Investor Briefing - Nippon Steel Corporation (NSC) 2024 AGM

Analysis of climate plan and climate lobbying disclosures
Insights on shareholder resolutions at 2024 AGM

Jo Kelly, Company Strategist, ACCR
jo.kelly@accr.org.au

Jasmine Fowler-Morrow, Analyst, ACCR
jasmine.fowler-morrow@accr.org.au

Sam Hall, Analyst - Policy Engagement, ACCR
sam.hall@accr.org.au

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Executive Summary

- Our research shows that despite claiming it strives for carbon neutrality by 2050, Nippon Steel Corporation's (NSC) climate strategy falls well short of aligning with the Paris Agreement.
- Since January 2023, institutional investors alongside ACCR and Corporate Action Japan (CAJ) have been engaging with Nippon Steel on improving its decarbonisation commitments, climate strategy, and climate-related lobbying disclosures - focusing on the opportunity to increase long-term shareholder value and accelerate the company's transition towards decarbonisation.
- Following extensive engagement with the company three shareholder proposals have been filed for consideration at the 2024 Annual General Meeting (AGM): Proposals 1 & 2 co-filed by ACCR and CAJ; Proposal 3 co-filed by ACCR and Legal & General Investment Management (LGIM).

This presentation outlines the **strong case for the shareholder proposals** on:

1. Aligning emissions reduction targets with the goals of the Paris Agreement & disclosing planned capex for decarbonisation investments
2. Linking remuneration to greenhouse gas (GHG) emissions reduction targets
3. Improving climate-related lobbying disclosures

Nippon Steel Corporation is a globally significant steelmaker (and miner)

Nippon Steel Corporation:

- is the 4th largest steelmaker in the world and Japan's largest steelmaker
- dominates the Japanese market, producing 43% of Japan's crude steel[1]
- operates in 15 countries.

Owned capacity by material[2]	
Steel	66 Mtpa (cons.)
Coking coal	25 Mtpa (ncons.)
Iron ore	50 Mtpa (ncons.)

In 2021, NSC's operational emissions (scope 1 and 2) footprint was equivalent to 8.4% of Japan's emissions.

1: NSC 2023 Integrated Report, p. 51
2: NSC 2023 Integrated Report, p. 13

Overview of NSC climate strategy

Our research shows that despite claiming it strives for carbon neutrality by 2050, NSC's decarbonisation strategy falls well short of aligning with the Paris Agreement

NSC's climate transition plan falls significantly short of aligning with the goals of the Paris Agreement

- NSC's decarbonisation strategy does not currently drive its emissions reductions – the majority of reductions since 2013 are the result of decreased production
- 2030 emissions reduction targets are not Paris-aligned and exclude Scope 3 emissions. Targets also only cover domestic operations, therefore excluding 30% of NSC's total steelmaking capacity
- Emissions reduction targets fall short of Japan's Industry emissions target and Nationally Determined Contributions (NDC)
- NSC invests heavily in technologies with limited potential for decarbonisation, focusing on coal-dependent technologies without transparency regarding their effectiveness or cost-efficiency. It has significant reliance on CCUS for emissions cuts
- The company lack clear and ambitious strategies for renewable energy use and green steel production.
- NSC does not link its executive compensation to climate performance, reducing accountability and motivation for achieving climate goals.

Shareholder engagement

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Timeline of engagement

January 2023: Co-engagement group including Man Group, Storebrand Asset Management, Corporate Action Japan (CAJ) and ACCR begin engaging with Nippon Steel Corporation (NSC) on its decarbonisation commitments and climate strategy. This engagement was initiated due to NSC's potential to be a leader in decarbonisation as a significant steel producer and carbon emitter, presenting an opportunity to increase long-term shareholder value and accelerate the transition towards decarbonisation.

May 2023: After several months of engagement, NSC publicly commits to transitioning from blast furnace to electric arc furnace steelmaking at its Kyushu and Setouchi Works, marking a significant step towards reducing emissions. NSC further announces plans to temporarily prolong the life of blast furnaces only where necessary due to economic, maintenance, or safety reasons.

September 2023 - February 2024: ACCR continues to engage with NSC.

January - May 2024: Expanded co-engagement group including LGIM, Nordea, Storebrand, Amundi, CAJ and ACCR continues engaging with NSC on improving its climate strategy. Following multiple meetings with the company, and with insufficient outcomes, three shareholder proposals were filed.

Amendment to articles of incorporation: The only pathway

- UN PRI: Japan is one of the countries with a ‘**restrictive**’ framework. Shareholder proposals **must** take the form of amendments to the articles of association
- Japan Companies Act allows for shareholder proposals in the form of amendment to the articles.
- Legal uncertainty regarding climate proposals in a different form creates a risk of rejection by companies of a shareholder proposal not framed as amendment to the articles.
- Shareholder proposal shall preferably not encroach on “management matters” of the Board because:
  - vocal minority view against it;
  - certain Japanese AM have voting policy against proposals prescribing specific business execution

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Proposals and co-filers

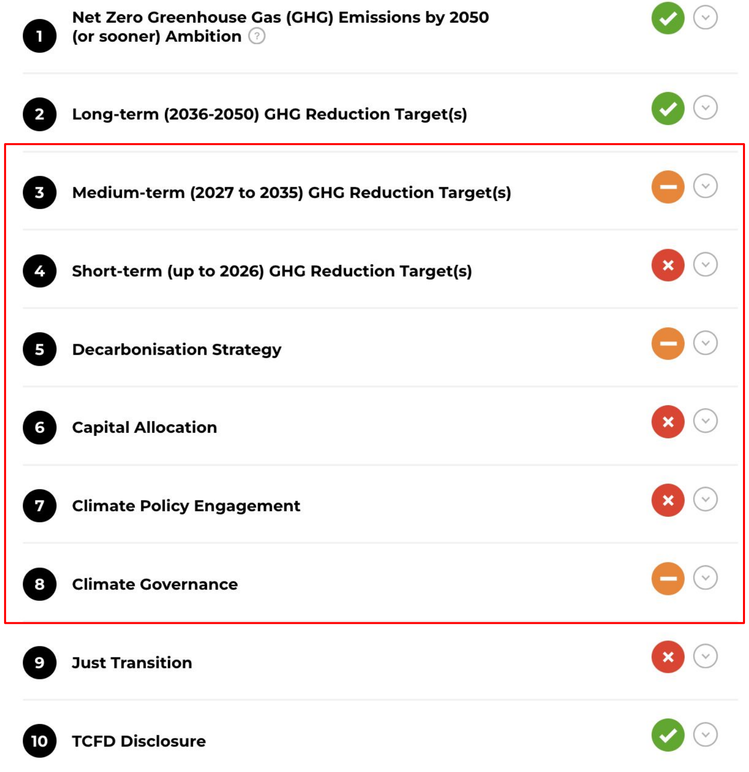
1. Enhancing climate targets and disclosures
    - **Co-filers:** Corporate Action Japan, ACCR; **Co-engagers:** Amundi, Nordea Asset Management and Storebrand Asset Management
    - We request that NSC set and disclose Paris-aligned short- and medium-term GHG reduction targets for Scope 1, 2, and 3 emissions, including detailed transition plans and annual progress reports to improve transparency and avoid risks of capital misallocation and stranded assets.

2. Linking executive compensation to GHG emissions reduction targets
    - **Co-filers:** Corporate Action Japan, ACCR; **Co-engagers:** Amundi, Nordea Asset Management and Storebrand Asset Management
    - We request NSC to link executive remuneration to GHG emissions and reduction targets, ensuring that compensation aligns with climate strategies, motivating leadership, and protecting long-term shareholder value.

3. Enhancing climate lobbying disclosures
    - **Co-filers:** LGIM, ACCR; **Co-engagers:** Amundi, Nordea Asset Management and Storebrand Asset Management
    - We request NSC to annually disclose its climate-related policy positions and lobbying activities, ensuring alignment with its carbon neutrality goal by 2050, enhancing transparency, and meeting global investor expectations

Nippon Steel performs poorly on CA100+ Assessment; Shareholder resolutions aim to improve performance

- **Proposal One** aims to lift NSC's performance against **criteria 3 to 6**
- **Proposal Two** aims to lift its performance against **criteria 8**
- **Proposal Three** aims to lift its performance against **criteria 7 and 8**



Source: CA100+ Assessment of Nippon Steel

Proposal One

Paris-aligned targets and enhanced disclosures are crucial to protecting the long-term value of the company for investors.

