

Assessing Net Zero 2025

Tracking Progress of
10 Japanese Companies

ネットゼロを
評価する 2025

日本企業10社の進捗評価

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Disclaimer

This report represents the authors' views and interpretations, guided by the methodology of the Corporate Climate Responsibility Monitor, of publicly available information that is self-reported by the companies assessed. Due to the fragmentation, inconsistency and ambiguity of some of the information provided by the assessed companies, as well as the fact that the authors did not seek to validate the public self-reported information provided by those companies, the authors cannot guarantee the factual accuracy of all information presented in this report. Therefore, neither the authors nor Climate Integrate makes representations or warranties as to the accuracy or reliability of any information in this report. The authors and Climate Integrate expressly assume no liability for information used or published by third parties with reference to this report.

1. About this report

The chance to limit the global mean temperature rise to 1.5°C above pre-industrial levels is rapidly diminishing, and extreme climate disasters are increasingly threatening lives worldwide. In this context, strong climate leadership and ambitious action from large companies are more crucial than ever to achieve the 1.5°C goal and help avert the worst consequences of the climate crisis.

This report is an updated edition of *Assessing Net Zero – Integrity Review of 10 Japanese Companies*, published by Climate Integrate in 2023.¹ The 2023 report conducted a group-wide 'transparency' and 'integrity' assessment of climate pledges of 10 Japanese companies with high greenhouse gas (GHG) emissions. Transparency here refers to the extent to which a company publicly discloses information necessary to fully understand the integrity of a company's approach towards corporate climate responsibility. Integrity, in this context, is a measure of the quality, credibility and comprehensiveness of such approaches. Building on the 2023 assessment, this report aims to continue to track the target setting practices and emission performance of the same 10 Japanese companies, thereby promoting ongoing transparency and integrity in their climate efforts.

As in 2023, this year's assessment applies the methodology of the NewClimate Institute, with a focus on the progress of the 10 companies.² Main sources used for this report are corporate disclosures for FY2023, including annual reports and integrated reports published by each company in 2024. Progress is assessed in comparison with disclosures for FY2021 published in 2022.

Methodology

This report is prepared by Climate Integrate in collaboration with NewClimate Institute, following the Corporate Climate Responsibility Monitor (CCRM) methodology version 3.0,³ with minor adaptations to align with version 4.0, to enable a more granular analysis on the medium-term targets (2031–2040).⁴ Company assessments evaluate the transparency and integrity of each company's disclosures and efforts across four sections of corporate climate responsibility:

1. Tracking and disclosing emissions
2. Setting specific and substantiated targets
3. Reducing emissions
4. Climate contributions and offsetting

A full overview of the rating methodology for transparency and integrity of every indicator is presented in NewClimate Institute's methodology documents.

¹ Climate Integrate "[Assessing Net Zero - Integrity Review of 10 Japanese Companies](#)" May 8, 2023

² For company selection criteria please refer to the previous report: Climate Integrate "[Assessing Net Zero - Integrity Review of 10 Japanese Companies](#)" May 8, 2023

³ NewClimate Institute "[Corporate Climate Responsibility, Guidance and Assessment Criteria for Good Practice Corporate Emission Reduction and Net-Zero Targets Version 3.0](#)" February 13, 2023

⁴ NewClimate Institute "[Corporate Climate Responsibility, Guidance and Assessment Criteria for Good Practice Corporate Emission Reduction and Net-Zero Targets Version 4.0](#)" April 9, 2024

Key updates to this report include revised time horizons for emission reduction targets and refined analysis by separating short- and medium-term targets:

- Short-term targets now refer to goals set for up to 2030
- Medium-term targets cover 2031–2040
- Longer-term targets refer to post-2040 ambitions

Table 1 provides an overview of good practice corporate climate responsibility in the four sections stated above.

Table 2 provides an overview of company assessments and progress since the previous assessment in 2023. 'Progress' indicates how each company's corporate disclosures and actions have changed since the previous assessment, though some changes may also result from updates to the methodology outlined previously.



Table 1: Overview of good practice corporate climate responsibility

1 Tracking and disclosing emissions	Good Practice
Comprehensiveness of disclosure	<ul style="list-style-type: none"> • Disclose full details on their GHG emissions on an annual basis in public documents. • Include a breakdown of the data to specific emission sources (including scope 1, 2, 3 and non-GHG climate forcers). • Present historical data for each emission source. • Ensure consistency of emission disclosure across documents.
2 Setting specific and substantiated targets	Good Practice
Short-term targets (up to 2030) Medium-term targets (2031-2040) Longer-term targets (2041 onward)	<p>All short-, medium-, and long-term targets should</p> <ul style="list-style-type: none"> • cover all scope 1, 2, 3 emissions and non-GHG climate forcers, where relevant, • align with 1.5°C-compatible trajectories and benchmarks for the sector, and • be independent from offsetting claims.
3 Reducing emissions	Good practice
Emission reduction measures	<ul style="list-style-type: none"> • Implement encompassing and deep decarbonization measures and disclose details of those measures to support replication and the identification of new solutions. • Refrain from using bioenergy where alternatives to combustion exist and ensure that any bioenergy they use does not have negative sustainability implications.
Renewable electricity	<ul style="list-style-type: none"> • Procure the highest quality renewable electricity available and disclose the full details of that procurement.
4 Climate contributions and offsetting	Good practice
Responsibility for unabated emissions	<ul style="list-style-type: none"> • Pursue high transparency and integrity on climate contributions and any neutralization claims made today.
Offsetting plans for the future	<ul style="list-style-type: none"> • Clearly disclose offsetting claims and plans. • Avoid misleading pledges and claims. • Avoid risk of distraction by also committing to measures for deep emission reduction. • Commit to procure only high-quality credits from ambitious projects with a permanent climate impact. • Commit to preventing any form of double-counting of climate impacts.

Source: Adapted from NewClimate Institute

Table 2: Company assessments and progress since the assessment in 2023**High integrity****No companies achieved a High rating****Reasonable integrity****No companies achieved a Reasonable rating****Moderate integrity****No companies achieved a Moderate rating**

Low integrity	Progress	Section-level changes	Transparency	Integrity
JERA	—	Carbon intensity target for FY2030 now lacks quantifiable details; renewable energy target set for FY2035		
J-POWER	▲	Renewable energy target set for FY2030		
Nippon Steel	—	—		
JFE	—	—		
ENEOS	▲	Renewable energy target set for FY2040; numeric breakdown of offsetting technologies added per target		
Taiheiyo Cement	—	—		
Mitsubishi Chemical	—	Numeric breakdown of emission reduction measures added for 2030 target		
ANA	—	—		
Oji	—	—		
Toyota	—	Scope 3 calculation methodology revised		

Very low integrity**No companies received a Very low rating****RATING****Progress** ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.**Section levels** refer to 1. Tracking and disclosing emissions, 2. Setting specific and substantiated targets, 3. Reducing emissions, 4. Climate contributions and offsetting.**5-point scale** ● High ● Reasonable ● Moderate ● Low ● Very low See individual company analyses.

