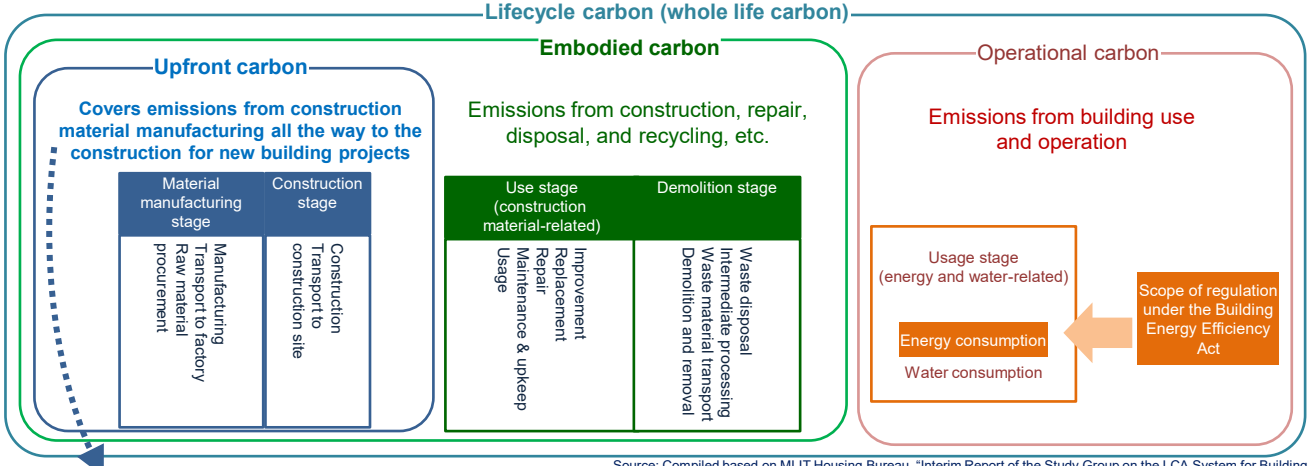
Illustrative expansion of GX Steel utilization in public works



Source: Referenced materials of the Working Group of Experts for the Realization of GX, December 2025

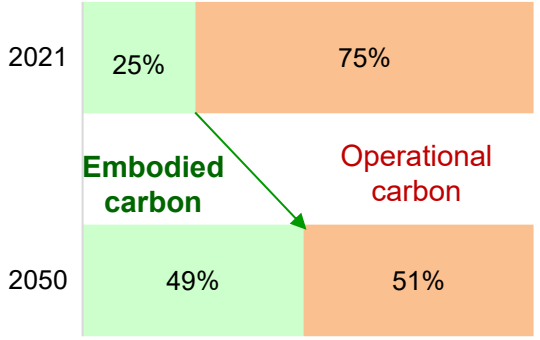
Introduction of the Life Cycle Carbon Assessment System for Buildings and Expectations for the Utilization of GX Steel for Buildings

- The Japanese government has decided to introduce **an evaluation system for the Lifecycle Carbon (LCC) of buildings** and submitted a bill to amend the Building Energy Efficiency Act to the 2026 ordinary Diet session
- **The policy focus has now shifted from operational carbon to reduce Embodied Carbon, which includes emissions from the manufacturing of construction materials.**
- **The implementation of this system is expected to encourage the utilization of low-carbon construction materials such as GX Steel.**



Source: Compiled based on MLIT Housing Bureau, "Interim Report of the Study Group on the LCA System for Building Structures - Main Text, " p.5

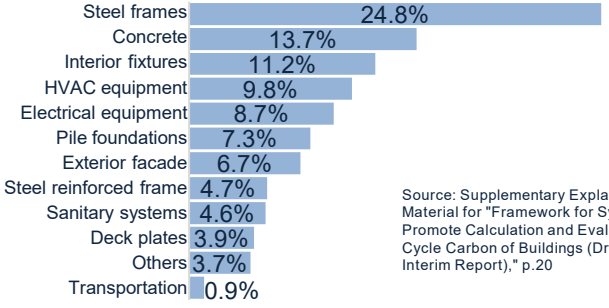
Projected share of GHG emissions in the building sector (UNEP)*



Source: MLIT Housing Bureau, "Interim Report of the Study Group on LCA System for Building Structures - Reference Material, " p.22

Breakdown of upfront carbon for steel-framed office buildings (floor area ≥ 5,000 m²)

(Analysis of 9 office building case studies)



Source: Supplementary Explanatory Material for "Framework for Systems to Promote Calculation and Evaluation of Life Cycle Carbon of Buildings (Draft Outline of Interim Report)," p.20

Introduction of LCC Evaluation System by the Building Energy Efficiency Act

- **Submission of Bill to Amend the Building Energy Efficiency Act to the 2026 Ordinary Diet Session ; expected promulgation in 2028]**
  - ○ Development of national guideline for LCC evaluation of buildings
  - ○ Mandatory reporting to the government of LCC evaluation for new offices (floor area ≥ 5,000 m²) by developer
  - ○ Mandatory obligation for architecture firms to explain LCC evaluation results to developer
  - ○ Labeling system to display third-party certification of LCC evaluation by legally registered agencies

Introduction of Subsidy for GX Steel Use Under the Low-Carbon Material New-Building ZEB Support Program

The use of GX Steel has been approved as an eligible material for subsidy
under the Ministry of the Environment's "**$LCCO_2$ Reduction Type Leading New-Building ZEB Support Program**"

Overview of the New-Building ZEB Support Program

[1] **$LCCO_2$ Reduction Type Leading New-Building ZEB Support Program** (omitted)

[2] the Low-Carbon Material New-Building ZEB Support Program (added from the start of FY2026)

In addition to [1], support is provided for buildings that use low-carbon building materials (steel, concrete, wood, etc.).

- Subsidy requirement: Introduction of low-carbon building materials in addition to [1], etc.
- Eligible expenses: Costs associated with the introduction of low-carbon building materials in addition to [1]

Subsidies are provided for incremental costs (the price difference) when using low-carbon building materials (Green Steel for GX promotion, low-carbon concrete, and wood (for mid-to-high-rise buildings with 4 or more floors)**).**
(Subsidy rate to be determined but based on 1/2 <only at the beginning of FY2026>)

[3] Project for surveys, public awareness, and adoption for to ZEB promotion (omitted)

ZEB stands for Net Zero Energy Building

Defines 4 stages in ZEB series based on the level of zero energy achievement

ZEB: Reduced to **0% or less** through energy saving + energy creation
Nearly ZEB: Reduced to **25% or less** through energy saving + energy creation
ZEB Ready: Reduced to **50% or less** through energy saving + energy creation
ZEB Oriented: **60% or less** for offices, schools, factories, etc.
70% or less for hotels, hospitals, department stores, restaurants, assembly halls, etc.

Building types, scales, and business entities eligible for ZEB

	Non-office buildings Hotels, hospitals, stores, schools, restaurants, assembly halls, etc.	Offices, etc. / Offices and government offices
Private enterprises and organizations, etc.	○ Under 10,000 m² only	
Large-scale municipalities Prefectures and ordinance-designated cities, etc.	○ Hospitals, etc. (hospitals, nursing homes, and welfare facilities, etc.)	×
Small-scale municipalities	○ Public hospitals, schools, and community centers (libraries, museums, gymnasiums, public halls, etc.)	○

Shipbuilding Sector

Introduction of Subsidy for GX Steel Use Under the “Subsidy Program for the Introduction of Zero-Emission Ships”.

Additional subsidy will be available for vessels that use Green Steel under the " Subsidy Program for the Introduction of Zero-Emission Ships, etc."
(FY2026 Government Budget Proposal: approved by the Cabinet in December 2025)

Subsidy Program for the introduction of zero-emission ships, etc.