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Shareholder Proposal 1: Enhanced climate targets and disclosures

We ask that Nippon Steel Corporation enhances its climate targets and disclosures by:

- setting and disclosing short- and medium-term GHG emissions reductions targets aligned to the goals of the Paris Agreement for <u>scope 1, 2 and 3 emissions</u>

- preparing and disclosing <u>transition plans that include planned capital allocation</u> for decarbonisation investment over the <u>forward 3 years</u>, along with the estimated emissions reduction impact of each investment, to achieve the company's short and medium-term GHG emissions reductions targets

- annual reporting on its progress against these targets and transition plans.

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Paris-aligned targets and enhanced disclosures are crucial to protect NSC's long-term value

NSC requires enhanced climate targets because its:

- 2030 target is not aligned with Paris Agreement, does not meet necessary emissions reductions
- climate targets exclude Scope 3 emissions
- 30% of its steelmaking capacity is not covered by its current targets.

NSC require enhanced disclosures on its decarbonisation spend because the company has:

- not disclosed its capital allocation towards decarbonisation in any of its projects
- spent years developing and investing in technologies that perpetuate coal reliance without transparency on their effectiveness or cost-efficiency.

We believe NSC's unambitious and indecisive approach risks capital misallocation and stranded assets. However, there is still significant opportunity for NSC to become a leader in steel decarbonisation, though that window is rapidly closing.

Snapshot: NSC has one of the largest emissions footprints in the steel industry

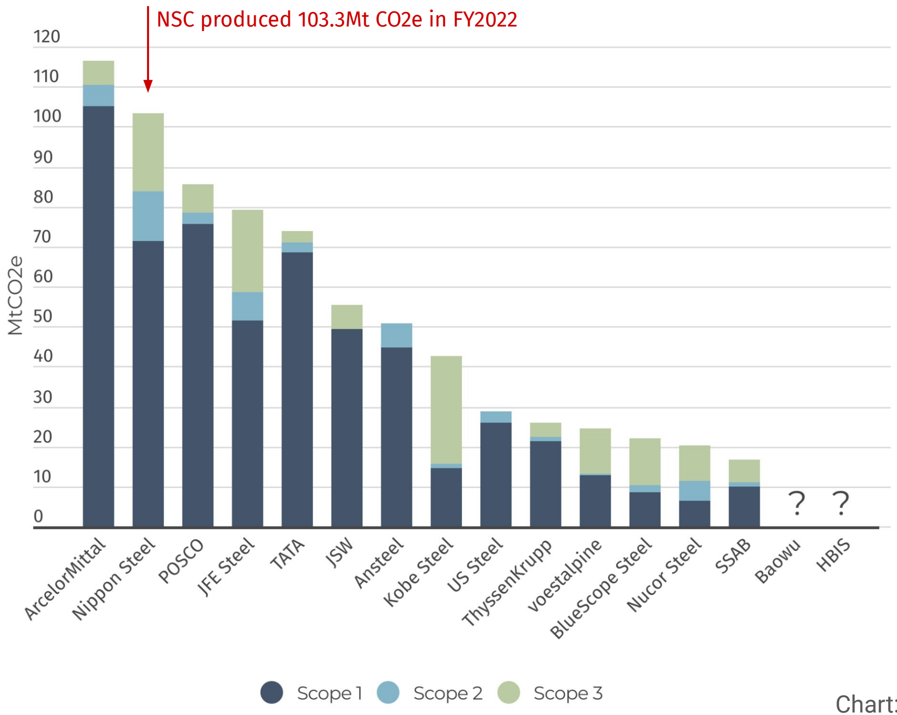

Chart: ACCR, Data: Company disclosures

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NSC's decarbonisation strategy does not currently drive its emissions reductions – The majority of reductions since 2013 are the result of decreased production

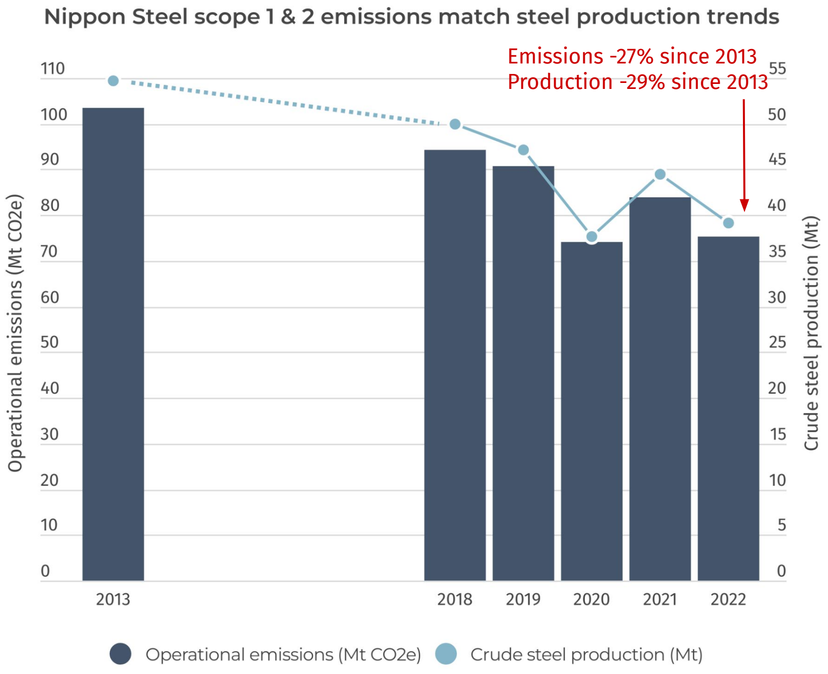

Chart: ACCR, Data: NSC disclosures

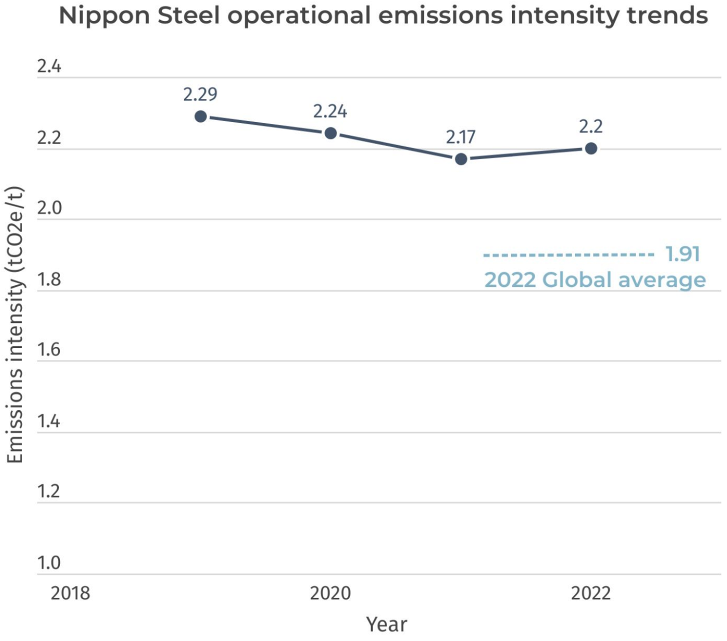

Chart: ACCR; emissions intensity data: Transition Asia (non consolidated); Global average: World Steel Association 2022

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NSC's 2030 emissions reduction targets fall short of Japan's Industry emissions target and Nationally Determined Contributions (NDC)