Assessments were made based on public information identified by Climate Integrate. A poor rating may not necessarily be an indication that a company's climate strategy is weak but could also indicate that the information was insufficient to confirm good practice. Ambitious companies can improve their ratings by ensuring that all aspects of their climate responsibility strategies are transparently and accurately disclosed, and in the public domain.

2. Key insights

✓ All 10 companies maintain their net zero targets but lack progress in implementation.

The 10 companies are large corporations playing a central role in Japan's economy and climate efforts. In fact, their total scope 1 and 2 emissions were equivalent to approximately 40% of Japan's total GHG emissions in FY2023.^{5,6} While all 10 companies continue to uphold their net zero or carbon neutrality targets for 2050, progress on measures to achieve these targets remains limited. Some companies (e.g., JERA, J-POWER, Nippon Steel) are also expanding overseas operations in regions like Asia and the United States, meaning that their lack of sufficient progress could have implications for low-carbon transition beyond Japan as well.

✓ All 10 companies are still rated "low" in integrity.

Since the previous assessment in the 2023 report, some companies have revised short-term targets (J-POWER, ANA, Toyota), introduced new renewable energy targets (JERA, J-POWER, ENEOS), updated scope 3 disclosures (Toyota), or added new medium-term targets for 2031–2040 (ENEOS). However, these developments have not led to significant changes in overall corporate policies or measures. Consequently, while transparency scores improved in some instances, integrity scores remained uniformly low across all 10 companies (see Table 2 for details).

✓ Scope 1 and 2 emission trends between FY2021 and FY2023 vary across companies.

While ANA's emissions increased by about 36% and ENEOS's by about 8%, the remaining companies reported reductions ranging from 3 to 19%.

✓ The pace of the transition to renewable electricity remains slow.

The three energy suppliers, JERA, J-POWER, and ENEOS have updated their plans to expand investment in renewable electricity as part of efforts to decarbonize the electricity they supply. While more than 90 Japanese companies have joined the RE100 initiative,⁷ none of the 10 assessed companies have pledged to switch to 100% renewable electricity. Overall, the scale and pace of these efforts remain insufficient.

⁵ MOE "Japan's National Greenhouse Gas Emissions and Removals in FY2023" April 25, 2025

⁶ Note that there might be some double counting in scope 1 emissions of utility companies (JERA and J-POWER) and scope 2 emissions of the other companies. Domestic and overseas emissions were used for this calculation.

⁷ Climate Group [RE100 Members](#) (accessed on September 25, 2025)

✓ Many companies rely heavily on emerging technologies to achieve targets.

To meet their long-term targets, many companies plan to rely on emerging technologies, such as ammonia- and hydrogen-fired thermal power, carbon capture and storage (CCS), and direct air capture (DAC), as well as offsets through forest absorption and emission trading schemes. However, these new technologies remain expensive and include technologies that have yet to prove their effectiveness in contributing to emission reduction, raising concerns about the feasibility of stated targets. Particularly concerning is the reliance of electric utility companies on ammonia and hydrogen co-firing and CCS without clear commitments to phase out coal, despite the fact that early decarbonization of the power sector is crucial for achieving economy-wide decarbonization.

✓ Companies' targets and measures fall short of the efforts needed to limit global warming to 1.5°C.

While all assessed companies have a net zero or carbon neutrality target by 2050, few have implemented measures consistent with the standards required for transparent and credible corporate climate action. Reliance on offsets and carbon credits further adds uncertainty to the emission reduction targets. So far, only ANA and Toyota have set science-based targets (well-below 2°C),⁸ but these targets have not been updated since 2022. Companies' target setting could be improved by setting medium-term targets (2035 and 2040, with recent base years) that cover their value chain emissions. Their implementation plan could be improved through adopting cost-effective measures in line with 1.5°C-compatible benchmarks for the sector, with short, medium and long-term timelines and expected emission reduction for each measure.

✓ The 10 companies need to strengthen their targets and measures.

The 10 Japanese companies assessed are not only key domestic players but also bear significant climate responsibilities globally. Yet, critical gaps remain between their current efforts and the levels required. To lead decarbonization in Japan and worldwide, it is crucial that these companies:

- Strengthen 2030 targets and measures to align with the 1.5°C goal.
- Set clear medium-term targets for 2035 and 2040 towards achieving net zero by 2050.
- Accelerate improvements in energy efficiency and expand renewable energy deployment across both supply and demand.
- Commit to phasing out fossil fuels, especially coal-fired power generation.
- Apply close evaluation on cost-effectiveness to technologies such as ammonia, hydrogen, and CCS/CCUS (Carbon Capture, Utilization, and Storage).
- Prioritize cost-effective and readily available decarbonization technologies.
- Improve scope 3 tracking and disclosure and strengthen emission reduction measures, particularly for companies with high scope 3 emissions.
- Further enhance the disclosure of climate-related information to improve transparency.

⁸ Science Based Targets Initiative [Target Dashboard](#) (accessed on September 25, 2025)

✓ The government has a vital role to play in unlocking the potential of corporate climate action.

This report finds that the climate action of Japan's major emitting companies' remain insufficient and largely ambiguous. This raises concerns about the credibility and quality of current corporate emission reduction plans in relation to Japan's overall net-zero pathway. In light of this, it is crucial for the Japanese government to place a renewed and urgent focus on strengthening the integrity of corporate emission reduction plans towards 2030 and beyond. Recommended policies and measures include establishing a robust carbon pricing framework under GX-ETS,⁹ which is Japan's emission trading scheme set to become fully operational by the beginning of FY2026, as well as setting targets to phase out coal, and accelerate the deployment of renewables.