Subsidies are provided for the introduction of such vessels to accelerate the adoption of zero-emission ships (*), etc.
Specifically, subsidies will cover a portion of the costs associated with installation of engines, fuel tanks, fuel supply systems, propulsion batteries, shore-based power supply facilities, etc., for zero-emission ships.

Additional subsidies will be provided if Green Steel is used in the introduction of zero-emission ships, etc.

Zero-emission ships

Hydrogen-fueled ship

Ammonia-fueled ship

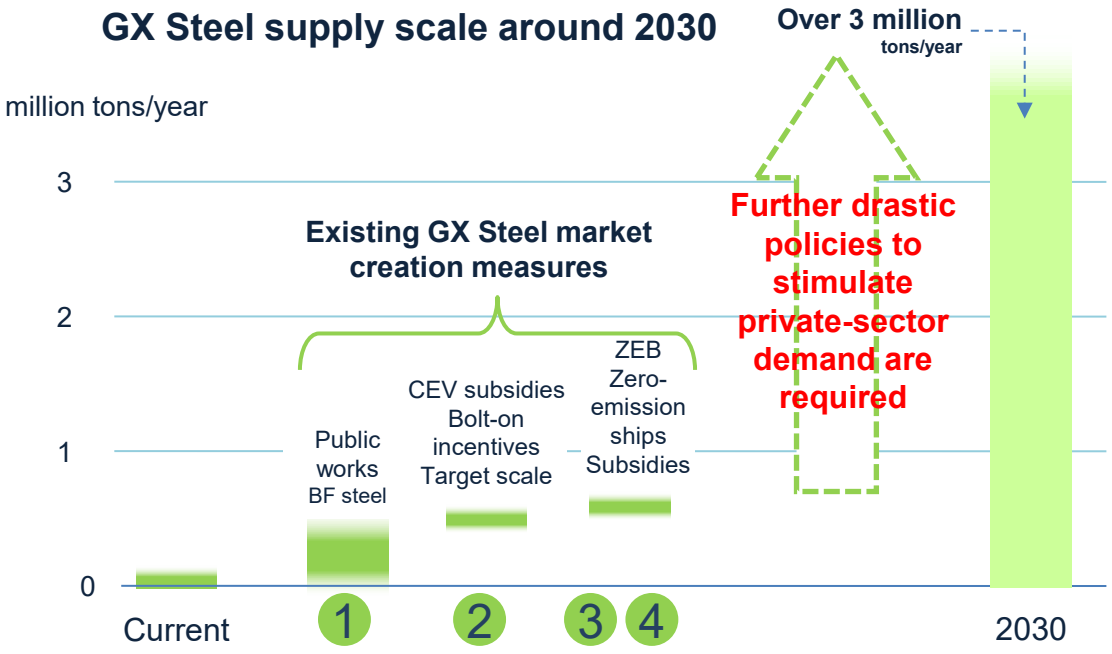
Methanol-fueled ship

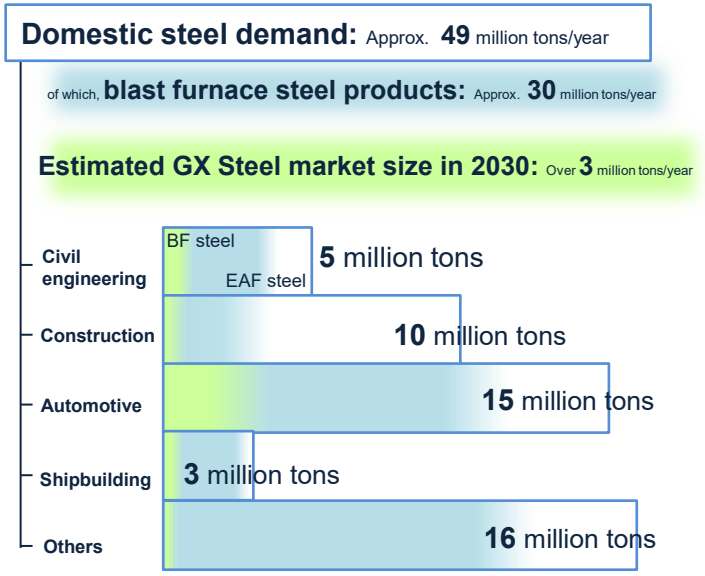
Battery-powered ship
(including hybrid ship)

Required Market Size for GX Steel by 2030

Despite concrete policy measures to create the GX market steadily taking shape, **these early demand creation measures and public sector demand are insufficient** in scale to absorb the GX Steel supply in 2030, which will be equivalent to approximately 10% of domestic blast furnace steel market around 2030.
Further measures to drastically stimulate private-sector demand is required given the significant gap between future supply capacity and the foreseeable market size under current policies

GX Steel Orders and Supply in the Japanese Steel Industry





Public sector demand	1	Civil engineering	Dec. 2025: **Policy on the use of GX Steel in public works** Cf. BF steel demand in public works: Approx. 0.5 million tons/year
Private-sector demand	2	Automotive	2025 **CEV subsidies bolt-on incentives** Cf. Eligible vehicles: **120,000** units (incl. EVs, PHEVs, and FCVs)
	3	Construction	Dec. 2025: Cabinet decision (to commence from FY2026) **on ZEB subsidies (GX Steel products)**
	4	Shipbuilding	Dec. 2025: Cabinet decision (to commence from FY2026) **Zero-emission ship subsidies (GX Steel products)**

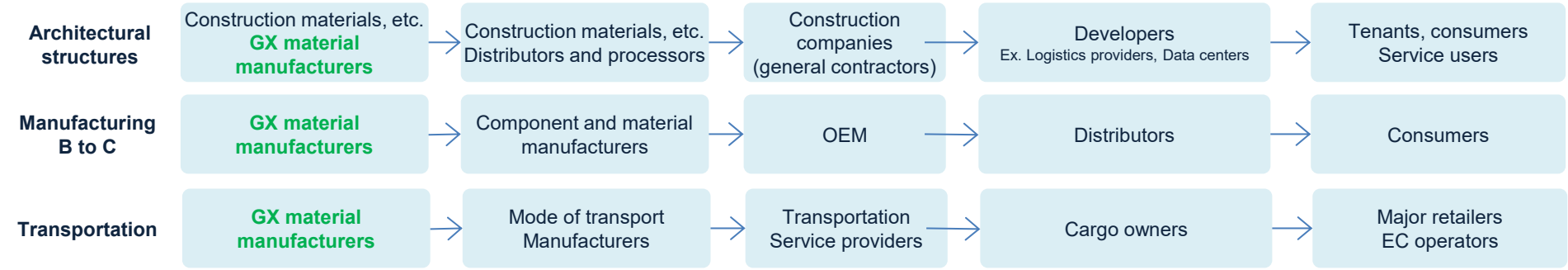
Building Frameworks Across the Value Chain : Schemes for GX Product Market Creation

Realizing GX product market in which the CO_2 reduction value is shared and shouldered requires the **introduction of rule-based measures where all players throughout the value chain**—from GX material suppliers, intermediate material & parts processors, downstream end-product manufacturers all the way to the ultimate end user — **shares and bears the value and cost of emissions reduction**.

For example:

- Rule-based measures for all players in the value chain, from upstream to downstream, to disclose usage ratio of products and services that utilize GX products
- Incentive measures, such as tax relief and subsidies, to alleviate the initial burden on end users.

Illustrative example of the value chain



<Need for data collaboration to enable sharing of reduction value>

An environment and framework to share the reduction value among value chain players such as **a data linkage platform that can relay the reduction value of products using GX Steel to downstream players** may be necessary.
-> Nippon Steel participated in a FY2025 survey project conducted by the Ministry of Economy, Trade and Industry (METI) on the necessity of such a data linkage.