NSC's current climate targets

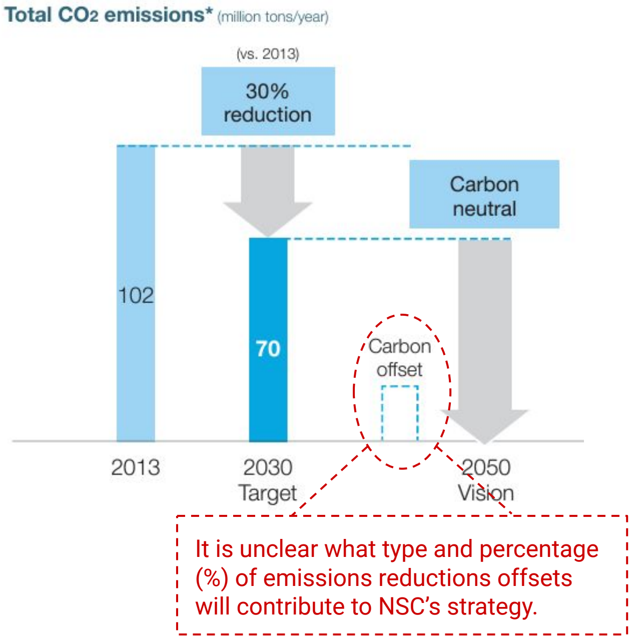

Chart: NSC 2023 Integrated Report, p. 31

NSC's 2030 target vs Japan's industry and overall 2030 target

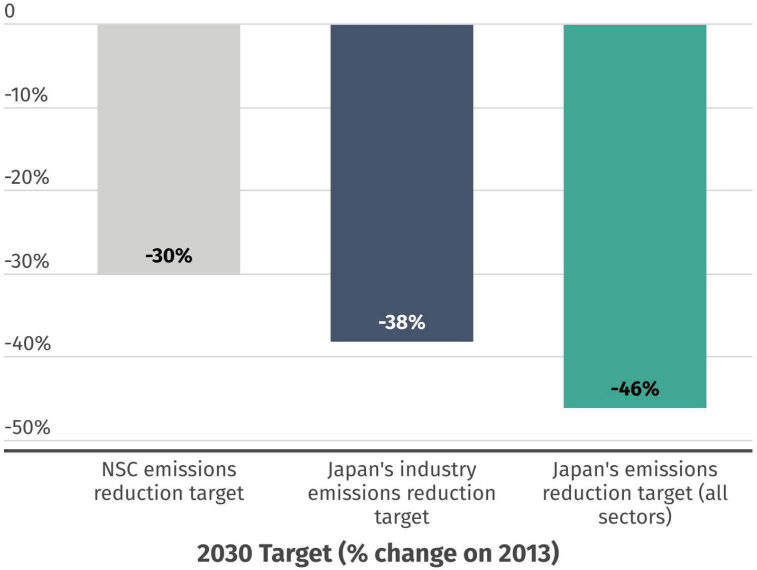

Chart: ACCR, Data: NSC disclosure, Japan's Nationally Determined Contribution

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Japan's Climate Targets are not aligned with a 1.5°C pathway, and heading for 3°C world

Figure: Climate Action Tracker's evaluation of Japan's climate targets, policies and actions

Japan aims to achieve a **46%** (50% as aspirational target & 42% excluding LULUCF) **GHG emissions reduction by 2030** below 2013 levels.

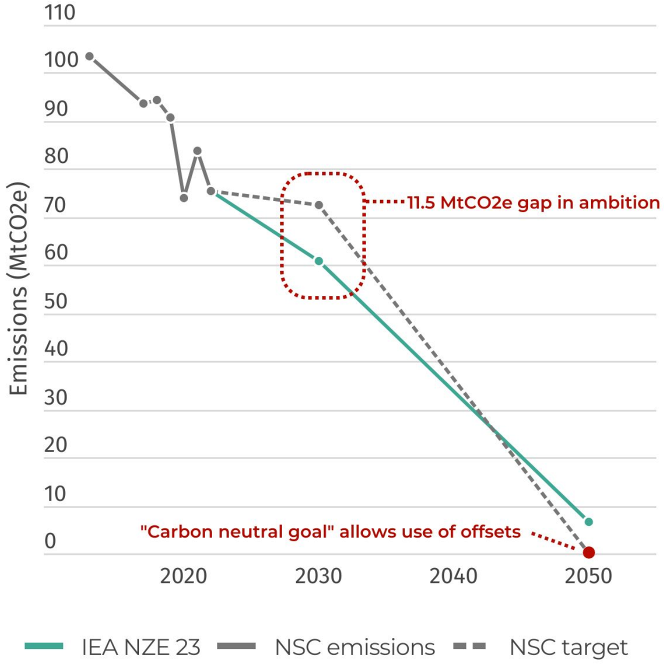
The Climate Action Tracker rates this target as **"insufficient"** when compared to required domestic efforts, and **"insufficient"** when compared to Japan's fair share.

Japan's policies, actions and targets are heading towards a 3°C world

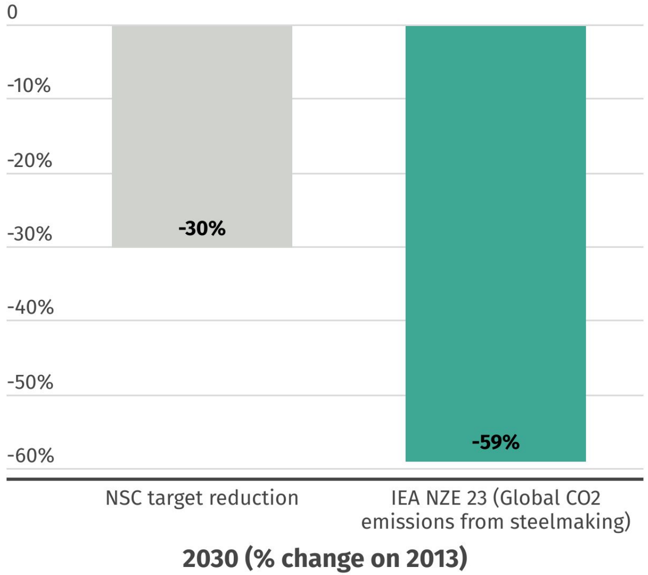
Source: Climate Action Tracker, Japan, updated 30 Nov 2023
LULUCF: Land use, land-use change and forestry

NSC's 2030 emissions reduction targets are not Paris-aligned based on IEA NZE scenario for steelmaking

NSC's emissions reduction trajectory compared to an IEA NZE 23 pathway



NSC's 2030 emissions reduction target compared to an IEA NZE 23 steelmaking pathway



Charts: ACCR, Data: NSC disclosures, WEO 2023

NSC's current targets exclude 30% of its steelmaking capacity, and potentially over 50% if strategic growth goals are met

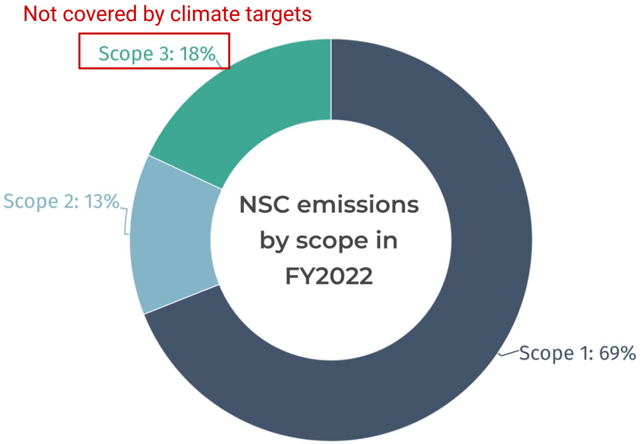


Table: NSC current steelmaking capacity and expansion plans

	Geographic scope	2022 capacity	After U.S. Steel acquisition	Strategic goal
Domestic	6 Works 13 Areas	47 Mtpa	47 Mtpa	>40 Mtpa*
Overseas	15 Countries 51 Companies	19 Mtpa	39 Mtpa	>60 Mtpa
Total	-	66 Mtpa	86 Mtpa	>100 Mtpa

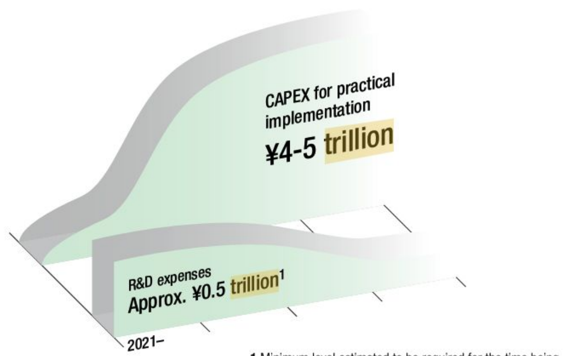
- NSC's 2030 target and carbon neutral roadmap cover **domestic operations only** and **exclude Scope 3 emissions.**
- All of NSC's capacity growth is planned outside of Japan.
- Acquisition of U.S. Steel will increase production capacity by 20 Mtpa
- If NSC achieves goal of 100Mt production capacity, it's targets will cover **less than 50% of steelmaking capacity.**

*Figure unclear as NSC has not disclosed. ACCR assumes it will be ~40 Mtpa.
Source: NSC, 'Acquisition of U.S. Steel', 18 Dec 2023, p. 21

NSC's lack of detailed disclosure on decarbonisation investments and capital allocation hinders transparency and accountability

- NSC estimate the investments needed for decarbonisation are:
  - 4-5 trillion yen (USD 25.5bn) in CAPEX for practical implementation of decarbonisation strategy
  - 500 billion yen (USD 3.2 bn) in the short-term for decarbonisation R&D.
- **NSC has received 450 billion yen** (USD 2.9 billion) from Japan's Green Innovation fund, with 53% (almost USD 1.6bn) of this being put towards developing Super COURSE50.
- According to ACCR's research, **NSC has not disclosed the Company's spend on any decarbonisation projects**.