⁹ GX League [Emissions Trading System \(GX-ETS\)](#) (accessed September 25, 2025) (in Japanese)



3. Company assessments

1. JERA (Electric utilities)

JERA, the largest GHG emitting company in Japan, remains heavily dependent on unabated thermal power (LNG 72% and coal 22% of its capacity in FY2023).¹⁰ Its Zero-Emission Transition Plan states that it will eliminate coal-fired power generation by converting it to ammonia-fired thermal power in Japan, while continuing to develop LNG-fired thermal power and promote the conversion of coal-fired thermal power to ammonia in Asia.¹¹ However, emission reduction by ammonia conversion will be very limited, adding in emissions from ammonia production, unless emissions are abated with CCS.¹² JERA has not specified a deadline for the phase-out of unabated coal-fired thermal power. The company has recently set a new renewable energy target (20 GW by FY2035),¹³ but it is behind global net zero pathways which require that the share of renewables reach at least 60% by 2030 globally.¹⁴ JERA reduced its CO₂ emissions in Japan by 31% in FY2023 compared to FY2013 in line with its target to reduce it by at least 60% by FY2035,¹⁵ but this is not aligned with the IEA's Net Zero Roadmap where the electricity sector reaches net zero by 2035 in advanced economies.¹⁶

2. J-POWER (Electric utilities)

J-POWER largely relies on unabated thermal power (coal 39%, gas 22% of its total capacity in 2024).¹⁷ The company plans to rely on unabated coal-fired power even beyond 2035, gradually expanding co-firing with biomass and ammonia, or combining it with CCS.¹⁸ J-POWER has not set a coal phase-out target nor a medium-term emission reduction target (2031-2040). It has slightly modified its short-term emission reduction target to 46% reduction by FY2030 compared to FY2013. It plans to develop 2.2 GW of renewables globally by the 2030s¹⁹ and has set a new target to increase power generation from renewables by 4,000 GWh/year by FY2030 compared to FY2022 in Japan.²⁰ J-POWER's domestic CO₂ emissions saw a reduction by 31% in FY2023 compared to FY2013 in line with its emission reduction targets,²¹ but this is not aligned with the IEA's Net Zero Roadmap where the electricity sector reaches net zero by 2035 in advanced economies.²² Notably, emissions from overseas business—which are not covered by the short-term target—doubled from 5 MtCO₂ to 10 MtCO₂ between FY2021 and FY2023.²³

3. Nippon Steel (Steel)

Nippon Steel has not changed its targets, which aim to reduce its energy-derived CO₂ emissions by 30% by 2030 compared to 2013, and to achieve carbon neutrality by 2050. The company's global footprint is growing, as exemplified by its acquisition of U.S. Steel, but these targets only cover domestic scope 1 and 2 emissions.²⁴ In FY2023, scope 1 and 2 emissions were 28.4 MtCO₂e for U.S. Steel

¹⁰ JERA "JERA Group Integrated Report 2024" September 30, 2024 (p.96)
¹¹ JERA "JERA Group Integrated Report 2024" September 30, 2024 (p.28)
¹² Climate Integrate "Getting Lost on the Road to Decarbonization: Japan's Big Plans for Ammonia" June 30, 2022 (p.11)
¹³ JERA "JERA Group Integrated Report 2024" September 30, 2024 (p.2)
¹⁴ UNFCCC "Upgrading our systems together" 2021 (p.8, 10-11)
¹⁵ JERA "JERA Group Integrated Report 2024" September 30, 2024 (p.55)
¹⁶ IEA "Net Zero Roadmap" November 29, 2024 (p.63)

¹⁷ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.2)
¹⁸ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.64)
¹⁹ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.3)
²⁰ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.45)
²¹ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.68)
²² IEA "Net Zero Roadmap" November 29, 2024 (p.63)
²³ J-POWER "J-POWER Group Integrated Report 2024" October 24, 2024 (p.67)
²⁴ Nippon Steel "Nippon Steel Integrated Report 2024" October 2024 (p.36)

and 76.5 MtCO₂ for Nippon Steel.^{25,26} To align with SBTi's Corporate Net-Zero Standard, targets need to cover 95% of scope 1 and 2 emissions,²⁷ which would require the inclusion of business overseas. Nippon Steel's Carbon Neutral Vision centers around expanding electric arc furnace (EAF) capacity, improving blast furnace efficiency, and investing in hydrogen and CCUS in Japan.²⁸ Following EAF commercial operation in Hirohata area in 2022, studies for conversion from the BF-BOF to EAF at two sites have started.²⁹ However, the company does not specify targets or timelines for the expansion of EAFs beyond 2030. Energy-derived CO₂ emissions (scope 1 and 2) in FY2023 have decreased by about 9% since FY2021.³⁰

4. JFE (Steel)

JFE has set a target to reduce 30% or more of its steel business emissions by FY2030 compared to FY2013,³¹ which remains far short of the requirement of the SBTi's Corporate Net-Zero Standard to reduce absolute scope 1 and 2 emissions at an annual rate of 4.2% over the target period.³² JFE aims to expand its offshore wind business and JFE Engineering, a group company, constructed Japan's first manufacturing plant for the fixed-bottom offshore wind monopile foundation in 2024.³³ Between FY2021 and FY2023, scope 1 and 2 emissions fell, representing a 7% reduction. Yet, emission intensity stayed relatively stable with a marginal increase from 2.03 to 2.06 tCO₂ per ton of steel,³⁴ indicating that the decline in absolute emissions likely reflects lower production. Over the same period, steel scrap use declined from 1.2 to 0.8 million tons.³⁵ This trend runs counter to the IEA's Net Zero Roadmap, which projects that the global scrap input share in steel production increases to 38% by 2030 and 48% by 2050.³⁶ Those developments suggest that JFE's current trajectory does not yet align with corporate standards for the steel sector to meet net zero targets.

5. ENEOS (Oil and gas)

According to ENEOS, the company accounted for about 50% of Japan's domestic petroleum sales in FY2024.³⁷ The majority of its emissions is scope 3, with 77% of its GHG emissions stemming from the use of sold products in FY2023.³⁸ ENEOS has set new medium-term targets to reduce scope 1 and 2 emissions by 60% by FY2035 and 73% by FY2040, from FY2013 levels,³⁹ but scope 1 and 2 emissions increased by 8% between FY2021 and FY2023.⁴⁰ The company targets a 20%-50% reduction in carbon intensity by FY2040 and carbon neutrality by FY2050, including scope 3.^{41,42} Measures to meet these targets include CCS and offsets by forest absorption.⁴³ Reliance on CCS and biological carbon sequestration to meet these targets raises non-durability concerns.^{44,45} Although a target to expand renewable energy capacity to 6–8 GW by FY2040 has been set,⁴⁶ ENEOS provides no clear timeline for individual measures or clarification of how each measure will contribute to overall emission reduction.

