Achievements in Major Climate Change-Related Advocacy Activities

Nippon Steel Corporation

Date	Meetings / Presenters	Detailed Overview	
December 16, 2025	Climate Emergency Network 5th Anniversary Symposium / [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the symposium, a presentation titled “Initiatives of the Japanese Steel Industry on Green Steel” was delivered, explaining the targets set by member companies of the Japan Iron and Steel Federation for achieving carbon neutrality by 2050, as well as the progress and challenges in technological development to achieve these targets. The presentation also covered the mechanisms and current status of green steel market formation, and the progress of industry guidelines and international standardization. In addition, policy trends and support measures of the Japanese government were introduced, including GX Transition Bonds; support for manufacturing process transformation and capital investment utilizing subsidies for hard-to-abate sectors; and measures to support the formation of a GX Steel market through government preferential procurement and subsidy add-ons, such as CEV subsidies. It was emphasized that substantial time and significant costs are required to achieve green steel, and that market formation and cost allocation during the transition period represent major challenges. The establishment of a GX Steel market and the international standardization of the CoC approach were highlighted as critical factors that will determine the success or failure of the steel industry’s efforts to achieve carbon neutrality.	Creation of the GX product market International standardization
December 9, 2025	3rd Japan-Korea Green Steel Joint Seminar & CBAM Discussion / [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the seminar, a presentation was given on the formulation of industry guidelines by the Japan Iron and Steel Federation (JISF) to promote the domestic introduction of GX steel and trends in international standardization. During the Ministry of Economy, Trade and Industry’s “Study Group on Green Steel,” it was explained that GX Steel is defined as products that involve additional direct emissions reductions, possess high environmental value, and are accompanied by price premiums, and that such products are positioned as targets of market expansion policies. Steel produced using electricity based on non-fossil certificates (NFCs) is also being discussed from the perspective of energy policy. Furthermore, it was explained that, in order to ensure transparency within the industry going forward, JISF is actively participating in initiatives such as the formulation and revision of industry guidelines; the establishment of the GX mass balance approach and the GX allocation method; and international standardization efforts, including discussions on the GX allocation method at worldsteel, the revision and development of ISO standards (ISO 14067, ISO 14077, and ISO 14064-1), and coordination between the GHG Protocol and ISO standards.	Creation of the GX product market International standardization
November 25, 2025	Nikkei Forum “Global GX & Finance Conference,” Sapporo / [Eiji Orihashi, Managing Executive Officer]	A Nippon Steel executive officer explained the latest progress in a multi-track approach combining scrap-based production by electric arc furnaces, hydrogen reduction in blast furnaces with CCUS, and hydrogen direct reduction combined with electric arc furnaces towards the implementation of GX technologies for the decarbonization of steel manufacturing processes. In addressing the significant capital expenditures and rising operating costs required going forward, he explained the importance of government support, the creation of a GX Steel market, and mechanisms to visualize and reflect CO_2 reduction value in pricing to ensure the economic rationality of GX investments. In addition, the executive stated that rules are being established to enable CO_2 emissions reduction achievements to be reflected in product CFPs through the issuance of the “Steel Product CFP Calculation Guidelines by Product Category” and the “GX Steel Guidelines” in October 2025, as well as through active participation in and leadership of the development of ISO standards and worldsteel Guidelines. During the presentation, he also stated that nationwide studies are being conducted on the development of hydrogen supply infrastructure, which is indispensable for realizing a decarbonized society, and that the Company is participating in advanced CCS projects.	Government GX policy Creation of the GX product market International standardization