Investments needed for the carbon neutral steel project



Source: NSC 2023 Sustainability Report, p. 27

Support NSC has received from Green Innovation Fund				
Technology	**Green potential**		**Funding received (billion yen)**	**% of total funding**
COURSE50	Limited		43.6	9.7%
Super COURSE50	Limited	Low Carbon	238.6	53.0%
H2-DRI	Green		114.1	25.4%
Large-scale EAFs	Green		30.6	6.8%
Electric melting furnace	Green		23.0	5.1%

Source: NSC FY 2023 Earnings Summary, p. 44

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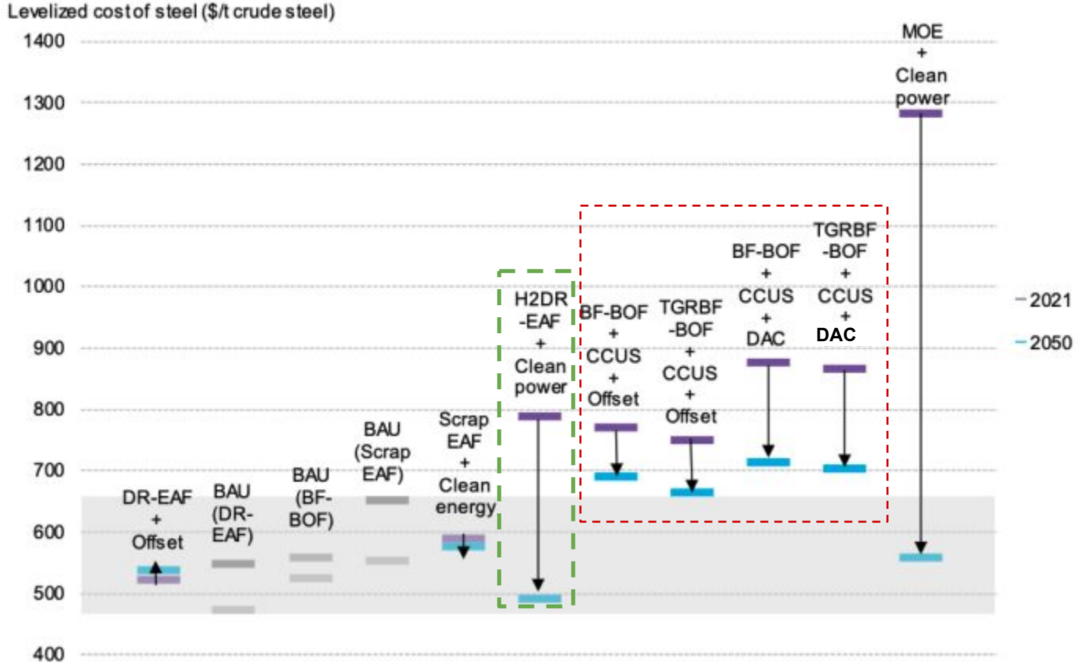
Bloomberg New Energy Finance suggests that technologies involving blast furnaces will end up more expensive than fossil-free alternatives

NSC's COURSE50 technology is forecast to be more expensive than fossil-free alternatives.

According to BloombergNEF:

- BF technologies with CCUS and offsets will be among the most expensive carbon neutral steel production options in 2050
- fossil-free H2-DRI-EAF powered by renewables will be the cheapest option in 2050.



Source: BloombergNEF

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NSC's Mass Balance brand, *NSCarbolex™ Neutral*, has a limited impact on the Company's emissions. Promoting it as "green" steel poses legal and regulatory risks

ACCR estimates that *NSCarbolex™ Neutral* has reduced the Company's annual emissions by approximately 0.13%[1]

Promoting mass balance steel as "green" steel poses Legal and regulatory risks: Recent disclosures from the company have touted *NSCarbolex™ Neutral* as "green" steel with mass balance approach. The POSCO legal proceedings brought by Solutions For Our Climate highlight potential greenwashing risks associated with the mass balance approach, raising concerns about misleading claims and compliance with environmental regulations.

NSC's mass balance brand *NSCarbolex™ Neutral* does not disclose:

- what premium is being charged for these products
- whether it is spending revenue from these products on furthering decarbonisation efforts, as is best practice.

What is Mass Balance?

It is a calculation-based approach where emissions are reduced for certain products by allocating these emissions reductions. E.g., if emissions are reduced by 10%, then 10% of all steel products can be marketed as "low carbon" and sold with a green premium.

Mass balance should only:

- be a transition measure towards fossil-free green steel, with clear and transparent disclosures
- be used temporarily, with revenues generated from green premiums transparently reinvested in solutions that will produce fossil-free green steel.

1: Based on emissions reductions cited in the NSCarbolex Independent Assurance Statement, which cites 47,145 tCO_2e as the emissions saved over 6 months.

Proposal Two

Long-term institutional investors consider directly linking executive remuneration and the achievement of NSC's GHG emissions reduction targets to be in the company's interests.

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Shareholder Proposal 2: Linking executive compensation to GHG emissions reduction targets

- We ask that NSC set and disclose details in its annual reporting on how its compensation system incentivises and rewards progress towards achieving the Company's GHG emissions reduction targets.
- Long-term institutional investors in NSC consider the direct linkage of remuneration to the achievement of GHG emissions reduction targets an important mechanism to incentivise executive performance towards NSC's strategy and goals, protecting corporate value.

Linking executive compensation to Paris-aligned targets drives decarbonisation efforts, ensures strategic implementation, and safeguards shareholder value

By linking executive remuneration to the achievement of Paris-aligned emissions reduction targets, NSC can:

- motivate its leaders to take climate action by tying executive pay to the achievement of GHG reduction goals
- keep pace with peers who are already linking executive remuneration to climate goals
- align compensation with investors' long-term expectations, protecting corporate value

Of note:

- NSC intends to propose a revision of the amount of compensation for Directors in **Items 4 and 5** at the AGM, stating: "If each of these proposals is approved, the Company will continue to properly address its management issues, **including the challenge of achieving carbon neutrality under the new compensation levels and system**."

What gets measured, gets managed: NSC's current remuneration structure does not incentivise decarbonisation

Decarbonisation **targets and climate change are not currently factored into the assessment of NSC's executive performance**.

This is concerning because:

- it misses a critical lever for aligning leadership actions with decarbonisation objectives
- the lack of recognition and response to climate change poses a material risk to the company's long-term value
- it suggests NSC views climate change as a matter of regulatory compliance rather than a business risk or opportunity.

8.2 The company's executive remuneration scheme incorporates climate change performance elements.

NO, DOES NOT MEET ANY CRITERIA

A The company's CEO and/or at least one other senior executive's remuneration arrangements specifically incorporate climate change performance as a Key Performance Indicator determining performance-linked compensation (references to 'Environmental, Social, and Governance (ESG)' or 'sustainability performance' are insufficient).

NO, DOES NOT MEET ANY CRITERIA

B The company's CEO and/or at least one other senior executive's remuneration arrangements incorporate progress towards achieving the company's GHG reduction targets as a Key Performance Indicator determining performance-linked compensation.

NO, DOES NOT MEET ANY CRITERIA

Source: CA100+ Assessment of Nippon Steel

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NSC's peers are already linking executive remuneration to climate goals and taking stronger steps in the right direction

JFE Steel

- **2022:** Following engagement with Man Group, Storebrand and ACCR, JFE Steel committed to:
  - linking remuneration incentives to its emissions reduction targets
  - annual consideration of its 2030 emissions target, with regard to exceeding it
  - annual conversations with shareholders about the alignment of its technology investments with its reduction targets.

KobelCo

- **2024:** After engaging with an investor group including CAJ, LGIM, Man Group and ACCR, KobelCo commits to introducing ESG metrics, including a climate change score, as part of its remuneration incentives for executive performance.