²⁵ United States Steel [website](#) (accessed on September 25, 2025)

²⁶ Nippon Steel "[Nippon Steel Integrated Report 2024](#)" October 2024 (p.85)

²⁷ Science Based Targets Initiative "[SBTi Corporate Net-Zero Standard](#)" September 15, 2025 (p.24)

²⁸ Nippon Steel "[Nippon Steel Integrated Report 2024](#)" October 2024 (p.40)

²⁹ Nippon Steel "[Nippon Steel Integrated Report 2024](#)" October 2024 (p.45)

³⁰ Nippon Steel "[Nippon Steel Integrated Report 2024](#)" October 2024 (p.85)

³¹ JFE Group "[Sustainability Report 2024](#)" (p.85)

³² Science Based Targets Initiative "[SBTi Corporate Net-Zero Standard](#)" September 15, 2025 (p.18)

³³ JFE Group "[Integrated Report 2024](#)" June 25, 2024 (p.25)

³⁴ JFE Group "[Sustainability Report 2024](#)" (p.239)

³⁵ JFE Group "[Sustainability Report 2024](#)" (p.246)

³⁶ International Energy Agency "[Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach - 2023 Update](#)" November 2024 (p.95)

³⁷ ENEOS [website](#) (accessed on September 25, 2025)

³⁸ ENEOS "[ESG Data Book 2024](#)" January 2025 (p.155-156)

³⁹ ENEOS "[Fourth Medium-Term Management Plan](#)" May 12, 2025 (p.29)

⁴⁰ ENEOS "[Integrated Report 2024](#)" November 11, 2024 (p.29)

⁴¹ ENEOS "[Integrated Report 2024](#)" November 11, 2024 (p.19, 30)

⁴² ENEOS "[Fourth Medium-Term Management Plan](#)" May 12, 2025 (p.30)

⁴³ ENEOS "[Fourth Medium-Term Management Plan](#)" May 12, 2025 (p.27)

⁴⁴ ENEOS "[Fourth Medium-Term Management Plan](#)" May 12, 2025 (p.27)

⁴⁵ NewClimate Institute "[Options for supporting Carbon Dioxide Removal](#)" July 2020 (p.14)

⁴⁶ ENEOS "[Integrated Report 2024](#)" November 11, 2024 (p.30)

6. Taiheiyo Cement (Cement)

According to Taiheiyo Cement, the company is the largest cement company in Japan with a 35% share of domestic cement sales.⁴⁷ Most of its GHG emissions (85% in FY2023) come from scope 1, especially energy use in cement production.⁴⁸ The short-term targets for FY2030 include a 40% reduction in domestic scope 1 and 2 emissions and at least a 20% reduction in the emission intensity of scope 1, 2, and partially scope 3 (categories 1 and 3), compared to FY2000.⁴⁹ The company's 40% CO₂ emission reduction target (scope 1 and 2) was already met in FY2022,⁵⁰ which suggests the need to update the short-term target for FY2030 to accelerate further efforts. The emission intensity target is far short of the required level (360-463 kgCO₂/t carbon intensity by FY2030) to be aligned with the 1.5°C pathway.⁵¹ Its emission reduction measures focus on shifting to blended cement production and developing technologies until FY2030, while post-FY2030 measures center around deployment of new technologies, including CO₂ capture (C2SP Kiln), methanation and CCS.⁵² Taiheiyo Cement's latest roadmap no longer includes a plan to expand renewable energy use after FY2030.

7. Mitsubishi Chemical (Chemicals)

Mitsubishi Chemical had announced plans to carve out its petrochemical and coal chemical businesses by FY2023,⁵³ that are associated with its largest emission source (scope 3),⁵⁴ but a concrete exit timeline has not been disclosed yet.⁵⁵ Scope 3 emissions accounted for 77% of total emissions in FY2023 (purchased goods and services 29%, use of sold products 26%, end-of-life treatment of sold products 13%)⁵⁶ yet remain excluded from both short-term and 2050 net-zero targets. Decarbonization efforts focus on scope 1 and 2, primarily through increasing renewable electricity use, and replacing heavy oil and coal in power generation by liquefied natural gas (LNG), with plans to transition to hydrogen and ammonia after FY2030. The company mentions further measures post FY2030 such as utilization of biomass feedstock, R&D (e.g. CCUS) and offsets.⁵⁷ However, details on timelines and expected emission reductions associated with such measures remain unclear. The company's total GHG emissions have decreased by about 12% from FY2021 to FY2023.⁵⁸ The company presents efforts to help realize a circular economy,⁵⁹ yet the lack of an emission reduction target for scope 3 undermines the credibility of its climate strategy.

8. ANA (Transport services)

In the 2024 Annual Report, ANA modified its FY2030 target from 0% net reduction to 10% net reduction from FY2019 levels.⁶⁰ However, this 10% net reduction relies heavily on carbon credits. ANA estimates that its aircraft CO₂ emissions will more than double by FY2050 from the FY2030 level in the business-as-usual (BAU) scenario. This BAU scenario is used as a baseline for its FY2050 target, which can be easily misinterpreted. Targets should be compared with either recent actual emissions or car-

⁴⁷ Taiheiyo Cement [website](#) (accessed on September 25, 2025) (in Japanese)

⁴⁸ Taiheiyo Cement "Integrated report 2024" November 2024 (p.144)

⁴⁹ Taiheiyo Cement "Integrated report 2024" November 2024 (p.83)

⁵⁰ Taiheiyo Cement "Integrated report 2024" November 2024 (p.83)

⁵¹ NewClimate Institute "A repository of sector specific decarbonization benchmarks informing 1.5°C-aligned corporate climate action" April 2024 (p.36, 37)

⁵² Taiheiyo Cement "Integrated report 2024" November 2024 (p.46, 58, 82)

⁵³ Mitsubishi Chemical Group Corporation "Kaiteki Report 2022" November 17, 2022 (p.27, 35)

⁵⁴ CDP "Mitsubishi Chemical Group Corporation Climate Change 2023" (C6.5)

⁵⁵ Mitsubishi Chemical Group Corporation "Kaiteki Report 2024" October 2024 (p.10)

⁵⁶ Mitsubishi Chemical Group Corporation "Fiscal 2023 Data Sheet" (p.1)

⁵⁷ Mitsubishi Chemical Group Corporation "Kaiteki Report 2024" October 2024 (p.50)

⁵⁸ Mitsubishi Chemical Group Corporation "Fiscal 2023 Data Sheet" (p.1)

⁵⁹ Mitsubishi Chemical Group Corporation "Kaiteki Report 2024" October 2024 (p.51)