Supply of GX Steel Using the Mass Balance Method

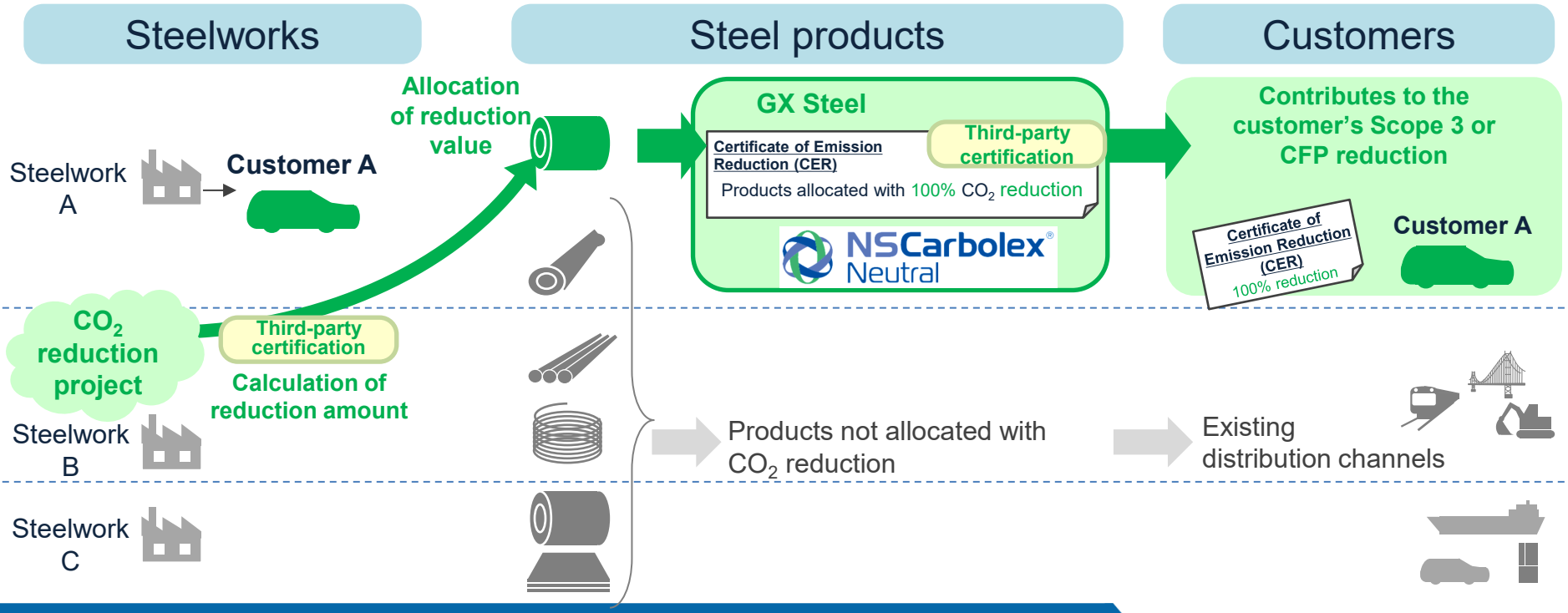
GX transition toward full carbon neutrality must proceed in a phased manner.

Customers' procurement of high-grade steel is tied to specific steelworks, making relocation difficult.

Allocating company-wide CO_2 emissions reduction achievements made in any steelworks to specific steel products enables a prompt response to customer needs for GX Steel.

The CO_2 reduction amount is pooled and managed on a company-wide basis.

The CO_2 reduction volume is allocated to any product from any steelworks.



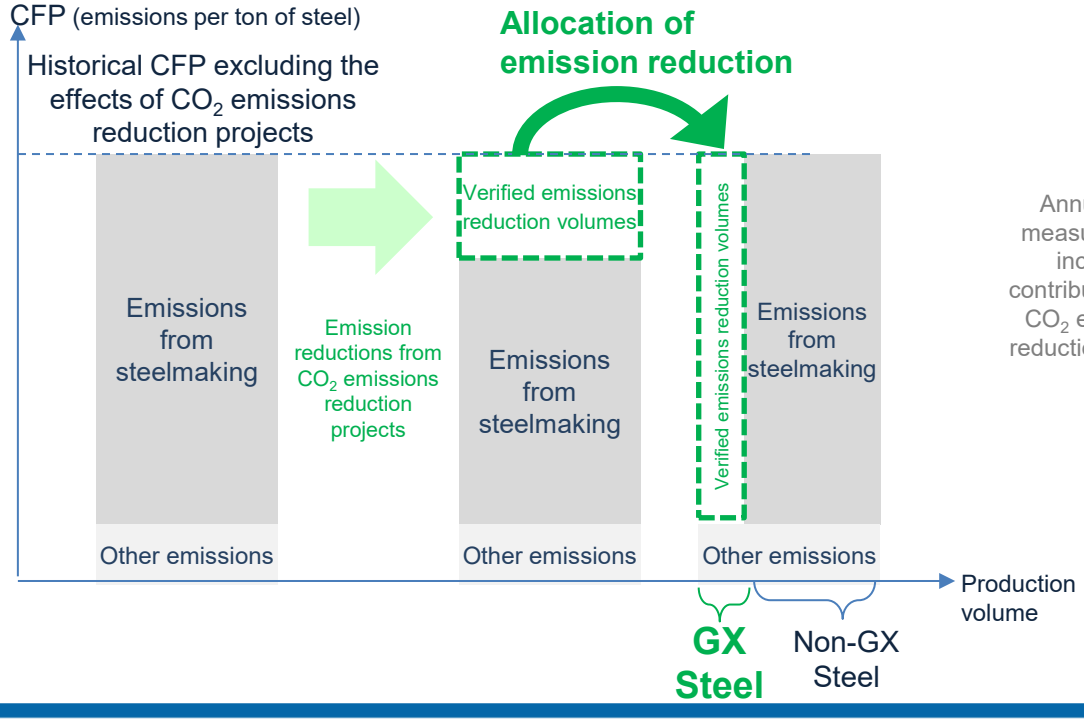
The Allocation Method: Development of Domestic Guidelines

The "Allocation Method" was established, which is based on the existing Mass Balance Method **but is more closely aligned with international standards for Carbon Footprint of Products (CFP), with the help of academic experts.**

(Established rules under **Product-specific CFP Calculation Guidelines for Steel Products** , released on October 2025 by JISF)

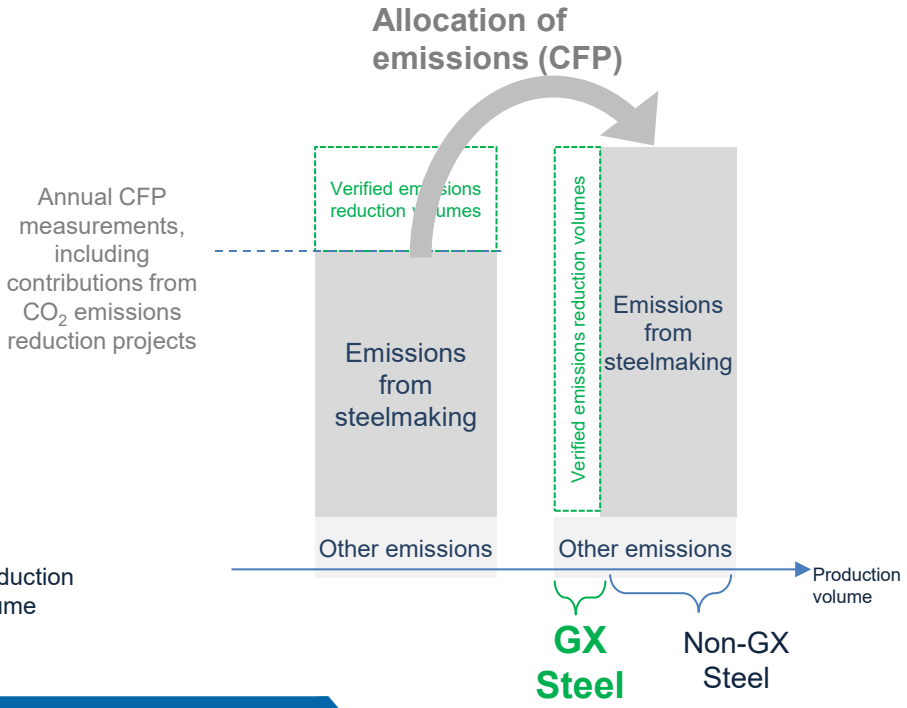
<Mass Balance Method>

- Bundled sale of the steel product's CFP and its Certificate of Emission Reduction (CER)
- Allocating verified reduction volumes to specific steel products based on ISO 22095 (CoC: Chain of Custody)