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Shareholder Proposal 2: Linking executive compensation to GHG emissions reduction targets

We ask that NSC set and disclose details in its annual reporting on how its compensation system incentives and rewards progress towards achieving the Company's GHG emissions reduction targets:

1. Incentivising climate targets
    a. **Linking remuneration to GHG targets:** ensuring that executive compensation is directly tied to the achievement of the Company's GHG emissions reduction targets
    b. **Encourages executive performance:** using compensation as a tool to motivate executives to meet climate goals and implement decarbonisation strategy
2. Alignment with investor interests
    a. **Investor expectations:** Institutional investors consider a direct linkage between remuneration and GHG target achievement to be crucial for protecting corporate value

Long-term institutional investors in the Company consider a direct linkage between remuneration and achievement of the Company's GHG emissions reduction targets, to be in the Company's interests, as an important mechanism to incentivise executive performance towards achievement of the Company's strategy and goals and protect corporate value.

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Proposal Three

Aligning NSC's climate-related lobbying activities with its goal of carbon neutrality by 2050 supports long-term value creation.

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Shareholder Proposal 3: Enhanced climate lobbying disclosures

We ask that NSC annually discloses:

- its global climate-related and decarbonisation-related policy positions and lobbying activities, including its own direct lobbying and industry association memberships:
  - reviewing these for alignment with its company goal of carbon neutrality by 2050
  - explaining the actions the company will take if its activities are determined to be misaligned.

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Enhancing lobbying disclosures and governance is good for long term value

By enhancing its climate lobbying disclosures, NSC will:

- increase transparency, allowing shareholders to properly assess if NSC's lobbying supports its decarbonisation goals
- align with the expectations of global investors, who believe the transparent disclosures of these activities is required by good governance, essential for long-term value creation, and ensures companies align with global climate goals.

Improving NSC's climate lobbying disclosures is important because:

- effective policies and subsidies are crucial for unlocking the decarbonisation of Japan's steel sector. This includes ensuring the availability of green iron and scrap steel, green H_2 and renewable energy capacity for the sector and grid
- consistency across all geographies is important to ensure there isn't a two-tiered decarbonisation system that is slower outside of Japan, especially given the increasing materiality of NSC's overseas operations.

NSC's lobbying reporting lacks transparency and falls short of investor expectations

- NSC's reporting is **not systematic or deep, lacks transparency,** and its disclosures **do not assess alignment** with decarbonisation goals or give investors significant insight into its activities (e.g. 2022 & 2023 Sustainability Reports)
- NSC's lobbying and disclosures fall well short of Global Standard on Responsible Climate Lobbying expectations and do not meet any Climate Policy Engagement elements of the CA100+ Disclosure Framework (see below).

7.1 The company commits to conducting its policy engagement activities in accordance with the goals of the Paris Agreement.

NO, DOES NOT MEET ANY CRITERIA

A The company has a specific public commitment/position statement to conduct all of its lobbying in line with the goals of the Paris Agreement.

NO, DOES NOT MEET ANY CRITERIA

B The company commits to advocate for Paris-aligned lobbying within the trade associations of which it is a member.

NO, DOES NOT MEET ANY CRITERIA

C [New Metric] The company's public commitment/position statement to conduct all of its lobbying in line with the objectives of the Paris Agreement specifies the goal of restricting global temperature rise to 1.5ºC above pre-industrial levels.

NO, DOES NOT MEET ANY CRITERIA

NSC does not meet any Climate Policy Engagement elements from the CA100+ Disclosure Framework

7.2 The company reviews its own and its trade associations' climate policy engagement positions/activities.

NO, DOES NOT MEET ANY CRITERIA

A [New Metric] The company publishes a review of its climate policy positions' alignment with the Paris Agreement and discloses how it has advocated for these positions through its climate policy engagement activities.

NO, DOES NOT MEET ANY CRITERIA

B The company publishes a review of its trade associations' climate positions/alignment with the Paris Agreement and discloses what actions it took as a result.

NO, DOES NOT MEET ANY CRITERIA

NSC's lobbying is misaligned with Paris and lags in the CA100+

- NSC's lobbying is the second-worst of the CA100+ steelmakers featured – only Taiwan's China Steel performs worse.

NSC's lobbying has been misaligned with Paris since assessments started and is worse than 84% of CA100+

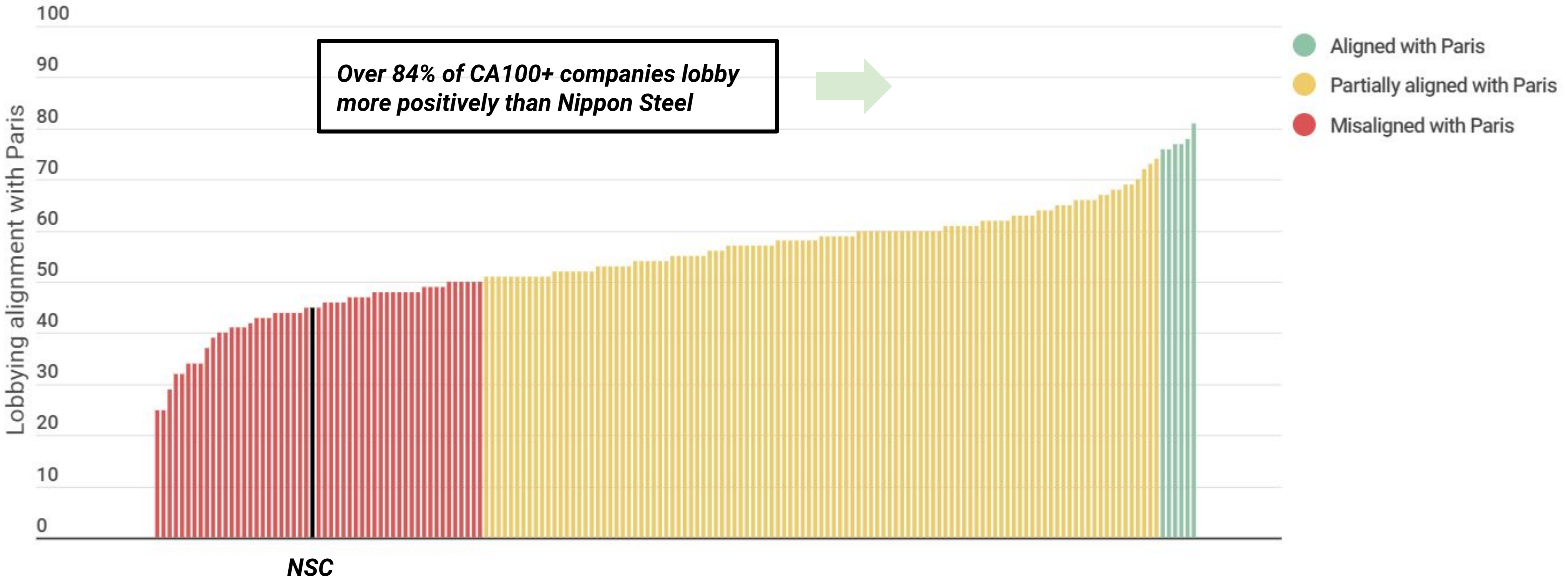

Chart: ACCR | Source: CA100+ climate policy engagement - alignment scores (InfluenceMap, May '24)

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NSC's reporting on direct lobbying lacks detail on material engagements

- Current reporting is insufficient for investors to understand the progress and Paris alignment of NSC's direct lobbying.

NSC lobbying reporting	ACCR observations
*…we express our **commitment and determination** of the steel industry for achieving **carbon neutrality**.* *We have also recommended to promptly create Japan's policy package that **combines climate change measures and measures to maintain and enhance international competitiveness** of industries, led by the government.*	• Commitment does not stipulate Paris alignment, timelines or pathways • Policy recommendations are generic
*…we have been arguing for the need for a policy to **change the energy supply structure including active promotion of nuclear** power utilization…* *…for **promotion of policies to achieve carbon neutrality**…*	• No mention of policy to boost renewables in energy mix • Carbon neutrality policies are too broad (more investment in decarbonisation, CCUS roadmap, and assistance on cost increases)
*We **contribute to policy formulation**, as exemplified by the recently passed **GX Promotion Act and GX Decarbonization Electricity Act**, which reflected these recommendations.*	• No detail on specific contributions attributable to NSC in major policy initiatives • Alignment not addressed. InfluenceMap finds GX is not Paris-aligned and UNPRI notes GX lacks crucial detail.