⁶⁰ ANA "Annual Report 2024" (p.61, 63)

bon intensity. ANA plans to replace at least 10% of aviation fuels with sustainable aviation fuel (SAF) by FY2030, and transition almost entirely to low-carbon fuels by FY2050.⁶¹ ANA's CO₂ emissions halved in FY2020 due to the COVID-19 pandemic but had largely returned to pre-pandemic levels by FY2023.⁶²

9. Oji (Paper and forestry)

Oji targets a 70% reduction in net scope 1 and 2 emissions by FY2030 (vs. FY2018), achieved through a 20% emission reduction (-1.56 MtCO₂e) and 50% offset via increased forest carbon stocks (-3.9 MtCO₂e).⁶³ Scope 1 and 2 GHG emissions have decreased from 7.6 MtCO₂e to 6.8 MtCO₂e between FY2021 and FY2023.⁶⁴ The company has decommissioned two coal boilers (in FY2021 and FY2023) and updated plans to phase out eight remaining coal-only-fired boilers by FY2030, excluding coal co-fired boilers and backup units.⁶⁵ A shift to gas fuels is framed as transitional,⁶⁶ yet Oji has not committed to fully phasing out carbon-intensive infrastructure. SBTi requires paper and forestry companies to treat targets and emission accounting related to forestry, land, and agriculture (FLAG) separately from energy and industry (non-FLAG),⁶⁷ meaning removals from forest conservation and plantation activities cannot be used to offset fossil fuel emissions. Neither targets nor emission disclosure are aligned with the SBTi's guidance. The company does not disclose FLAG-specific emissions, lacks a scope 3 reduction target for non-FLAG emissions, and provides limited clarity on its targeted emission levels after FY2030.

10. Toyota (Transport OEMs)

The majority of Toyota's GHG emissions are scope 3 and are associated with the use phase of its sold vehicles (74% in FY2023) and purchased goods and services such as steel (21% in FY2023).⁶⁸ Its emission disclosure has improved since FY2021, with a revised methodology for lifetime mileage and fuel efficiency of sold vehicles.⁶⁹ This led to a 187 MtCO₂ increase in reported scope 3 emissions between FY2021 and FY2023.⁷⁰ Yet, Toyota does not publicly disclose key input data for its scope 3 emissions calculations, such as annual driving distance.⁷¹ Independent analysis estimates that it continues to underestimate vehicle use-phase emissions by around 22%.⁷² Toyota remains uncommitted to phase out internal combustion-engine vehicles by 2035—a milestone regarded as essential for bringing the road transport sector in line with a 1.5°C goal.^{73,74}

⁶¹ ANA "Annual Report 2024" (p.63)

⁶² ANA "Environmental Data" July 31, 2025

⁶³ Oji Holdings Corporation "Oji Group Integrated Report 2024" October 2024 (p.60)

⁶⁴ Oji Holdings Corporation "Oji Group Integrated Report 2024" October 2024 (p.97)

⁶⁵ Oji Holdings Corporation "Oji Group Integrated Report 2024" October 2024 (p.61)

⁶⁶ Oji Holdings Corporation "Oji Group Integrated Report 2024" October 2024 (p.61)

⁶⁷ World Wildlife Fund, Washington, DC. "Forest, Land and Agriculture Science-Based Target-Setting Guidance" December 2023 (p.12)

⁶⁸ Toyota Motor Corporation "Sustainability Data Book (Last update: June 2025)" (p.56-57)

⁶⁹ Toyota Motor Corporation "Sustainability Data Book (Last update: June 2025)" (p.57)

⁷⁰ Toyota Motor Corporation "Sustainability Data Book (Last update: June 2025)" (p.57)

⁷¹ NewClimate Institute "Corporate Climate Responsibility Report 2025 Automotive Manufacturers Sector Deep Dive" July 2025 (p.11)

⁷² Carbon Tracker Initiative "Oil Companies in Disguise: 2024 Edition" January 2024 (p.21)

⁷³ IEA [Cars and Vans - Energy System](#) (accessed on September 25, 2025)

⁷⁴ International Transport Forum "ITF Transport Outlook 2023" May 24, 2023 (p.118)

JERA

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Electric utilities	JPY 3,710.7 bn (2023)	Net zero by 2050	—	Low	Low
1 TRACKING AND DISCLOSING EMISSIONS				Moderate	
Tracking and disclosure 184.9 MtCO₂e in 2023 Subsidiaries are partly covered.					
2 SETTING EMISSION REDUCTION TARGETS Short-term targets (up to 2030) <i>Reduce carbon emission intensity of thermal power plants by 20% compared to the government energy outlook</i> Scope coverage: Scope 1 Scope 2 Scope 3 Own emission reductions (compared to full value chain in 2019): ? by 2030				Very low	Very low
Medium-term targets (2031-2040) <i>Reduce CO₂ emissions from its operations in Japan by at least 60% by FY2035 compared to FY2013</i> Scope coverage: Scope 1 Scope 2 Scope 3 Own emission reductions (compared to full value chain in 2019): ? by 2035					
Long-term targets (2041 onward) <i>Net-zero CO₂ from domestic and overseas operations by 2050</i> Scope coverage: Scope 1 Scope 2 Scope 3 Own emission reductions (compared to full value chain in 2019): ? by 2050					
3 REDUCING EMISSIONS Emission reduction measures Heavily depends on conversion to ammonia-fired power generation and development of LNG-fired thermal power generation (incl. hydrogen co-firing). Phase-out deadline for unabated coal-fired power generation is not specified.				Moderate	Very low
Renewable electricity Set target to increase capacity of renewables to 20 GW by FY2035.					
4 CLIMATE CONTRIBUTIONS AND OFFSETTING Responsibility for unabated emissions No information identified on how the company takes responsibility for unabated emissions.				Very low	Very low
Offsetting plans for the future 2050 target depends on offsets using technologies such as so called "CO ₂ -free LNG". No further details disclosed.					

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale Average of sections 1-4.

Sections 1-4 5-point scale Average of the criteria in each section.

Rating criteria 3-point scale See methodology document for rating criteria.

Transparency refers to the disclosure of information. Integrity refers to the quality and credibility of the approach.