November 18, 2025	EU-Japan Centre for Industrial Cooperation Symposium, Nippon Steel’s Green Transformation Initiatives / [Shigeaki Tanaka, Executive Officer]	A Nippon Steel executive officer explained that achieving Japan’s CO_2 emissions reduction targets requires, among other measures, a transition within the steel industry from blast furnaces to electric arc furnaces and the introduction of hydrogen reduction technologies, and that technological development, the formation of a GX Steel market, and the visualization and standardization of CO_2 emissions reduction value are essential for this transition. The executive further explained that the transformation of manufacturing processes entails massive capital investment, research and development expenditures, and increases in operating costs, as well as additional cost burdens associated with decarbonized raw materials and energy, and that it is necessary to establish an environment in which these costs and the value of emissions reductions are shared across the entire value chain. To achieve this, the executive asserted that it is necessary to address challenges on both the demand side and the supply side, including demand-side measures such as public procurement and expanded procurement by private companies, engagement by investors and financial institutions, and advocacy for international standardization, as well as supply-side measures such as the reduction of hydrogen prices, the establishment of a stable hydrogen supply, the reduction of CCS costs, and the development of related infrastructure.	Creation of the GX product market
September 24, 2025	15th Asia Steel Forum /Japanese steel industry initiatives: Decarboni z ation and Green Steel / [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the forum, the current status, challenges, and future direction of decarbonization and green steel initiatives in the Japanese steel industry were explained. It was emphasized that, in order to respond to increasing steel demand, it is necessary not only to utilize scrap but also to maintain production from iron ore. However, new technologies such as production of direct reduced iron using hydrogen require long development periods and large-scale investments, as well as a stable supply of affordable carbon-free hydrogen and electricity and the implementation of CCUS. Accordingly, government support in terms of funding, infrastructure development, and the maintenance of international competitiveness was described as indispensable. With a view to creating a GX Steel market that converts emissions reduction volumes into economic value, it was introduced that initiatives are being advanced, including the adoption of the JISF Green Steel scheme, under which decarbonization value is certified and attached to products for supply, demand creation measures through public-private collaboration (such as revisions to green procurement frameworks and the expansion of CEV subsidies), and the promotion of GX investments across the entire supply chain. In addition, it was introduced that, for the purpose of international standardization and guideline development, the formulation and revision of guidelines by the Ministry of Economy, Trade and Industry and the Institute of Life Cycle Assessment, Japan, as well as by JISF and worldsteel, are currently underway. It was also explained that the SBTi has introduced new concepts, such as direct and indirect mitigation, to promote GHG emissions reductions across the entire supply chain.	Creation of the GX product market International standardization
July 10, 2025	The Nikkan Kogyo Shimbun Green Forum Research Group / Japan Steel Industry Initiatives on Green Steel / [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the forum, the progress and challenges in the Japanese steel industry’s decarbonization initiatives, including the roadmap for achieving carbon neutrality by 2050, were explained. With regard to green steel market formation, examples of public- and private-sector adoption were introduced for the JISF Green Steel scheme, under which the outcomes of GHG reduction projects are certified and linked to products for supply, along with progress in their implementation in public works and in the shipbuilding and maritime sectors. It was also explained that, in order to ensure sustainability across the entire supply chain, the CoC approach (supply chain management) and the allocation method (CFP allocation) have been introduced, and that systems have been established to rationally calculate GHG reduction volumes based on international standards such as ISO 14067:2018 and to prevent double counting. In addition, it was explained that, with a view to achieving international standardization, industry guidelines are being developed and discussions on international standardization are advancing while incorporating safeguards to ensure transparency and credibility, including the disclosure and implementation of decarbonization plans, the promotion of understanding of the CoC approach, the pursuit of rational methodologies, and the mandatory use of third-party certification.	Creation of the GX product market International standardization

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July 9, 2025	World Hydrogen Asia Organized by S&P Global / [Taisuke Horimi, Executive Counselor, Green Transformation Development]	A Nippon Steel executive participated in the panel discussion at the event and introduced an overview of Nippon Steel's carbon neutrality vision, as well as the roadmaps and latest progress in the development of innovative technologies, including high-grade steel production in large-scale electric arc furnaces, production of direct reduced iron using hydrogen, hydrogen reduction in blast furnaces, and CCUS. Furthermore, he explained that, in order to promote the decarbonization of steelmaking processes, the development of infrastructure to ensure a stable supply of large volumes of carbon-free hydrogen and electricity is critically important. He also emphasized that, to secure predictability in recovering the large-scale capital investments and increases in manufacturing costs associated with the development and commercialization of decarbonized processes, the creation of a GX Steel market through the visualization of GX value and international standardization is indispensable.	Hydrogen and related infrastructure development Creation of the GX product market International standardization