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NSC's direct lobbying skews negative

- InfluenceMap research indicates NSC has a mixed but **overall negative record** of advocacy on climate policy (1,2). Its **organisation score of 39%** on CA100+ alignment assessment (conducted by InfluenceMap) is firmly misaligned with Paris
- Enhancing disclosures may shift balance as assessments are based on publicly available information.

Negative direct lobbying	Positive direct lobbying
Unqualified support for coking coal, gas power and hydrogen • often lacks details on phase-out timelines and abatement levels. **Historically opposed emissions pricing:** • conditional support from 2023 but limited detail on design or timing. **Some push-back against support measures for renewables:** • sought to weaken feed-in tariffs and asked for industry exemptions from renewables levies.	**Some support for green steel policy** • e.g. to increase EAFs, scrap steel use and renewables (but prioritising nuclear). **Some support for green steel standards** • focused on circular economy rather than greener underlying technology • less ambitious than international best practice. **Some support for renewables** • recent messaging on Basic Energy Plan

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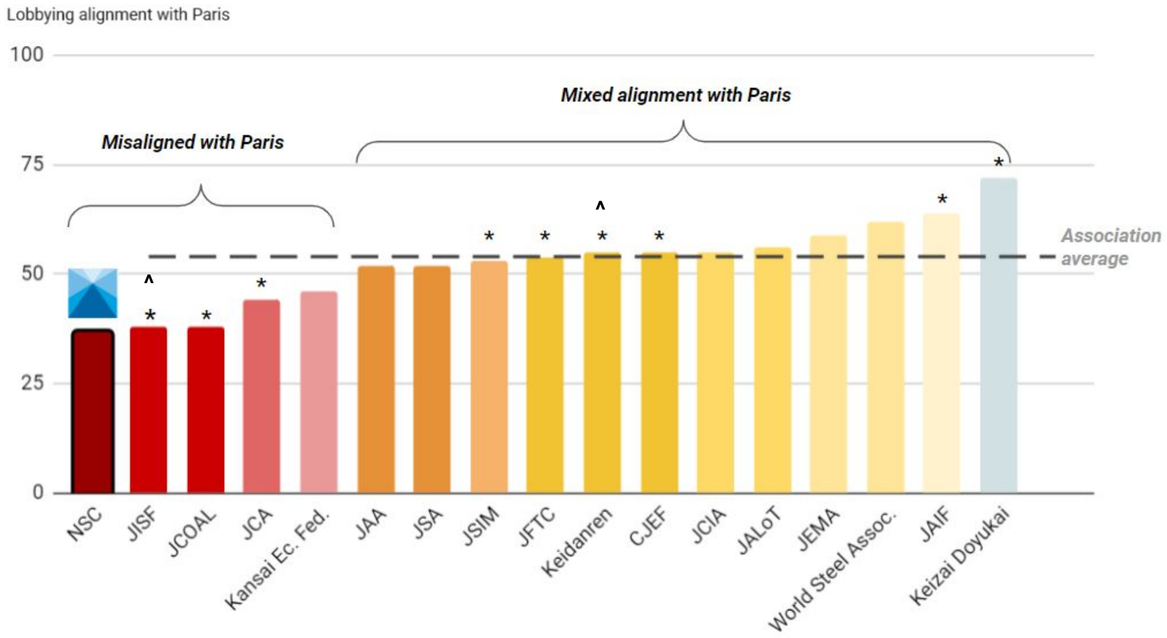
NSC is not transparent about its industry associations, despite material impact

- **NSC's disclosures on associations are very limited,** with only selective mentions of some roles at lobbying groups, a low level of detail and no assessment of alignment.

Unusually, NSC's direct lobbying is less aligned than its associations



** = association where NSC has leadership role*
^ = association NSC disclosed in reporting

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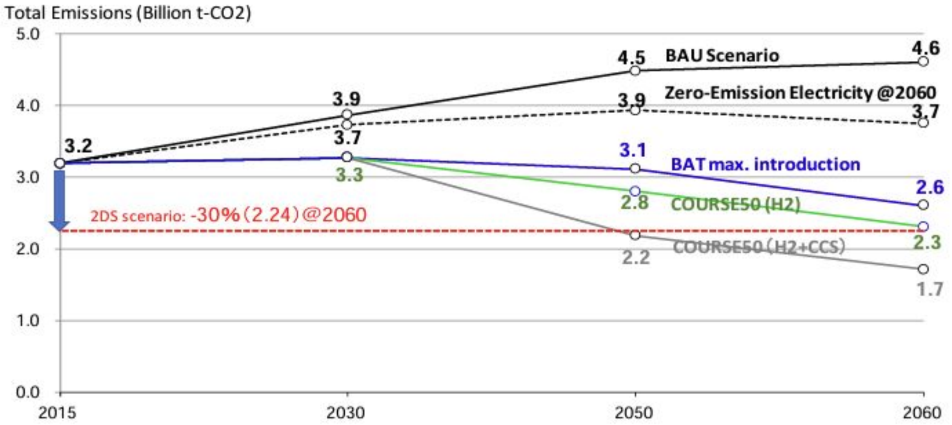
NSC runs influential, negative associations and does not drive them to improve

Japan Iron and Steel Federation (JISF)

- NSC executive is Vice Chair and company has (may still hold) leading roles on the Global Warming Measures Committee
- Extensive lobbying against carbon pricing (domestic, EU CBAM, Australian GHG emissions standards and a border adjustment mechanism)
- Heavily favours the “mass balance approach” and coal + CCS-heavy COURSE50 tech over electric arc furnaces (EAFs)
- NSC participates in JISF technology transfer programs that engage governments across Asia. These prioritise circular economy technology over more fundamental shifts from blast furnaces to greener EAFs.

JISF favours long-term COURSE50 usage with heavy CCS use



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NSC runs influential, negative associations and does not drive them to improve

JCOAL

- NSC executive is on the Board
- JCOAL has dedicated programs for promoting 'clean coal' technology in APAC and globally
- Extension of coal-fired thermal power overseas exacerbates a key bottleneck to NSC's green steel transition.

Japan Business Federation ('Keidanren')

- NSC executives hold leadership roles and represent the association in important engagements with government
- Endorses ammonia/hydrogen co-firing in coal plants, often without clarity on alignment with Paris pathways
- InfluenceMap found influential, negative engagement with GX on carbon pricing, iron & steel and the energy mix.

The overseas activities of NSC's industry associations matter because overseas production is increasingly material to its business

NSC has a significant and growing presence overseas

- more than 40% of FY22 revenue (ending Mar '23) came from outside of Japan
- expects its overseas steel production to dominate moving forward (see right).

NSC does not presently report on the overseas activities of its industry associations

- As discussed, some of NSC's associations do actively lobby overseas
- Other companies report on policy engagement activities that involve overseas operations and joint-ventures.

NSC plans to grow overseas steel production significantly

Global Production Framework

(Million tons/year)

		2014	2022	Future Vision
Crude steel production capacity	Japan	52	47	
	Overseas	**6**	**19**	**> 60**
	Being global	**58**	**66**	**> 100**

* This is a basic calculation of the combined production nominal full capacity of companies (including USIMINAS) with an equity stake of 30% or more, which the World Steel Association adopts as a standard measure of crude steel production.

- More than 300% capacity growth expected overseas as domestic production falls
- Overseas steel production contribution to consolidated profit has grown from 2% to 14% (FY14-23)

An opportunity for NSC to improve and demonstrate its advocacy

We highlighted to NSC the opportunities enhanced reporting and governance present for:

- progressing strategic objectives and active risk management
- positive advocacy and demonstrating climate alignment to investors.

NSC recognises the value of enhanced lobbying disclosures but needs to make this a priority

- We built a roadmap for enhancing disclosures, including timelines and examples of good, feasible practice. Management was not opposed to the enhancements in principle but was unable to commit in time
  - Filing this shareholder proposal will help the board prioritise lobbying disclosures
  - NSC would retain its ability to set and change policy and implementation in a timely manner.

1. Make public commitments

2. Build policy positions and governance processes

3. Implement in reporting and actions

Before 2024 AGM: commit to publicly assessing and aligning decarbonisation advocacy goals, allocating governance responsibility to the board & senior management.

Across 2024: build clear policy positions, assessment processes, criteria and escalation procedures for addressing misalignments.

Before 2025 AGM and annually thereafter: Publish assessment of material direct and indirect lobbying, and detail actions to improve alignment.