J-Power

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Electric utilities	JPY 1,258.0 bn (2023)	Carbon neutral by 2050		Moderate	Low
1 TRACKING AND DISCLOSING EMISSIONS				Moderate	
Tracking and disclosure 57.9 MtCO ₂ e in 2023		Major emission sources: 77% of total emissions come from power generation (scope 1). Disclosure: Base year emissions for 2030 target are not disclosed except for scope 1 CO ₂ emissions in Japan.			
Subsidiaries are partly covered.					
2 SETTING EMISSION REDUCTION TARGETS				Moderate Very low	
Short-term targets (up to 2030)		Reduce CO ₂ emissions from power generation business in Japan by 46% compared to FY2013			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)		by 2030			
Medium-term targets (2031-2040)		No target			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)					
Long-term targets (2041 onward)		Carbon neutrality in domestic power business by 2050			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)		by 2050			
3 REDUCING EMISSIONS				Moderate Very low	
Emission reduction measures		No commitment to phase out unabated coal. Plans to gradually retrofit it to hydrogen and ammonia (co-)fired thermal power generation or combine it with CCS from 2030s.			
Renewable electricity		Plans to increase capacity by 2.2 GW by 2030s compared to FY2023 and set a target to increase domestic power generation by 4,000 GWh/year by FY2030 compared to FY2022.			
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				Very low Very low	
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.			
Offsetting plans for the future		Plans to include utilizing carbon credits and emission trading. No details disclosed.			

RATING

Progress Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.

Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.

Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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Nippon Steel

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Steel	JPY 8,868.1 bn (2023)	Carbon neutral by 2050	—	<div><div></div></div> Low	<div><div></div></div> Low
1 TRACKING AND DISCLOSING EMISSIONS				<div><div></div>Moderate</div>	
Tracking and disclosure 92.1 MtCO ₂ e in 2023		Major emission sources: 83% of total CO ₂ emissions come from scope 1 and 2. Disclosure: Scope 3 covers parent company only, while scope 1 and 2 have broader but not group-wide coverage.		<div><div>020406080</div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div><div>- upstream</div><div>- downstream</div></div>	
<div><div></div>Subsidiaries are partly covered.</div>					
2 SETTING EMISSION REDUCTION TARGETS				<div><div></div>Very low</div> <div><div></div>Very low</div>	
Short-term targets (up to 2030)		Reduce energy-related CO ₂ emissions from scope 1 and 2 in Japan by 30% compared to FY2013			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div> <div>?</div>	
Own emission reductions (compared to full value chain in 2019)		? by 2030			
Medium-term targets (2031-2040)		No target			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div> <div>?</div>	
Own emission reductions (compared to full value chain in 2019)		?			
Long-term targets (2041 onward)		Carbon neutral by 2050			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div> <div>?</div>	
Own emission reductions (compared to full value chain in 2019)		? by 2050			
3 REDUCING EMISSIONS				<div><div></div>Low</div> <div><div></div>Low</div>	
Emission reduction measures		Measures are mostly based on existing processes, and aim to develop new technologies, incl. high-grade steel production technology in large-size EAFs. No post-2030 targets and timelines are described for the expansion of EAFs.		<div><div></div></div> <div></div>	
Renewable electricity		No disclosure of renewable energy procurement constructs.		<div><div></div></div> <div>?</div>	
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				<div><div></div>Very low</div> <div><div></div>Very low</div>	
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.		<div><div></div></div> <div>?</div>	
Offsetting plans for the future		Plans to achieve its 2050 targets with CCUS, and other carbon offset measures, but no further details disclosed.		<div><div></div></div> <div>?</div>	

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale Average of sections 1-4.

Sections 1-4 5-point scale Average of the criteria in each section.

Rating criteria 3-point scale See methodology document for rating criteria.

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JFE

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Steel	JPY 5,174.0 bn (2023)	Carbon neutral by 2050	—	<div><div></div>Low</div>	<div><div></div>Low</div>
1 TRACKING AND DISCLOSING EMISSIONS				<div><div></div>Moderate</div>	
Tracking and disclosure 77.4 MtCO ₂ e in 2023		Major emission sources: 71% of total CO ₂ emissions come from scope 1 and 2. Disclosure: No group-wide emission disclosure is available. Coverage differs across emission scopes.		<div><div>020406080</div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div><div>- upstream</div><div>- downstream</div></div>	
<div><div></div>Subsidiaries are partly covered.</div>					
2 SETTING EMISSION REDUCTION TARGETS				<div><div></div>Low</div>	<div><div></div>Very low</div>
Short-term targets (up to 2030)		Reduce CO ₂ emissions from JFE Steel by 30% or more compared to FY2013			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		? by 2030		<div><div></div></div>	
Medium-term targets (2031-2040)		No target			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		?		<div><div></div></div>	
Long-term targets (2041 onward)		Carbon neutrality in CO ₂ emissions by 2050			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		? by 2050		<div><div></div></div>	
3 REDUCING EMISSIONS				<div><div></div>Low</div>	<div><div></div>Very low</div>
Emission reduction measures		Focus on expanding low-carbon technologies to 2030 and commercialization of new technologies, including carbon-recycling blast furnaces and CCU after 2030. No clear timelines are described for new technologies post 2030.		<div><div></div></div>	
Renewable electricity		JFE Engineering operates wind and solar plants aiming to expand renewables; JFE Shoji plans to cut domestic CO ₂ via renewable electricity procurement. The Group has not disclosed the volume of renewable electricity used.		<div><div></div></div>	
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				<div><div></div>Very low</div>	<div><div></div>Very low</div>
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.		<div><div></div></div>	
Offsetting plans for the future		No plans to offset emissions in the future are announced.		<div><div></div></div> <div>N/A</div>	

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale ● High ● Reasonable ● Moderate ● Low ● Very low Average of sections 1-4.

Sections 1-4 5-point scale ● High ● Reasonable ● Moderate ● Low ● Very low Average of the criteria in each section.

Rating criteria 3-point scale ● High ● Moderate ● Poor See methodology document for rating criteria.

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ENEOS

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Oil and gas	JPY 13,856.7 bn (2023)	Carbon neutral by 2050		Moderate	Low
1 TRACKING AND DISCLOSING EMISSIONS				Moderate	
Tracking and disclosure 216.5 MtCO₂e in 2023 Subsidiaries are partly covered.		Major emission sources: 77% of total emissions come from the use phase of the products (scope 3 downstream). Disclosure: Scope 3 covers parent company only, while scope 1 and 2 have broader but not group-wide coverage.			
2 SETTING EMISSION REDUCTION TARGETS				Moderate Very low	
Short-term targets (up to 2030)		Reduce scope 1 and 2 emissons by 38-46% compared to FY2013			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)		by 2030			
Medium-term targets (2031-2040)		Reduce scope 1 and 2 emissons by 73% by FY2040 compared to FY2013; reduce carbon intensity of supplied energy by 20-50% by FY2040 compared to FY2020			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)		by 2040			
Long-term targets (2041 onward)		Carbon neutrality by FY2050			
Scope coverage					
Own emission reductions (compared to full value chain in 2019)		by 2050			
3 REDUCING EMISSIONS					
Emission reduction measures		Its emission reduction strategy includes direct cuts, artificial fixation of CO ₂ (mainly CCS), and forest absorption, but lacks clarity. No reduction targets for oil and gas production disclosed.			
Renewable electricity		Target to expand renewable energy capacity to 6-8 GW by FY2040, but lacks detail on implementation of this target.			
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				Low Very low	
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.			
Offsetting plans for the future		Plans to offset emissions via artificial fixation of CO ₂ (CCS, BECCS, DACCS) and natural absorption of CO ₂ (forest/soil absorption, blue carbon), providing breakdown by offset volume.			