July 3, 2025	LCA Japan Forum General Meeting Commemorative Seminar / Avoiding Greenwash: Case Studies from the Steel Industry / [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the seminar, Nippon Steel explained that emissions reductions from blast furnaces (primary ironmaking) are particularly indispensable to reduce CO_2 emissions in the steel industry. It was also explained that scrap recycling (secondary steelmaking) cannot serve as a sufficient quantitative or qualitative substitute for blast furnaces, and that there is a risk of misunderstanding that electric arc furnace products are low CFP products, making accurate evaluation essential. As the decarbonization of primary steelmaking processes requires substantial time and cost, Nippon Steel explained that new market formation and the development of appropriate metrics during the transition period are necessary. Accordingly, it was emphasized that, during the transition period, a mass balance approach that allocates CO_2 emissions reduction volumes to specific products is an effective method. It was further asserted that, to enable this approach, it is essential to promote understanding of the CoC approach, advance international standardization, and pursue rational methodologies, as well as to ensure transparency and traceability through measures such as the disclosure and implementation of decarbonization plans, explanation of the CoC approach, development of guidelines, alignment with international rules, prevention of double counting, and mandatory third-party certification.	Creation of the GX product market International standardization
May 29, 2025	the Entire Value Chain through Creating Demand for Green Products, etc. (2nd Meeting) /Initiatives of the Japanese Steel Industry for Decarbonization of the Entire Value Chain/ [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	At the study group, initiatives undertaken by the Japanese steel industry towards the decarbonization of the entire value chain were explained. In the course of the presentation, Nippon Steel asserted that reducing CO_2 emissions from blast furnaces (primary ironmaking) is essential, and that the most important factor in achieving this is the formation of a sound GX Steel market in which appropriate compensation is provided for the value of CO_2 emissions reductions. https://www.env.go.jp/council/content/06earth04/000318048.pdf	Government GX policy Creation of the GX product market
April 16, 2025	Green Innovation Project Subcommittee of the Industrial Structure Council Working Group on Energy Structure Conversion "Use of Hydrogen in the Steelmaking Process" [Tadashi Imai, Representative Director, President and COO]	In the working group sponsored by the METI, President Imai reported on the progress of the Green Innovation Fund Support Project "Use of Hydrogen in the Steelmaking Process." In reporting, he introduced the "completion and commencement of a test electric furnace at the Hasaki R&D Center" and "achievement of 43% CO2 emissions reduction by hydrogen reduction in a test blast furnace" concerning technology development, and the "issuance of worldsteel guideline ver. 1 based on the Japan Iron and Steel Federation's Guidelines for Green Steel for GX (November 2024)" and "proposal of comprehensive public-private measures for creating the market for green steel for GX at a session of the Study Group on Green Steel for Green Transformation" concerning the creation of the market for green steel for GX. https://www.meti.go.jp/shingikai/sankoshin/green_innovation/energy_structure/pdf/028_05_00.pdf [available only in Japanese]	Government GX policy Creation of the GX product market
March 13, 2025	Nippon Steel's Briefing Session "Nippon Steel's Green Transformation (GX) Initiatives" [Eiji Orihashi, Managing Executive Officer, and Shigeaki Tanaka, Executive Officer]	NSC's executives explained the progress and challenges of its Carbon Neutral Vision to institutional investors, financial institutions, analysts, environmental protection groups, and the media. They specifically explained 1) the necessity of "a multi-pathway approach through the development and implementation of breakthrough decarbonized technologies" and "the development of social infrastructure such as a supply scheme for huge quantities of cost-effective hydrogen and decarbonized energy" concerning technology development and implementation, and 2) the necessity of "adoption and standardization of green steel for Green Transformation (GX steel)" and "predictability of investment recovery" concerning the creation of the market for GX steel. They also asked the participants for their cooperation toward the creation of the market. NSC's engagement with society and its basic stance toward solving these issues were also explained. https://www.nipponsteel.com/en/ir/library/pdf/20250313_100.pdf	Government GX policy Creation of the GX product market