<Allocation Method>

- Allocate emissions using Allocation Method compliant with ISO 14067 (CFP standard) and ISO 22095
- Sold as low-CFP steel products



Development of Domestic Guidelines

The key to GX Steel market creation is to **respond to the customer's needs for "reducing the organization's Scope 3 emissions" and "reducing the carbon footprint of products (CFP)."**
-> Rules for calculating CFP of steel products is required
-> Japan Iron and Steel Federation (JISF) compiled the GX Steel Guideline on October 2025

METI (Ministry of Economy, Trade and Industry) Ministry of the Environment

Guideline on Carbon Footprint of Products (CFP)

Issued on March 2023
Established **general rules for CFP calculation applicable to all industries**
States that CFP calculation rules for each industry/product may be determined individually by each industry based on product-specific characteristics

JISF Guidelines

Product-specific CFP Calculation Guidelines for Steel Products

Published in October 2025 (consulted with METI and academic experts)
- Established **as industry-wide common rules for CFP calculation of steel products**

<Scope 1 Reduction> Importance of CFP that crystallizes the green transformation (GX) in steel and its value
-> **Mentions the concept of ISO-based Allocation Method that responds to CFP reduction needs,** in addition to the conventional Mass Balance Method.
<Scope 2 Reduction> Includes descriptions of steel products utilizing non-fossil fuel electricity

Scope 1 Reduction

GX Steel Guideline

Renamed and revised in October 2025 (Formerly Guidelines for Green Steel)
- **Rules for calculating actual emissions reduction volumes and allocation to steel products, etc.**
  -> **Stipulates detailed rules for the ISO-based Allocation Method to cater to CFP reduction needs,** in addition to the conventional Mass Balance Method.
- Calculation of actual reduction volumes for GHG reduction projects, internal management, and additionality
- Requirements for third-party verification

Scope 2 Reduction

CFP Calculation Guideline for Steel Products Utilizing Non-fossil Fuel Electricity

Published by JISF and the Non-Integrated Steel Producers' Association on October 2025
Provides calculation rules for reducing CFP through the use of non-fossil fuel electricity.

Steady Progress Towards International Standardization of GX

Continuous efforts to reflect Japan's initiatives into international standards, based on the "Product-specific CFP Calculation Guidelines for Steel Products" and "GX Steel Guidelines" established by JISF on October 2025.

Japan Iron and Steel Federation

Product-specific CFP Calculation Guidelines for Steel Products

Compiled in consultation with government and academic experts
Stipulates framework on higher-level provisions for steel CFP calculation that governs the "GX Steel Guidelines" and "CFP Calculation Guidelines for Steel Products Utilizing Non-fossil Electricity."

GX Steel Guidelines

Specifies usage methods of Scope 1 actual reduction volumes that can significantly contribute to NDCs.
- Mass Balance Method: Incorporate verified reduction volumes into certificates attached to products
- Allocation Method: An ISO-aligned method that issues CFPs that reflect emission reduction volume, which can be counted into the customer's product's CFP.

Alignment and Collaboration

World Steel Association (worldsteel)

worldsteel guidelines for GHG Chain of custody approaches in the steel industry

Benchmark guidelines for the global steel industry

Alignment and Collaboration

Global standards spanning multiple industries

Discussions are moving toward incorporating the Chain of Custody concepts embedded in Mass Balance Method

Joint WG (collaborative discussions)

Through to 2027
ISO 14067
International Carbon Footprint Standard
Rules mainly based on a product-level concept

Through to 2028
GHG Protocol
Rules establishing corporate-level emission calculations, etc.

Through to 2027
SBTi
(Science Based Targets Initiative)
Initiatives for Corporate Emission Reduction Targets

4. Efforts toward CO_2 Reduction within the Group

Nippon Steel Group: CO_2 Emissions Map

Consolidated basis
Approx. **110** million tons/year

Domestic: Approx. 78 million tons/year

Engineering and construction business:
***0.1** million tons/year

Chemicals & materials business:
***0.6** million tons/year

System solutions business:
***0.0** million tons/year

*Including overseas group companies and equity method affiliates

Nippon Steel Corp.
Non-consolidated:
73.6 million tons/year
including Nippon Steel Stainless Steel

Domestic EAFs:
1.1 million tons/year
Sanyo Special Steel
Osaka Steel, etc.

Other subsidiaries:
2.4 million tons/year
Cement, logistics, etc.

Overseas: Approx. 31 million tons/year

Integrated mills:
29.9 million tons/year

U.S. Steel 28.8
G/GJ Steel 0.6
OVAKO 0.2, etc.

Other subsidiaries:
1.1 million tons/year
LATINUSA,
Kurosaki Harima's India operations , etc.

Cf. Equity method:
9 million tons/year

Domestic equity share: 2 million tons/year

Domestic EAFs:
0.5 million tons/year
Kyoei Steel, Topy Industries, etc..

Other related companies:
1.0 million tons/year
Oxygen and coke production companies, etc.

Raw material:
0.8 million tons/year
NS United Kaiun
Nippon Denko

Overseas equity share: 7 million tons/year

Integrated iron and steel works:
6.1 million tons/year
AM/NS India

Other affiliates
0.6 million tons/year
NSBS
JCAPCPL, etc.

Raw material:
0.2 million tons/year
Australian mines
NIBRASCO

Methodology for aggregation

- Scope 1 + 2 actual emissions (based on FY2022)
- Scope of consolidation as of January 2026
- Aggregates CO_2 emissions from parent company, consolidated subsidiaries, and major equity-method affiliates that have significant emissions.
- Emissions from equity-method affiliates are calculated based on ownership share.

NIPPON STEEL

NSC Group's Governance Policy on Carbon Neutrality

Leveraging Nippon Steel Corporation's resources and expertise gained from domestic R&D and operational activities to advance carbon neutrality initiatives at domestic and overseas upstream companies

[1] Consolidated domestic companies (parent company + subsidiaries)	● Establish group-wide targets that includes the parent company and consolidated subsidiaries. ● Each company formulates individual emission reduction plans to achieve the target.
[2] Overseas subsidiaries	● Targets set individually by country and/or company in recognition of different conditions in each country/region and the varying national reduction targets and transition strategies
[3] Equity method affiliates (Domestic and overseas)	● Collaborate with JV partners to support target setting and carbon neutrality initiatives for each company.