RATING

Progress Change in overall Transparency or Integrity rating since the 2023 assessment.

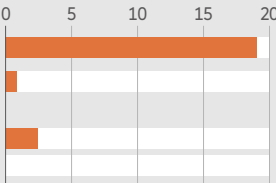
Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.

Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.

Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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Taiheiyo Cement

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Cement	JPY 886.3 bn (2023)	Carbon neutral by 2050	—	Moderate	Low
1 TRACKING AND DISCLOSING EMISSIONS				Reasonable	
Tracking and disclosure 22.3 MtCO ₂ e in 2023		Major emission sources: 85% of total CO ₂ emissions come from scope 1. Disclosure: CO ₂ emissions from its 16 cement plants and quarries are disclosed. Scope 3 downstream emissions are not disclosed.			
Subsidiaries are partly covered.					
2 SETTING EMISSION REDUCTION TARGETS				Moderate	Low
Short-term targets (up to 2030)		Reduce CO ₂ emissions from scope 1 and 2 in Japan by 40% or more compared to 2000; reduce CO ₂ emissions intensity in scope 1,2 and 3 (category 1 and 3) by 20% or more compared to 2000			
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		? by 2030			
Medium-term targets (2031-2040)		No target			
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		?			
Long-term targets (2041 onward)		Carbon neutrality in whole supply chain by 2050			
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		? by 2050			
3 REDUCING EMISSIONS				Low	Low
Emission reduction measures		Plans to use future technologies, including hydrogen, and synthetic methane converted from captured CO ₂ , but does not present a commitment to increase the share of carbon neutral concrete in total global production.			
Renewable electricity		Focus on increasing renewable energy from 2030 onward, but no clear target presented.			
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				Very low	Very low
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.			
Offsetting plans for the future		No indication to use carbon direct removal or offset credits.		N/A N/A	

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

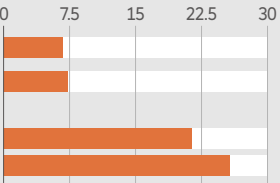











Overall 5-point scale ● High ● Reasonable ● Moderate ● Low ● Very low Average of sections 1-4.

Sections 1-4 5-point scale ● High ● Reasonable ● Moderate ● Low ● Very low Average of the criteria in each section.

Rating criteria 3-point scale ● High ● Moderate ● Poor See methodology document for rating criteria.

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Mitsubishi Chemical

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Chemicals	JPY 4,387.2 bn (2023)	Carbon neutral by 2050	—	Moderate	Low
1 TRACKING AND DISCLOSING EMISSIONS				Reasonable	
Tracking and disclosure 61.1 MtCO ₂ e in 2023		Major emission sources: 77% of total CO ₂ emissions come from scope 3. Disclosure: Emissions data coverage represents 82% of the Group's revenue, but the extent of emissions coverage is unclear.			
Subsidiaries are partly covered.					
2 SETTING EMISSION REDUCTION TARGETS				Moderate	Very low
Short-term targets (up to 2030)		Reduce GHG emissions from scope 1 and 2 by 29% compared to FY2019			
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		7% by 2030			
Medium-term targets (2031-2040)		No target			?
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		?			
Long-term targets (2041 onward)		Carbon neutrality in GHG emissions from scope 1 and 2 by 2050			
Scope coverage		Scope 1 Scope 2 Scope 3			
Own emission reductions (compared to full value chain in 2019)		? by 2050			
3 REDUCING EMISSIONS				Low	Very low
Emission reduction measures		Measures include conversion from heavy oil and coal to LNG, hydrogen and ammonia, along with plans to adopt power purchase agreements.			
Renewable electricity		Aims to introduce on-/offsite power purchase agreements to contribute to scope 2 reduction of 3.66 MtCO ₂ e by FY2030. No quantitative target for renewable electricity disclosed.			
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				Low	Very low
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.			?
Offsetting plans for the future		Plans to use carbon offsets through investment in renewable resources. No details available.			?

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.

Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.

Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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ANA

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY								
Transport services	JPY 2,055.9 bn (2023)	Net zero by 2050	—	Moderate	Low								
1 TRACKING AND DISCLOSING EMISSIONS				Reasonable									
Tracking and disclosure 13.6 MtCO ₂ e in 2023		Major emission sources: 77% of total CO ₂ emissions come from scope 1. Disclosure: Emission coverage unknown for group companies. Added disclosure on CO ₂ emissions from sustainable aviation fuels (SAF).		<table><tr><td>Scope 1</td><td>10.5</td></tr><tr><td>Scope 2</td><td>0</td></tr><tr><td>Scope 3 - upstream</td><td>3.1</td></tr><tr><td>Scope 3 - downstream</td><td>0</td></tr></table>		Scope 1	10.5	Scope 2	0	Scope 3 - upstream	3.1	Scope 3 - downstream	0
Scope 1	10.5												
Scope 2	0												
Scope 3 - upstream	3.1												
Scope 3 - downstream	0												
Subsidiaries are partly covered.													
2 SETTING EMISSION REDUCTION TARGETS				Moderate	Very low								
Short-term targets (up to 2030)		Aircraft CO ₂ emissions: Net 10%+ reduction compared to FY2019; Non-Aircraft CO ₂ emissions: 33%+ reduction compared to FY2019											
Scope coverage		Scope 1 Scope 2 Scope 3											
Own emission reductions (compared to full value chain in 2019)		? by 2030											
Medium-term targets (2031-2040)		No target			?								
Scope coverage		Scope 1 Scope 2 Scope 3											
Own emission reductions (compared to full value chain in 2019)		?											
Long-term targets (2041 onward)		Net zero CO ₂ emissions by FY2050											
Scope coverage		Scope 1 Scope 2 Scope 3											
Own emission reductions (compared to full value chain in 2019)		? by 2050											
3 REDUCING EMISSIONS				Low	Low								
Emission reduction measures		Plans to replace at least 10% of aviation fuels with SAF by 2030, and convert them almost entirely to low-carbon fuels by 2050. Conducts joint research on electric, hydrogen, and hybrid aircraft technologies.											
Renewable electricity		Plans to use renewables in non-aircraft operations, but lacks specific targets for renewable electricity procurement.											
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				Low	Very low								
Responsibility for unabated emissions		Taking measures to comply with CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation). Offers its customers the option of offsetting the emissions associated with their flight.			?								
Offsetting plans for the future		Plans to neutralize CO ₂ emissions through emission trading (11.5% of BAU) and negative emissions technologies (1% of BAU), such as direct air capture, by 2030. Lacks disclosure of offset volume.											