March 5, 2025	Presentation at Renewable Energy Institute's International Symposium "REvision 2025: The Great Decarbonization Competition and Renewable Energy" [Hitoshi Dohnomae, General Manager, Environmental Planning Division]	In the symposium, after explaining efforts to reduce CO2 emissions in the blast furnace process, General Manager Dohnomae explained that, as discussed at the METI's "Study Group on Green Steel for Green Transformation (GX steel)", GX steel is important to promote GX during the transition period, and that priority procurement and purchasing support by the government are necessary to expand demand for GX steel. He also explained that matters needed as basic policy for expanding demand for GX steel include 1) to work on expanding demand from an early stage to boost GX investment, 2) to reflect the actual GHG emissions reduction in the CFP (carbon footprint of products) according to international standards and rules, and 3) to promote support measures for stimulating demand for GX steel for the supply and demand sides. https://www.renewable-ei.org/pdfdownload/activities/S3-3_HitoshiDohnomae_NipponSteel_250305.pdf	Creation of the GX product market
November 19, 2024	Presented and participated as a panelist at the COP29 Japan Pavilion during the Japan Iron and Steel Federation-hosted side event "Pathways toward steel decarbonization." <Hitoshi Dohnomae , General Manager, Environmental Planning Div.>	As a panelist, General Manager Dohnomae explained that the steel industry is pursuing decarbonization through hydrogen-based reduction and the adoption of EAFs and that, given the considerable time and significant costs involved in this transition, green steel certified through a chain of custody is essential for delivering green products to customers as quickly as possible. Additionally, he explained that the Japanese government has pledged support for these efforts, and emphasized the necessity of establishing international regulations to facilitate GX product market formation. https://www.youtube.com/watch?v=540nSw0RC8w [available only in Japanese]	Creation of the GX product market
November 7, 2024	Presentation delivered at the Study Group on Green Steel for Green Transformation (GX), hosted by METI <Eiji Orihashi, Managing Executive Officer, Head of Green Transformation Development>	In the presentation, Managing Executive Officer Orihashi explained the necessity of reducing CO_2 emissions from blast furnaces and approaches for mitigating or transitioning from the reduction process were discussed and then emphasized that the transition to GX technologies requires substantial capital investment and increased operational costs, and that the formation of a GX-transformed green steel market is essential to ensure investment predictability. Furthermore, he explained that key challenges for creating a GX product market include establishing evaluation indices for CO_2 reduction achievements and developing international standards for GX-transformed green steel using the steel mass balance approach. https://www.meti.go.jp/shingikai/mono_info_service/green_steel/002.html [available only in Japanese]	Creation of the GX product market

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October 15, 2024	Participation in the GGX Finance Summit, hosted by METI and co-hosted by WBCSD, TCFD Consortium, and GX Acceleration Agency Session 1： Expanding the GX Market - Participation as a panelist <Hitoshi Dohnomae, General Manager, Environmental Planning Div.>	To expand the GX market, which is essential for industrial decarbonization, it is crucial that efforts to reduce greenhouse gas emissions during the manufacturing process are reflected in product value. In this context, the participants confirmed the current status of international debates on green procurement and held discussions on the selection of appropriate indicators for quantifying emissions reductions. We, as a panelist, explained the necessity of using “actual reduction volume” as an indicator was explained, along with considerations for international deployment and examples of its application in the steel industry. https://ggxf-summit.go.jp/programEn.html	Creation of the GX product market
July 23, 2024	Statement made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy <Eiji Hashimoto, Representative Director, Chairman and CEO>	Chairman Hashimoto referred to the two fundamental premises: first, power demand is increasing; second, the transition from thermal power to green power—comprising both renewable energy and nuclear power—is subject to temporal constraints, and stated that, regarding renewable energy, Japan’s natural conditions and geographical disadvantages impose significant cost constraints and that at present, both solar and wind power installations entirely rely on foreign materials and equipment. Consequently, he argued that while expanding renewable energy, it is necessary to simultaneously promote domestic production and assess economic feasibility and that this must be pursued pragmatically while adhering to the fundamental principles of S+3E and national security. https://www.enecho.meti.go.jp/en/committee/council/basic_policy_subcommittee/	Energy policy