Cf.) Examples of different conditions set by governments:

<India> Long-term target: Net zero by 2070; Reduction of emissions intensity per unit of GDP (45% reduction by 2030)

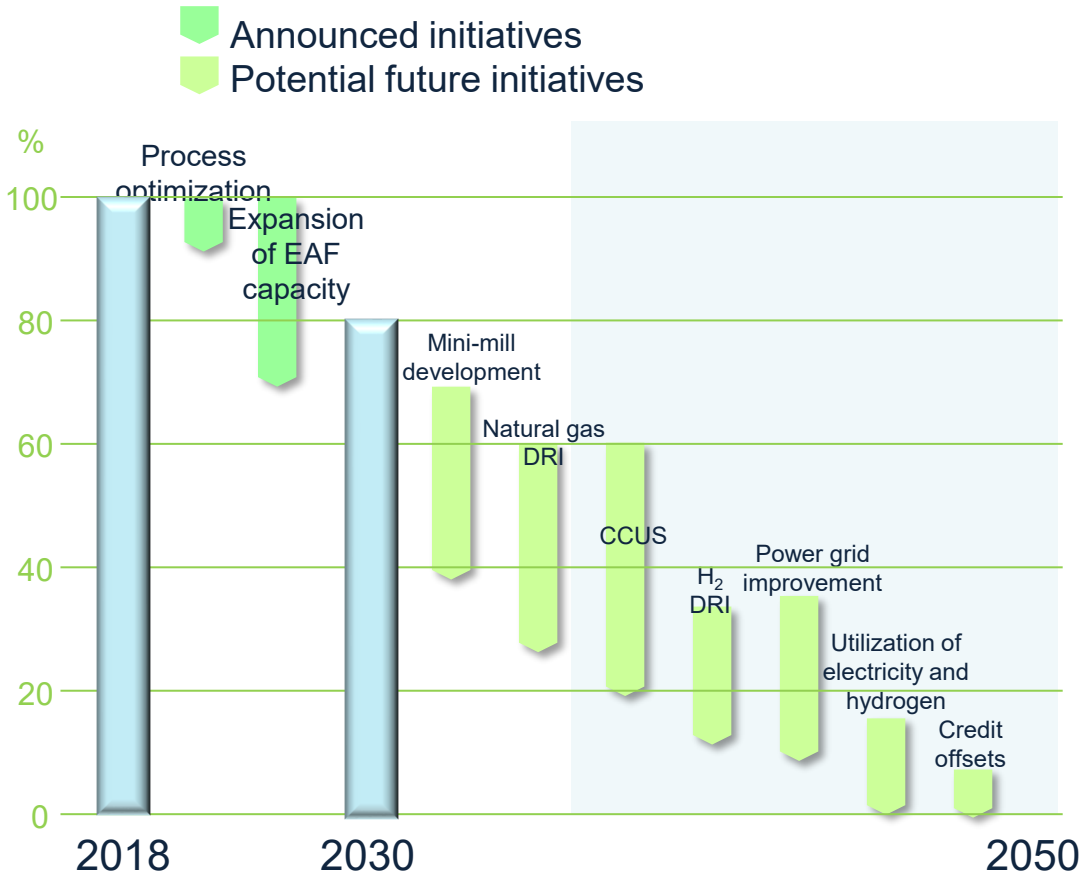
CO_2 Reduction Targets of Global Upstream Production Companies

			Crude steel production capacity (million tons/year)	Blast furnace (Units)	EAFs (Units)	DRI (Units)	CO_2 emissions (million tons/year)	CO_2 reduction targets: Mid-term targets	CO_2 reduction targets: Long-term targets	
[1] Domestic parent company and subsidiaries	Nippon Steel Corp.	Japan	40	10	6	-	72.5	Domestic Group target 2013→2030 ▽30%	Domestic Group target 2050 Carbon neutral	Including the former NIPPON STEEL Stainless Steel (merged in April 2025)
	EAF subsidiaries	Japan	4	-	9	-	2.2			Sanyo Special Steel, Nippon Steel Structural Shapes, Osaka Steel, Tokyo Kohtetsu, OJI Steel
	Non-upstream companies		-	-	-	-	3			
	Domestic		**44**	10	15		**78**			
[2] Overseas subsidiaries	**U. S. Steel**	United States	18.5	8	4	-	21.3	2018→2030 Emission intensity -20%	2050 Carbon neutral	
		Slovakia	4.5	3	-	-	7.5			
	OVAKO	Sweden Norway	1.3	-	3	-	0.2	2015→2030 ▽80%	2015→2040 ▽90% *3	Achieved carbon neutrality through the Carbon Offset Program in 2022.
	Standard Steel	United States	0.2	-	1	-	0.1			
	SSMI	India	0.2	-	1	-	0.2	2016→2030 ▽40%	2050 Carbon neutral	
	G/GJ Steel	Thailand	3.5	-	3	-	0.6			
	Non-upstream companies		-	-	-	-	1			
	Overseas		**28**	11	12		**32**			
	Global consol.		**72**	21	27		**110**			
[3] Equity method affiliates	Domestic EAF equity-method affiliates	Japan	1	-	10	-	0.5			Godo Steel, Ltd., Topy Industries Limited, Mitsubishi Steel Muroran Inc.
	AM/NS India	India	9.6	1	6	5	6.1	2021→2030 Unit emissions -20%		Nippon Steel Equity stake 40%
CO_2 emissions are based on our equity interest	Non-upstream companies	Japan	-	-	-	-	2			
		Overseas	-	-	-	-	1			
Global (including equity method)			82	22	43	5	120			

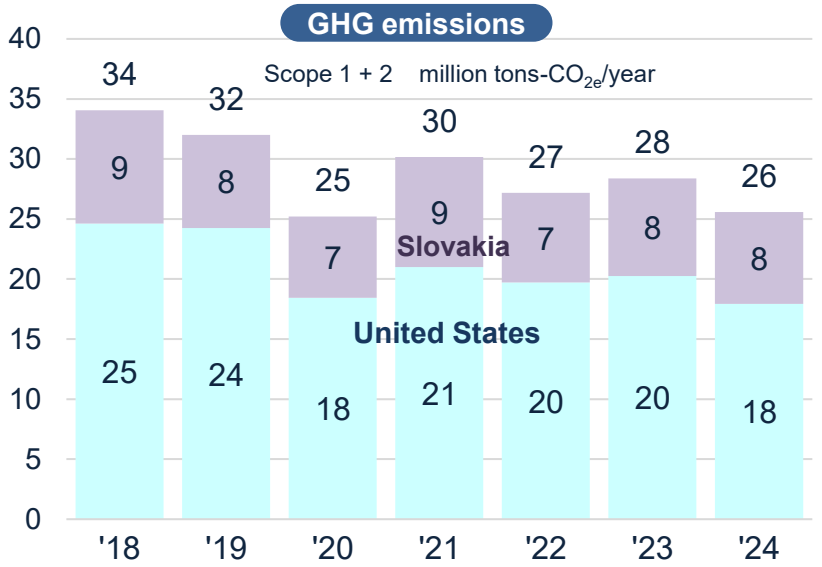
U. S. Steel's Carbon Neutrality Initiatives

20% reduction in emissions intensity by 2030 (vs. 2018 baseline)
Announced initiatives in 2021 to achieve carbon neutrality by 2050 and emissions reductions are progressing steadily