Shareholder proposals

Shareholder Resolution 1 at Nippon Steel Corporation (NSC)

Proposal 1 - **Enhanced climate targets and disclosures**

- The Company shall set and disclose short- and medium-term GHG emissions reductions targets aligned to the goals of the Paris Agreement for scope 1, 2 and 3 emissions for the consolidated accounting group, associates, joint ventures, and unconsolidated subsidiaries not included in the consolidated accounting group.
- The Company shall prepare and disclose transition plans that include, planned capital allocation for decarbonisation investment over the forward 3 years, along with the estimated emissions reduction impact of each investment, to achieve the short and medium-term GHG emissions reductions targets.
- The Company shall report, in its annual reporting, on its progress against such targets and transition plans.

Shareholder Resolution 2 at Nippon Steel Corporation (NSC)

Proposal 2 - Remuneration linkage and alignment to climate change

- The Company shall set and disclose, in its annual reporting, details of how the Company's compensation system incentivises and rewards progress for achieving the company's GHG emissions reduction targets.

Reason for the proposal

Long-term institutional investors in the Company consider a direct linkage between remuneration and achievement of the Company's GHG emissions reduction targets, to be in the Company's interests, as an important mechanism to incentivise executive performance towards achievement of the Company's strategy and goals and protect corporate value.

Shareholder Resolution 3 at Nippon Steel Corporation (NSC)

Proposal 3 - Enhanced climate lobbying disclosures

- The Company shall disclose annually, climate-related and decarbonisation-related policy positions and lobbying activities globally, including its own direct lobbying and industry association memberships, and review these for alignment with the Company's goal of carbon neutrality by 2050 and explain the actions it will take if these activities are determined to be misaligned.

Reason for the proposal

To manage strategy and risks to protect company value, it is in the Company's best interests for its climate-and decarbonisation-related policy positions and direct and indirect lobbying activities to be aligned with the Company's goal of carbon neutrality by 2050 and the achievement of its GHG emissions reduction targets.

Shareholders believe that disclosure of climate-related and decarbonisation-related policy positions and lobbying activities globally and their alignment to the Company's goals are required by good governance and essential to long-term value creation.

The current level of the Company's disclosures in these regards means shareholders cannot properly assess if the Company's lobbying activities are sufficiently coordinated and optimised to ensure the global policy environment supports its decarbonisation goals and are in line with the goals of the Paris Agreement.

Appendix

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Not all steel decarbonisation pathways are equally effective. There are clear distinctions in the decarbonisation potential of each technology route.

Category	Description	Technology Examples
Green potential	Steel production methods that have the potential to eliminate the use of fossil fuels entirely	• Renewable-powered EAF • Green hydrogen-based DRI • Electrolysis
Low carbon potential	Processes that significantly reduce emissions but may still utilise fossil fuels or emit carbon to some extent	• Gas-based DRI • Hydrogen injection in BFs • Biomass use
Limited potential	Technology solutions that offer minimal decarbonisation capabilities on their own	• Mass balance • Blast furnace optimisation • CCS/CCUS • Offsetting

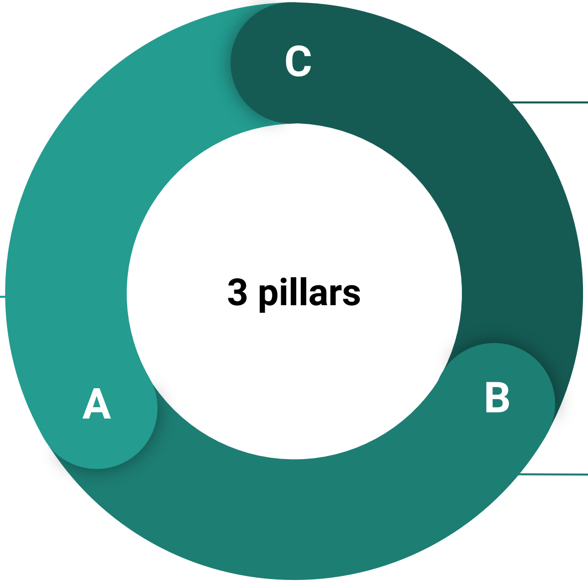
Source: ACCR, adapted from Forging Pathways report, 2024

NSC's three-pillar Carbon Neutral Vision 2050 plan faces significant challenges, with questionable effectiveness and limited transparency hindering full assessment

Reduction with hydrogen in BFs
Limited/Low carbon potential

COURSE50/ Super COURSE50: Flagship project incorporating significant reliance on CCS and substitution of coal in blast furnace with hydrogen.

Implementation of COURSE50 expected by 2030 and Super COURSE50 by 2040.



High-grade steel production in large size EAFs
Green potential

NSC plans to transition some of its BFs to large-scale EAFs by 2030. However, there are concerns about the feasibility and effectiveness of achieving substantial emissions reductions, particularly due to the lack of disclosures on renewable energy use, green steel production capacity, access to high-grade iron and scrap steel, and progress to date, as studies on this shift only commenced in 2023, with 2030 only six years away.

Hydrogen direct reduction of iron
Green potential

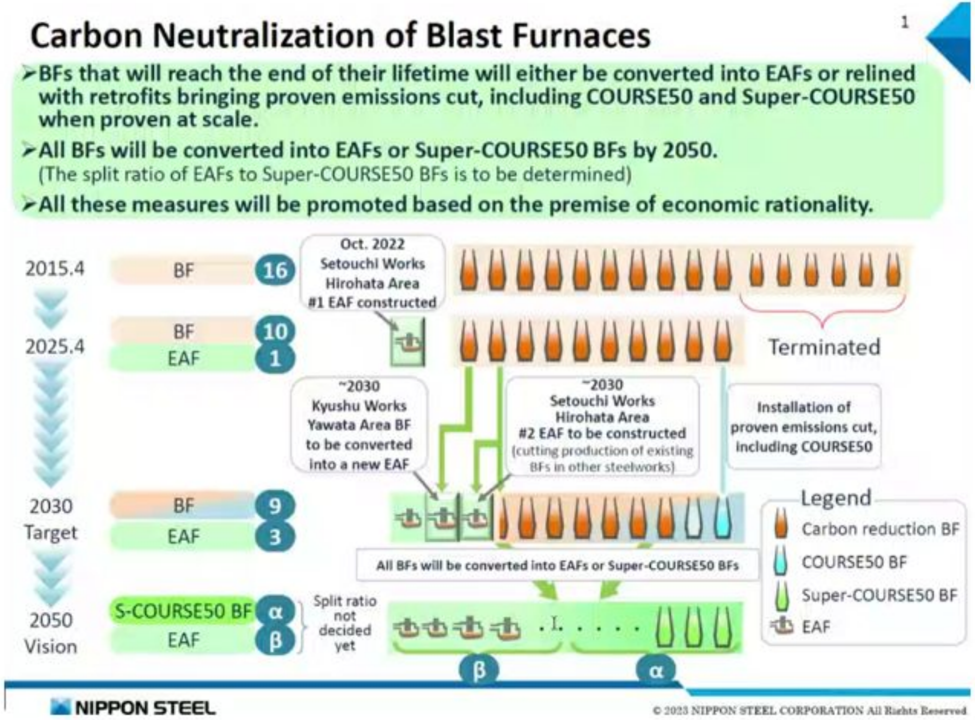
NSC aims to use H2-DRI, replacing carbon with hydrogen to reduce iron ore. However, significant barriers include access to high-grade iron ore, green hydrogen, and renewable electricity. Other steelmakers consider importing green iron to avoid the high costs and technical challenges of green hydrogen. Japan's limited renewable energy capacity complicates this further. Disclosures on this pathway are sparse, leaving unclear plans. While NSC recently announced exploring electric smelter technology for low-grade iron ores, details and timelines are still lacking.