July 8, 2024	Statement made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy <Eiji Hashimoto, Representative Director, Chairman and CEO>	Chairman Hashimoto made the following statement. A robust supply system for green power is indispensable to achieving a carbon-neutral (CN) society in Japan while maintaining international and industrial competitiveness in the CN era. We also noted that given the clear shift toward increasing power demand, it is imperative to swiftly implement concrete measures and that, considering that major countries have already introduced new policies based on the assumption of a significant rise in power demand, falling behind in this regard would jeopardize Japan’s industrial base and, ultimately, the livelihoods of its citizens, adding that this sense of urgency must be acknowledged. He explained that the fundamental conditions for a robust power supply system must include S+3E as well as national security and that from a national security perspective, the power supply system must meet the following three essential requirements: - domestic capability to manufacture equipment independently; - possession of operational technologies; - reduction of reliance on overseas sources for fuel procurement. He then argued that, given the fact that the primary approach should be the transition to renewable energy, but Japan faces exceptionally challenging natural conditions for renewable energy, and given the high dependence on overseas procurement for equipment and materials, pursuing economic viability solely through renewable energy expansion is impractical. Therefore, he asserted that while expanding renewable energy and maximizing economic efficiency, it is necessary to urgently promote the safe utilization of nuclear technology that meets the fundamental security conditions. Furthermore, based on the experience gained from the Kashiwazaki-Kariwa Nuclear Power Plant, he stated that it was confirmed that comprehensive safety measures, both in terms of software and hardware, have been fully implemented, which underscores the inherent safety of nuclear power plants. https://www.enecho.meti.go.jp/committee/council/basic_policy_subcommittee/index.html	Energy policy
May 15, 2024	Statement made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy <Eiji Hashimoto, Representative Director, Chairman and CEO>	Chairman Hashimoto made the following statement. Decarbonization is a shared global necessity and the decisive factor lies in technological development capabilities for both processes and products, making this the final significant opportunity for Japan's economic revival. Seizing this opportunity depends on whether the outcomes of research and development can successfully translate into full-scale domestic implementation and capital investments. He noted that, while the private sector is the primary driver of implementation, the development of essential infrastructure for decarbonization—such as green power and green hydrogen—should be government-led, and in this context, he welcomed the government’s new policy direction of assuming a more proactive role in the formulation and execution of industrial policies. In the steel industry, the transition to electric arc furnaces (EAFs) is one pathway to achieving decarbonization, but it is contingent on a stable supply of green power. Similarly, hydrogen reduction steelmaking depends on the reliable supply of hydrogen produced through electrolysis powered by green power. Of these two strategies, the transition to EAFs is prioritized for implementation by 2030. After explaining this, he asserted that, given that several years are required from the construction to the commissioning of such facilities, it is imperative to make substantial investment decisions no later than the end of the year. To enhance predictability in discussions for the 7th Strategic Energy Plan, he proposed addressing the following three key themes: - projections of future supply and demand; - a proper evaluation of each power source, accurately reflecting the comprehensive functions required of electric power, rather than assuming renewable energy as the sole solution; - identification of realistic transition strategies and associated challenges. This is not a special request but simply a reaffirmation of the fundamental principle of S+3E—seeking a viable approach to power generation and decarbonized power systems based on reality and data. He requested the following measures based on the premise of a stable supply of green power: - verification of the economic viability of renewable energy expansion; - safe utilization and expansion of nuclear technology, including new construction and replacements; - long-term reactivation of existing nuclear power plants as a transitional measure; - construction of high-efficiency thermal power plants that contribute to CO_2 reduction. https://www.enecho.meti.go.jp/en/committee/council/basic_policy_subcommittee/	Government GX policy Energy policy
