

Japan Airlines Co., Ltd. | Overview

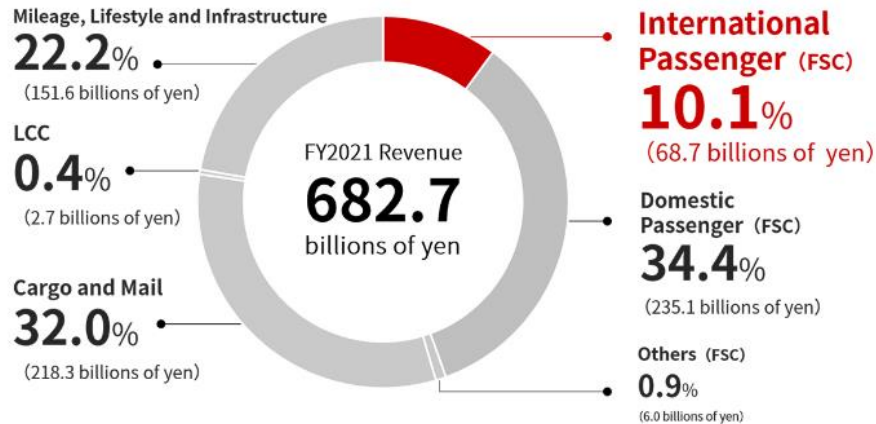
Japan Airlines Co., Ltd. : Transition-Linked Loan with Specified Use of Proceeds

■ Corporate Profile

Industry	Aviation
Location	Japan
Business	Japan Airlines Co., Ltd. operates international and domestic passenger services, cargo and mail services, and other businesses.

Business Overview

One of the two major domestic airlines established in 1951. Conducts business activities in four areas: Full Service Carrier (FSC); Low Cost Carrier (LCC); Cargo and Mail; and Mileage, Lifestyle and Infrastructure.



■ Loan Outline

Borrower	Japan Airlines Co., Ltd.
Agent Bank /Arranger Bank	MUFG Bank, Ltd., Mizuho Bank, Ltd.
Evaluation Agency	Japan Credit Rating Agency, Ltd.
Amount Borrowed	Approximately 26.5 billion yen
Contract Date	March 2023

Alignment with the Four Elements in the Guideline*

Element 1

- Transition strategy: ESG strategy is set as one of the three pillars of management strategy along with business strategy and finance strategy. Regarding the environmental sector, announced its commitment to achieve net zero CO₂ emissions by 2050 in addressing climate. Aims to achieve the target by upgrading to fuel-efficient aircraft, streamlining flight operations, and utilizing sustainable aviation fuel (SAF).
- Governance: The executive officers concerned review and discuss the progress of initiatives on a monthly basis.

Element 2

- Specified 4 areas and 22 issues as priority issues to address through business and set medium-term targets for each. "Total CO₂ emission reduction target," which is the KPI/SPTs of this transition-linked loan (TLL), falls under "Responding to Environmental/Climate Change."
- In addition, sets this target as a management target in the medium-term management plan as the most important in the four priority areas.

Element 3

- Established emission-reduction pathways and targets by referring to a number of international scenarios, including studies by ICAO and IATA.
- Long-term targets are in line with the ICAO long-term targets and the international scenarios of ATAG and IEA. TPI is also in line with the 1.5°C target.

Element 4

- Announced plans to invest a total of 660 billion yen over a four-year period from 2022 to 2025. Environment-related investments include the purchase of fuel-efficient aircraft. Placed orders for a total of 31 fuel-efficient aircraft.

*Basic Guidelines on Climate Transition Finance

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Use of Proceeds and KPI/SPTs

Use of proceeds

Use of proceeds is classified as clean transportation under the Green Loan Principles, and is aligned with the following three SDGs.