Acronyms: blast furnace (BF), carbon capture and storage (CCS) carbon capture utilisation and storage (CCUS), electric arc furnace (EAF), hydrogen direct reduction iron (H2-DRI)

NSC's carbon neutral roadmap: significant technology uptake not expected until after 2030, exact plans and timelines ambiguous

Progress on NSC's Carbon Neutral Vision 2050

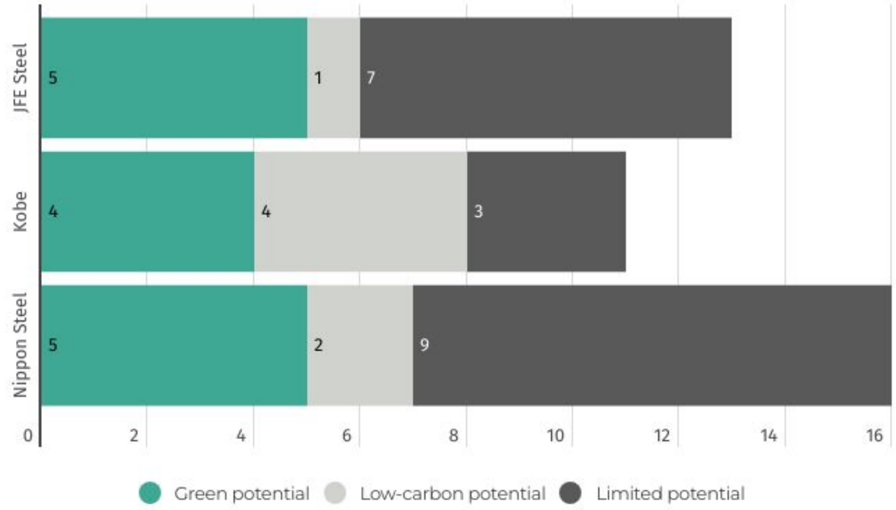
- **COURSE50**: has been in development for over 15 years (since 2008) but has not yet made it past the pilot phase. Industrial tests are planned for FY2026.
- **Super COURSE50**: pilot testing is currently underway, though implementation is not expected for another 15 years (around 2040).
- **High-grade steel in large-scale EAF**: the company aims to start small-scale trials in FY2024. Two EAFs (size not disclosed) are planned for startup in 2030.
- **Hydrogen-based DRI**: the company aims to start small-scale trials in FY2025.



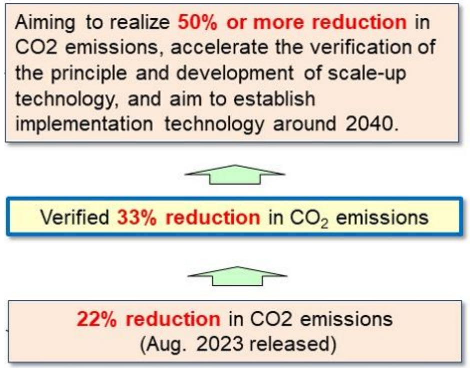
Source: NSC disclosures

NSC invests heavily on limited decarbonisation potential technologies, with significant reliance on CCUS for emissions cuts

Japanese steel decarbonisation projects by green potential



Source: ACCR Forging Pathways report 2024



Source: NSC News Release, 6 Feb 2024

- While ACCR's research found that NSC have the most decarbonisation projects, it is investing substantially in projects with **limited decarbonisation potential**.
- Specifically, Course50/ Super Course50 technology.
- NSC have verified a 33% reduction in emissions using Super-COURSE50, and aim to get this to 50%. **This means that NSC will be reliant on CCUS technologies for up to 50-67% of blast furnace emissions reductions.**

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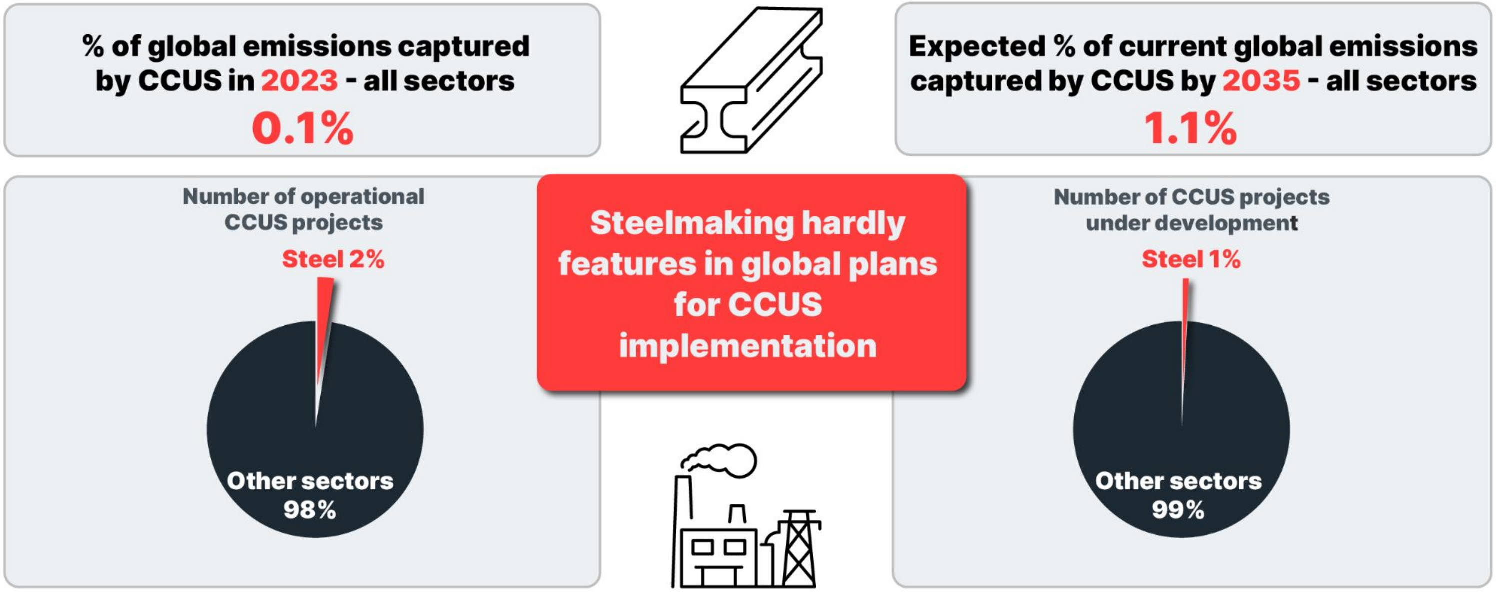
Carbon capture's impact across all sectors will be minimal. For steel it will be even more insignificant.



The only commercial-scale CCUS plant for steelmaking captures just 19%-26% of the plant's emissions, and the CO_2 is used for enhanced oil recovery (EOR)

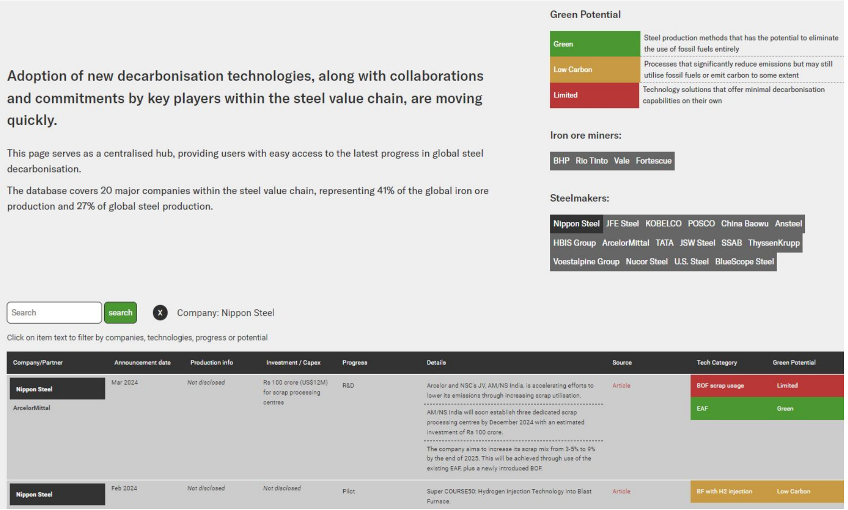
Source: Bloomberg New Energy Finance, Global CCS Institute, IEEFA calculations

IEEFA

Useful resources

[ACCR's latest report on the green steel transformation]

[ACCR's investor handbook: engaging with the steel industry]



[ACCR's steel decarbonisation announcements tracker]

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Useful resources

- Transition Asia:
  - Financed emissions in steelmaking and NSC case study
  - Sustainability Report Updates
- CA100+: assessment of NSC
- InfluenceMap: assessment of NSC
- IEEFA: CCUS will not play a major role in steel decarbonisation
- Client Earth:
  - The legal pathway for Japanese shareholder proposals on climate change
  - Japanese company directors must consider climate risk or face potential liability
- SteelWatch: research on NSC (upcoming)

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