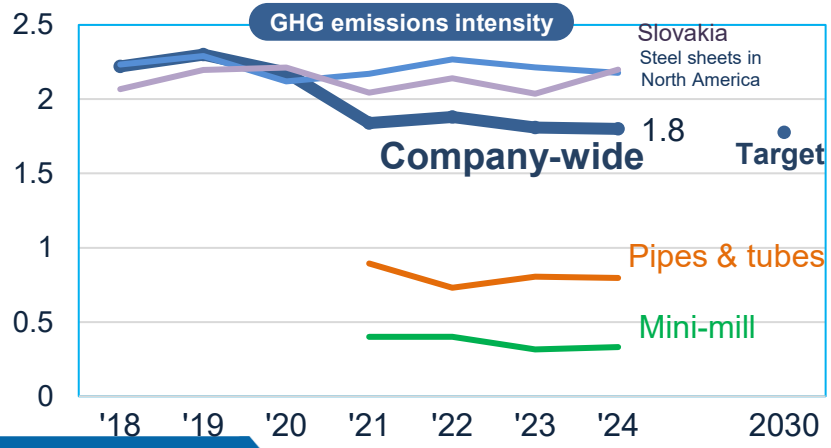
GHG Emissions reduction initiatives



GHG emissions

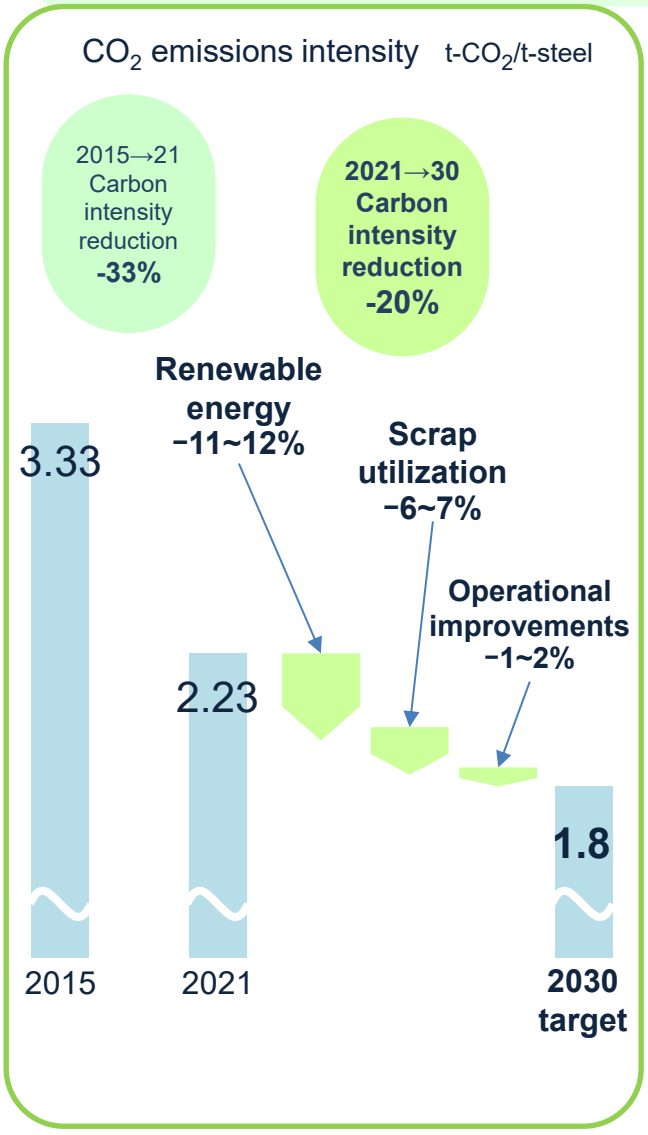


GHG emissions intensity



AM/NS India's Decarbonization Initiatives

Working toward a 20% reduction in emission intensity by 2030 (vs. 2021), centered on renewable energy utilization



Renewable energy

2022: Invested and participated in a renewable energy power project*

* Andhra Pradesh, Southern India; Capacity: 975 MW
Combined solar and wind power with pumped storage hydroelectric power to ensure stable supply; full-scale supply commenced in 2024

Supplies **20% of power for Hazira Steelworks**
⇒ **Scope 2 CO_2 reduction: 1.5 million tons/year**

Renewable energy ratio in FY2024-2025: 26%
⇒Target: 100% renewable energy for purchased electric power by 2030

Increased use of scrap

Scrap usage ratio
Current: 3-5% -> 2030: Over 10%

Operational improvements

Yield improvement, by-product gas utilization, waste heat recovery, process optimization, digital analytics/AI integration, etc.

Green Steel Certification

Became **the first integrated steel manufacturer in India to obtain** green steel certification based on the Ministry of Steel's Green Taxonomy
Targeting certification for 70% of production volume by 2027

Initiatives for further emissions reduction

Introduction of innovative technologies from Nippon Steel and ArcelorMittal
Study of hydrogen utilization
CCUS feasibility studies and regional collaboration, etc.

5. Advocacy to Society: Initiatives, Remaining Challenges, and Request for stakeholder cooperation

Initiatives to Overcome the Four Challenges
[Summary of Recent Achievements]

Steady progress in developing and implementing innovative technologies, and in the promotion and standardization of GX Steel

Technology development	R&D plan and testing	Established hydrogen reduction technology for CO_2 emissions reduction in experimental blast furnaces (reduction level −44.5%) Commenced testing of experimental EAF (2024) and experimental reduction furnace (2025)		
	Government support	Increased GI Fund for "Hydrogen Utilization in Steelmaking Processes" to 449.9 billion yen	・・・	Budgeting completed
Predictability of investment recovery	Gov't support for CAPEX	Government to cover one-third of investment costs based on the GX Promotion Act ▶ Investments for EAF transition (at Yawata, Hirohata, Shunan) selected and approved	・・・	Funding approved
	Operational cost Government support	Established a strategic materials and production tax incentive(Green Steel)	・・・	Instituted
	Crystallizing the economic value of environmental value (CO_2 reduction)	Study Group on the GX Product Market [METI] / GX 2040 Vision and sector-specific investment strategies [Government] Study Group on Green Steel for Green Transformation [METI] takeaways: ・Designated GX Steel as eligible for government preferential procurement and purchasing support -> Revision of Basic Policy on the Act on Promoting Green Procurement; CEV subsidies	・・・	Efforts underway to create a GX market
Institutionalized Standardization	Standardization	JISF published "Product-specific CFP Calculation Guidelines for Steel Products" and "GX Steel Guidelines" (October 2025) -> Established rules enabling the actual reduction volumes to be incorporated into customers' product's CFP	・・・	Active participation and stewardship -> Published
		Publication of worldsteel Guidelines Ver.1.2 (February 2026)	・・・	Published
		Engagement towards revision of ISO, GHG protocol, etc. GX League (METI) ▶ Growth-oriented carbon pricing Study Group on Utilizing CFP for Achieving GX (METI) ▶ CFP standardization	・・・	In-progress and preparing
Infrastructure buildout	Energy infrastructure buildout	Safe use of nuclear and other energy sources based on the 7th Strategic Energy Plan	・・・	Committee recommendations
		Hydrogen and ammonia: Revision of the Basic Hydrogen Strategy, Hydrogen Society Promotion Act	・・・	Bill passed
		CCS: JOGMEC/Advanced CCS Support Program	・・・	Participating

Examples of Advocacy Results for the Creation of the GX Steel Market

- Conducted active lobbying with relevant government ministries regarding the necessity to create a GX Steel market.
- In FY 2024, GX Steel was designated as a specific procurement item for goods and services under the Act on Promoting Green Procurement, although remained on the long list for public works.
- Continuous lobbying activities during in FY2025 resulted in including, in writing, an agreeable position and proactive opinion on the government's preferential procurement of GX Steel, in various committee reports and plans. Also, a policy and a specific schedule for the utilization of GX Steel by public works was clarified at the end of 2025.

Ministry of the Environment / Act on Promoting Green Procurrment (June 2, 2025)	Proposed inclusion of specific procurement items (re-application for four civil engineering steel products & H-shaped steel) and formally applied for high-strength bolts.
First Mid-term Plan for the Implementation of National Resilience (June 6, 2025)	Clearly states to pursue initiatives, from a comprehensive perspective, for the utilization of materials contributing to CO_2 emission reductions, while considering their effectiveness and introduction costs.
MLIT / Committee on Promoting Measures to Reduce Environmental Impact of Public Works (October 21, 2025)	Although the proposed items were classified as "for further consideration," a committee member suggested that the government should consider the proposed items that have high environmental reduction impact despite their higher procurement costs.
Ministry of the Environment/ Study Group on Specific Procurement Items (November 5, 2025)	The above-mentioned remarks by a MLIT committee member were also clearly stated in the Ministry of the Environment's study group material.
Sector-Specific Investment Strategy Ver. 3 GX Implementation Council (December 22, 2025)	Clearly states "proactive procurement of GX Steel," including the commencement of usage in pilot projects in public works (from FY2026) and full-scale utilization in public works by national and local governments (from FY2030). Clearly states that the government will seed the initial demand through proactive public procurement and tying it into private-sector demand, while also promoting the global value of GX and expanding the market.