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.

Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.

Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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Oji

SECTOR

Paper and forestry

REVENUE

JPY 1,696.3 bn (2023)

PLEDGE

Net zero by 2050

PROGRESS

—

TRANSPARENCY

Low

INTEGRITY

Low

1 TRACKING AND DISCLOSING EMISSIONS

Moderate

Tracking and disclosure

12.2 MtCO₂e in 2023

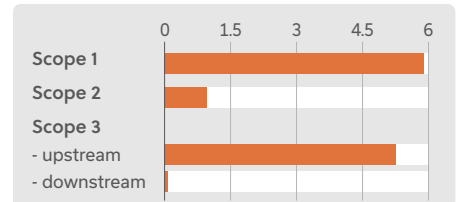
Subsidiaries are partly covered.

Major emission sources:

48% of non-FLAG CO₂ emissions come from scope 1, 43% from scope 3 upstream.

Disclosure:

FLAG emissions are not disclosed, while non-FLAG emissions across all scopes are covered.



2 SETTING EMISSION REDUCTION TARGETS

Low

Very low

Short-term targets (up to 2030)

70% GHG reduction of non-FLAG activities compared to FY2018 (-20%: energy-related measures, -50%: its forest conservation and plantation)

Scope coverage

Scope 1 Scope 2 Scope 3

Own emission reductions (compared to full value chain in 2019)

? by 2030

Medium-term targets (2031-2040)

No target

Scope coverage

Scope 1 Scope 2 Scope 3

Own emission reductions (compared to full value chain in 2019)

?

Long-term targets (2041 onward)

Net zero by FY2050 with carbon absorption by its forests

Scope coverage

Scope 1 Scope 2 Scope 3

Own emission reductions (compared to full value chain in 2019)

? by 2050

3 REDUCING EMISSIONS

Low

Very low

Emission reduction measures

Improve energy efficiency and expand absorption of overseas plantations. Extended its commitment on deforestation and illegal logging to include no conversion of own forest operations and global supply chains.

Renewable electricity

Increase renewables (mostly biomass fuels) to 60% by FY2030. No target on renewable energy beyond FY2030.

4 CLIMATE CONTRIBUTIONS AND OFFSETTING

Low

Very low

Responsibility for unabated emissions

Compensates its non-FLAG emissions by carbon absorption through FLAG activities.

Offsetting plans for the future

Targets largely rely on carbon absorption by its forest conservation and plantation. Volume of carbon absorption not specified for FY2050.

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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Toyota

SECTOR	REVENUE	PLEDGE	PROGRESS	TRANSPARENCY	INTEGRITY
Transport OEMs	JPY 45,095.0 bn (2023)	Carbon neutral by 2050	—	<div><div></div>Moderate</div>	<div><div></div>Low</div>
1 TRACKING AND DISCLOSING EMISSIONS				<div><div></div>Reasonable</div>	
Tracking and disclosure 592.9 MtCO ₂ e in 2023		Major emission sources: 74% of total GHG emissions come from its use of sold vehicles, 21% from purchased goods and services such as steel. Disclosure: Emissions across all scopes disclosed, however, lacks transparency on key input data for scope 3 calculations for vehicle use phase emissions.		<div><div>0125250375500</div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div><div>- upstream</div><div>- downstream</div></div>	
<div><div></div>Subsidiaries are partly covered.</div>					
2 SETTING EMISSION REDUCTION TARGETS				<div><div></div>Moderate</div> <div><div></div>Very low</div>	
Short-term targets (up to 2030)		-30% vehicle life cycle emissions compared to 2019, -33.3% of average GHG emissions for new LDVs, and -11.6% for HDVs compared to 2019			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		? by 2030			
Medium-term targets (2031-2040)		-50% average GHG emissions from new vehicles, -68% GHG emissions from corporate activities, and carbon neutrality at global plants by 2035 compared to 2019			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		? by 2035			
Long-term targets (2041 onward)		Carbon neutrality by 2050 throughout the vehicle lifecycle, including new vehicle emissions, business activities, and plant production			
Scope coverage		<div><div>Scope 1</div><div>Scope 2</div><div>Scope 3</div></div>		<div><div></div></div>	
Own emission reductions (compared to full value chain in 2019)		? by 2050			
3 REDUCING EMISSIONS				<div><div></div>Moderate</div> <div><div></div>Moderate</div>	
Emission reduction measures		No commitment to end new sales of internal combustion engine cars. Unclear about concrete approach to reducing upstream supply chain emissions, such as procurement of low-carbon steel.		<div><div></div></div>	
Renewable electricity		Renewable electricity target of 25% by 2025 achieved at global plants. No updated quantitative target has been set.		<div><div></div></div>	
4 CLIMATE CONTRIBUTIONS AND OFFSETTING				<div><div></div>Low</div> <div><div></div>Very low</div>	
Responsibility for unabated emissions		No information identified on how the company takes responsibility for unabated emissions.		<div><div></div></div>	
Offsetting plans for the future		Plans to use offset credits to achieve carbon neutrality from its global plants by 2035. No details on types and amounts of offsets are available.		<div><div></div></div>	

RATING

Progress ▲ — ▼ Change in overall Transparency or Integrity rating since the 2023 assessment.

Overall 5-point scale High Reasonable Moderate Low Very low Average of sections 1-4.

Sections 1-4 5-point scale High Reasonable Moderate Low Very low Average of the criteria in each section.

Rating criteria 3-point scale High Moderate Poor See methodology document for rating criteria.

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Assessing Net Zero 2025
Tracking Progress of 10 Japanese Companies

Climate Integrate | October 2025
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Climate Integrate is an independent climate policy think tank. We provide research and analysis on climate policy and support for decarbonization efforts by central and local governments, industry, and civil society.

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