December 4, 2023	Compilation of a report by the GX League’s “Working Group on Adding Value to Green Products”	NSC participated in the Working Group on Adding Value to Green Products and contributed to drafting the Green Candidate Product Use Cases. The findings on the green value of products and services were compiled and published as the final report. The report provides a cross-industry perspective on organizing concepts related to green value and offers recommendations for future market development. https://gx-league.go.jp/news/2023120401/ [available only in Japanese]	Creation of the GX product market

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June 28, 2023	Statement made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy <Eiji Hashimoto, Representative Director and President>	President Hashimoto made the following statement. While Europe optimizes its energy mix as a whole rather than on a country-by-country basis, Japan cannot integrate its power grid with neighboring countries as Europe does and must formulate its energy strategy independently, and therefore it is self-evident that Japan faces less favorable cost conditions when developing renewable energy infrastructure. Therefore, while self-sufficient power sources include hydropower and geothermal energy, concrete measures—including the construction of new nuclear power plants—are necessary. He added that large-scale investment in plant and equipment for decarbonization will only become financially viable through increased production and added value, and stated that for capital expenditures (CAPEX), the government must share costs with the private sector and that for operational expenditures (OPEX), the government must establish a supply system for electric power and hydrogen that ensures international competitiveness without disadvantaging domestic industries. Unless clear and specific policies on CAPEX and OPEX are established, he stressed, investments in domestic plant and equipment are unlikely to materialize. Accordingly, he urged that such investments be positioned as part of a national strategy involving both public and private sectors. https://www.enecho.meti.go.jp/committee/council/basic_policy_subcommittee/index.html	Energy policy Government GX policy
February 14, 2023	Participation as a panelist in the GX League Symposium 2023, organized by the Ministry of Economy, Trade and Industry (METI). <Eiji Hashimoto, Representative Director and President>	President Hashimoto participated as a panelist at the GX League Symposium, which promotes initiatives such as the GX Emissions Trading System (GX-ETS). He explained that the GX League aims to advance carbon pricing mechanisms that foster economic growth, as carbon pricing that stifles research and development could undermine the nation's long-term interests. He stressed that for GX to be genuinely integrated into Japanese society, public understanding and behavioral changes are essential and that public acceptance of cost increases associated with new technologies is also necessary. He argued that broad corporate participation in the GX League and a deeper understanding among companies would ultimately lead to greater public awareness and acceptance. https://www.youtube.com/watch?v=TsQHtLACrUg [available only in Japanese]	Carbon pricing
May 17, 2022	Publication of the Keidanren proposal "Towards Green Transformation (GX)"	Keidanren where Chairman Hashimoto serves as Vice Chairman proposed that discussions on the "cap-and-trade emissions trading system"—which requires careful consideration within the context of carbon pricing under the "GX Policy Package" for achieving carbon neutrality (CN) by 2050—should commence immediately. https://www.keidanren.or.jp/journal/times/2022/0428_01.html https://www.keidanren.or.jp/en/policy/2022/043_point.pdf	Carbon pricing
February 21, 2022	Presentation delivered at the Manufacturing Industry Subcommittee of the Industrial Structure Council <Eiji Hashimoto, Representative Director and President>	President Hashimoto explained the need for a Japanese-specific policy package, including the expansion of research and development support (such as the GI Fund), comprehensive assistance across all stages from R&D to facility implementation for decarbonization, and support for increased operational costs associated with hydrogen, electric power, and raw materials. https://www.meti.go.jp/shingikai/sankoshin/seizo_sangyo/011.html [available only in Japanese]	Government GX policy
November 17, 2020	Statement made as a committee member at the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy <Eiji Hashimoto, Representative Director and President>	President Hashimoto expressed support for the perspective that achieving carbon neutrality by 2050 should be regarded as a vision and a strategic direction for Japan to pursue. He pointed out that the target was extremely ambitious and could not be achieved with current technologies alone, and emphasized the importance of setting an ambitious vision to accelerate efforts. He highlighted that regarding renewable energy, the most important issue was whether it could be established as a primary power source while maintaining the 3E+S principles (Energy Security, Economic Efficiency, Environment, and Safety). He stressed the necessity of expanding offshore wind power generation as a key option for future energy supply and requested the development of policies to promote domestically produced offshore wind power. https://www.enecho.meti.go.jp/en/committee/council/basic_policy_subcommittee/	Government GX policy Energy policy