Further Challenges for Promoting GX Investment and Creating the GX Steel Market

1. Further demand creation for public procurement

Expand scope of public procurement of GX Steel beyond civil engineering projects directly managed by the MLIT and include other government ministries, government-affiliated companies, public corporations, and local governments.

Issues remain for designation as specific procurement item in civil engineering works under the Act on Promoting Green Procurement.

2. Further expansion of procurement by private-sector companies

Further enhance proactive dialogues with customers

Introduction of “phased introduction of regulations” to facilitate GX Steel market creation (Refer to the government’s Sector-Specific Investment Strategy.)

Establishment of rule-based measures to share the reduction value and costs among all players in every value chain, and the introduction of incentives for end users.

3. Engagement by investors and financial institutions with their investees and borrowers

Collaborate with investors who engage with steel consuming investees as well as collaborate with financial institution’s financed emission engagement with steel-consuming borrowers.

4. Advocate formulation of international standards and industry-specific standards

Engagement with influential standard-setting bodies as ISO, GHG Protocol, SBTi, to undertake rule-making that aligns with customer’s needs and steel industry’s emission reduction efforts.

Engagement to formulate emission reduction rules tailored to each industry sector

Further Challenges for Promoting GX Investment and Creating the GX Steel Market

5. Expand supply of high-grade scrap

Establish mechanisms to improve scrap quality and policy measures to enhance the domestic circulation of scrap resources

6. Establishment of an affordable and stable decarbonized power generation sources

Expansion of affordable and stable supply of electricity through the maximum use of nuclear power in addition to renewable energy.

7. Establishment of an affordable and stable supply of hydrogen

Realize significant reduction of hydrogen prices and buildout supply infrastructure to connect hydrogen utilization hubs

8. Expansion of CCS storage sites and ensuring economic viability

Further exploration of potential sequestration sites and ensuring the economic viability of CCS.

Request for Stakeholder Cooperation and Collaboration

Encourage customers to purchase GX Steel

It is crucial that the entire supply chain shares responsibility for environmental value, as this is a key factor in ensuring the business feasibility of GX investments.

Nippon Steel seeks to collaborate with customer industries to establish customer industry standards and promote the procurement of GX Steel, which will contribute to Scope 3 reduction and lowering CFP of products at the customer‘s industries.

Building concrete policies and rule-based measures to drive GX

The litmus test for GX Steel market will be demand creation that can absorb the full- scale increase in GX Steel supply when the innovative large-scale EAFs comes onstream. Drastic demand creation measures for private sector demands are indispensable, including "phased introduction of regulations."
Promoting GX requires strengthening infrastructure policies, including securing an affordable and stable supply of decarbonized power, further cost reductions and stable supply of hydrogen, and expanding CCS storage sites.

The understanding and support from customers, consumers, and society at large is necessary to drive these efforts forward. We must leverage the power of influence of a wide range of stakeholders.

Appendix

Nippon Steel's Policy Position (1)

Published in June 2025

Nippon Steel's stance on carbon neutrality underpinned by its mission, corporate philosophy and changing business environment

- The Nippon Steel Group is committed to continuously pursue world-leading technology and manufacturing excellence, thereby contributing to social progress by providing superior products and services.
- Steel is a basic material essential to all industries and infrastructure. Demand for steel will remain indispensable to society along with the increase in global population and economic growth. Nippon Steel's mission is to contribute to the advancement of a sustainable society by providing comprehensive solutions that include steel as a material, which serves as the foundation of modern life and economic progress, as well as its processing and application technologies.
- Transformational change in society and industry is leading to higher environmental and social requirements in manufacturing that, in turn, demands advances in steel performance and properties, especially in tackling the global challenge posed by climate change. NSC is boldly taking on the challenge to achieve a decarbonized society, which is becoming the emerging standard of competition, by developing and deploying new CO_2 reduction technologies and collaborating with the government on various initiatives to maintain its position as a global leader in the steel industry. Furthermore, Nippon Steel will work to contribute to carbon neutrality for the society as a whole, by providing high-functionality products and technology solutions by leveraging our technological expertise and product capabilities.
- We aim to sustainably develop and grow our business and will work to achieve carbon neutrality by 2050 by adhering to our mission to supply steel products essential for social development and tackling the challenge to solve global environmental issues.

Nippon Steel's Policy Position (2)

Nippon Steel's carbon neutrality initiatives ties into creating a socio-environment that enables both business sustainability and enhancement of corporate value.

1. Nippon Steel will seek societal acceptance that **maintaining and advancing reduction-based steelmaking process is indispensible** to meet essential steel demand for social progress, as relying solely on processes using scrap metal, which face supply constraints, is insufficient.
2. Nippon Steel will advocate for the buildout of necessary infrastructure and business conditions of **stable supplies of decarbonized energy/reducing agents at internationally competitive cost, which is of critical importance** for the stable production of GX Steel and the establishment of a socially acceptable cost structure.
3. Nippon Steel will seek societal acknowledgement of a realistic transition to decarbonized steel manufacturing processes, based on the fact that **Japan's steel is made from a gigantic and comprehensive manufacturing system to make products that respond to diverse quality requirements that differ by customer (i.e. high value-added customization) using a highly integrated and optimized manufacturing system.**
4. Nippon Steel will seek societal acknowledgement and will take a leading role to **establish environmental assessment rules that recognize the value of final products manufactured by customers using the GX Steel they procure**, ensuring that such customers also benefit.
5. Nippon Steel will **seek the understanding from society and customers to share the burden of environmental premium** as GX Steel will be more expensive than conventional products due to massive decarbonisation investments and higher operational costs compared to conventional processes. Nippon Steel seek for all stakeholders to commit to the **establishment of the GX product market** by building an innovative GX supply chain to enable the transition to a decarbonized steelmaking process.

Nippon Steel’s Policy Position (3)

Nippon Steel's advocacy stance

Nippon Steel endorses the government's policy to realize a carbon-neutral society by 2050 in line with the Paris Agreement and upholds the Nippon Steel Carbon Neutral Vision 2050 as a top management priority. However, achieving carbon neutrality in the steel industry is not something that can be achieved by steelmakers alone. A business environment conducive to achieving these goals requires strong and consistent support, including financial support, supply of stable and low-cost decarbonized energy, concrete policies to implement systems and regulations for the creation of a GX market, as well as the broad collaboration among all stakeholders including society.

Nippon Steel will make use of every opportunity to present proposals regarding Japan's climate change measures and energy policies in line with the Paris Agreement, and to proactively participate in and contribute to activities at economic and industry organizations.

Nippon Steel commits to actively advance carbon neutrality initiatives based on the aforementioned “Stance on Carbon Neutrality Given Its Mission, Corporate Philosophy, and Changing Business Environment” statement and on the “Pursuit of a Foundational Environment Where Carbon Neutrality Efforts Enhances Business Sustainability and Corporate Value”, and on these advocacy stance.

Nippon Steel's Policy Position (4)

Nippon Steel's advocacy stance

1

Stance on the government's GX policy

Achieving carbon neutrality requires the bold introduction of policies and systems backed by a national strategy under the strong leadership of the government, based on the realization that relying on market mechanism alone will not solve the external economics of this undertaking and that it is imperative to adjust responsibilities and burdens of all stakeholders in every supply chain while also ensuring international competitiveness.
Nippon Steel will actively express opinions and make proposals on Japan's climate change measures that are based on the Paris Agreement, such as the necessity of a Japan-specific policy package that integrates climate change measures with the sustainment/enhancement of international industrial competitiveness, powerful and seamless support across all stages of the decarbonization transition process covering R&D through to facility installation, support to offset increased costs related to hydrogen, electricity, and raw material operations, among others, and will lead these advocacy activities through industry organizations.
Nippon Steel will also seek cooperation and understanding from non-industrial entities related to climate change, based on the recognition that fostering social acceptance is indispensable for the realization of the aforementioned policies and systems.

2

Stance on energy policy

The prerequisites for achieving carbon neutrality in the steel industry include the expansion of decarbonized power sources and fuels and their stable supply, that the price levels of such inputs be conducive to the international competitiveness of the buyers and an implementable CCS environment. Nippon Steel will continue to actively engage with the government and relevant institutions to establish policies and systems necessary to achieve these objectives.
Nippon Steel will actively engage with the government to establish a business environment and systems necessary to secure decarbonized power sources, based on the view that the maximum utilization of nuclear power is essential to ensure a stable and low-cost supply, considering the S+3E perspective.
Nippon Steel will also collaborate to buildout a stable and low-cost supply of hydrogen and ammonia and will seek effective government subsidies to tackle the price difference between low-carbon hydrogen and ammonia compared to traditional fossil fuels, as well as urge concrete steps to drive the development of each potential hydrogen supply base and infrastructure in Japan.

Nippon Steel’s Policy Position (5)

Nippon Steel's advocacy stance

3

Stance of carbon pricing

Nippon Steel believes it is important from the perspective of simultaneously achieving economic growth and decarbonization, that the government institutes a phased approach in implementing carbon pricing, by committing to large-scale and long-term/multi-year support for decarbonization R&D and transition process that provides ample time to corporates to carry out necessary technology development and capital investment for decarbonization.
Nippon Steel fully endorses the **growth-oriented carbon pricing concept**, as outlined in GX Vision 2040 for its design to reward and encourage early transition to carbon neutrality and to support businesses competing in the international market.

Nippon Steel will continue to demand effective and feasible regulatory frameworks to the Japanese government based on the view that the most rational path to 2050 carbon neutrality is to ensure the pathway choices through innovative technological development and to pursue its commercial deployment while maintaining international competitiveness for high-emission industries that currently lack technological options for full decarbonization, against the backdrop of a phased introduction of emissions trading scheme.

Nippon Steel does not believe that carbon pricing alone can create a GX product market and improve the predictability of GX investment. **Nippon Steel therefore urges the government to formulate policies specific to GX products, in addition to promoting the growth-oriented carbon pricing concept.**

Nippon Steel’s Policy Position (6)

Nippon Steel's advocacy stance

4

Stance on the creation of the GX product market

Nippon Steel believes that in order to create and expand a GX market with a price-making mechanism that incorporates the requisite environmental premium and encourages mass consumption, it is necessary to crystallize and visualize the value-add (≒environmental value) achieved by the upstream basic material industries across the entire value chain. This is a prerequisite for hard-to-abate basic material industries to pursue bold decarbonization investments and increased use of recycled materials on the path to carbon neutrality.

Nippon Steel will work together with the public and private sector to ensure that verified reduction volumes are properly assessed and acknowledged and to create a market where such value-added products and services are preferred, so that corporates that undertake bold GX initiatives can make real contributions to achieve global carbon neutrality.

The creation of a GX Steel market requires the commitment and burden-sharing by the buyers in addition to suppliers.
In addition to establishing rules to quantify environmental value, Nippon Steel will actively engage with the government to design incentives to promote procurement by private enterprises and support for purchases of GX Steel products, as well as the implementation of green procurement procedures for infrastructure projects by the public sector. Nippon Steel also supports the phased introduction of regulations to support the growth of the GX market and commits to foster understanding of society at large and to encourage the shift toward GX-oriented behavior.

Achievements in Major Climate Change-Related Advocacy Activities

To be disclosed as needed from June 2025 onwards

2026.2.5	Expert Working Group for the Realization of GX (Presentation)	Orihashi, Managing Executive Officer
2026.1.23	Japan-India regular exchanges among public and private steel-related parties / Rule-making for the promotion of GX Steel (Presentation)	Hitoshi Dohnomae , General Manager
2025.12.25	Statements made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy	Eiji Hashimoto, Chairman
2025.12.16	Climate Emergency Network (CEN) / 5th Anniversary Symposium (Presentation)	Environmental Planning Div. Hitoshi Dohnomae , General Manager
2025.12.9	The Japan Iron and Steel Federation / 3rd Japan-Korea Green Steel Seminar (Presentation)	
2025.11.25	Nikkei Inc. / Nikkei Forum “Global GX & Finance Conference,” Sapporo (Presentation)	Eiji Orihashi , Managing Executive Officer
2025.11.18	EU-Japan Centre for Industrial Cooperation Symposium (Presentation)	Shigeaki Tanaka , Executive Officer
2025.9.25	Mysteel (China) / Asia Steel Forum 2025 (Presentation)	Environmental Planning Div. Hitoshi Dohnomae , General Manager
2025.7.10	THE NIKKAN KOGYO SHIMBUN, LTD. / Green Forum Study Group (Presentation)	
2025.7.9	S&P Global / World Hydrogen Asia (Panel Discussion)	Taisuke Horimi, Executive Counselor
2025.7.3	LCA Society of Japan / General Meeting Commemorative Seminar (Presentation)	Environmental Planning Div. Hitoshi Dohnomae, General Manager
2025.5.29	Ministry of the Environment / "Study Group for Decarbonization Across the Value Chain through Green Product Demand Creation, etc." (Presentation)	
2025.4.16	Industrial Structure Council / Working Group on Energy Structural Transformation (Presentation)	Tadashi Imai, President
2025.3.13	Nippon Steel GX Briefing / "Collaboration for GX Steel Market Formation" (Request)	Eiji Orihashi, Managing Executive Officer Shigeaki Tanaka, Executive Officer
2025.3.5	Renewable Energy Institute / "REvision2025" (Presentation)	Environmental Planning Div. Hitoshi Dohnomae, General Manager
2024.11.19	COP29 Japan Pavilion Side Event (Presentation/Panelist)	
2024.11.7	Ministry of Economy, Trade and Industry (METI) / Study Group on Green Steel for GX Promotion (Presentation)	Eiji Orihashi, Managing Executive Officer
2024.10.15	GGX Finance Summit: “Toward the Expansion of the GX Market” (Panelist)	Environmental Planning Div. Hitoshi Dohnomae, General Manager

For details, please refer to:https://www.nipponsteel.com/sustainability/lobbying/pdf/activities_05.pdf

Evaluation of Consistency between Participating Organizations and Nippon Steel's Policy Position

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We will continue to engage in constructive dialogues with organizations to reflect our stance set forth in the policy position.

See below for details of evaluation.
https://www.nipponsteel.com/sustainability/lobbying/pdf/evaluation.pdf

	1 Stance on the government's GX policy	2 Stance on energy policy	3 Stance of carbon pricing	4 Stance on the creation of the GX product market
Japan Iron and Steel Federation	Consistent	Consistent	Consistent	Consistent
Nippon Keidanren	Consistent	Consistent	Consistent	Consistent
World Steel Association	Consistent	Consistent	No expression of position	Consistent
Kansai Economic Federation (Kankeiren)	Consistent	Consistent	Consistent	No expression of position
Central Japan Economic Federation (Chukeiren)	Consistent	Consistent	Consistent	Consistent
Tokyo Chamber of Commerce and Industry	Consistent	Consistent	Consistent	No expression of position

<Evaluation Method>
We have evaluated the consistency and alignment of our policy positions with the main recommendations and activities posted on the websites of each organization. Specifically, each organization's stance on 1) Government GX policy, 2) Energy policy, 3) Carbon pricing and 4) GX product market creation is evaluated.

NIPPON STEEL

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