- 7. Affordable and clean energy
- 9. Industry, innovation and infrastructure
- 13. Climate action

Use of proceeds category

Upgrades to fuel-efficient aircraft

Qualifying criteria

- Upgrading to the latest fuel-efficient aircraft (A350 and 787) as set out in the "CO₂ Reduction Targets and Initiatives by 2030"
* Reduction of CO₂ emissions by about 15-25% compared with the current aircraft



KPI/SPTs

KPI being the GHG emission, two SPTs are set based on their strategy

KPI

GHG emissions

SPTs

- (1) Keep the level of FY2019 in FY2025
- (2) Below 90% of the level of FY2019 in FY2030

Alignment with the Green Loan Principles

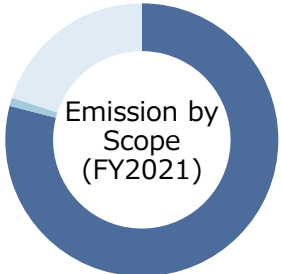
- 1. Use of Proceeds**
Upgrades to fuel-efficient aircraft with environmental benefits ✓
- 2. Project Evaluation and Selection Process**
Department in charge is identified and approved by the management ✓
- 3. Management of Proceeds**
Annual review by the Finance Department until full appropriation ✓
- 4. Reporting**
Annual disclosure on the website (including the amount of CO₂ reduction to the extent possible) ✓

Alignment with the Sustainability Linked Loan Principles

- 1. Selection of KPIs**
Contributes to ESG strategy and is related to the borrower's business materiality ✓
- 2. Calibration of SPTs**
Ambitious and consistent with medium- and long-term environmental targets ✓
- 3. Loan characteristics**
Specified in the contract ✓
- 4. Reporting**
Annual disclosure of KPI/SPTs achievement status until the last SPT trigger event of the loan is reached ✓
- 5. Verification**
Publishes results of verification of KPI by a third party until the last SPT trigger event ✓

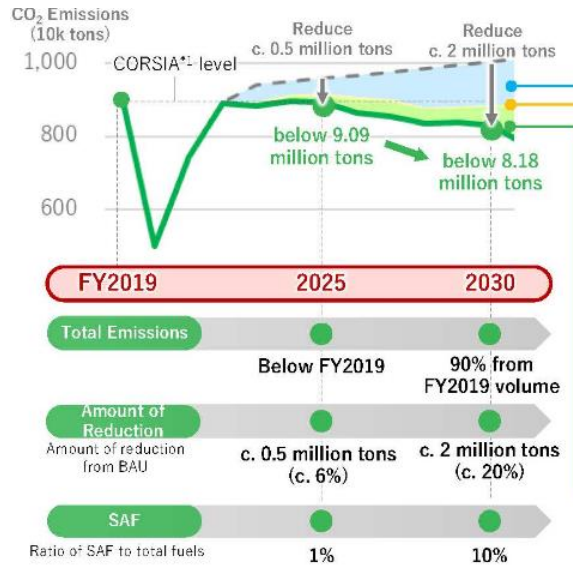
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Transition Strategy and Governance (Element 1)



- Scope 1: 79%
- Scope 2: 1%
- Scope 3: 20%

Strategies for Transition



Upgrades to Fuel-efficient Aircraft

FY2030 Emission Reduction: c. 60%

- Steadily introduce Airbus A350 and Boeing-787, more fuel-efficient models
- Coordinate with aircraft manufacturers to promote R&D of electrified/hydrogen-fueled aircrafts

Reduction of CO₂ Emissions in Daily Operations

FY2030 Emission Reduction: c. 5%

- Promote JAL Green Operations (to reduce emissions on a daily basis)
- Proactive participation in public-private partnership for the next-gen air traffic system

Use of SAF

FY2030 Emission Reduction: c.35%

- Switch to SAF by 10% for FY2030, based on the premise of improvement of the usability
- In addition to the Fulcrum partnership, build and integrated supply chain of Japan-made SAF

2050
Net zero emissions

Governance



Sustainability Promotion Council's main agenda items

- Decide major issues and annual targets for sustainability initiatives, and monitor and evaluate progress
- Decide actions to address climate change, risks and opportunities
- Monitor and evaluate the Environmental Management System
- Monitor and evaluate human rights due diligence

Key Points

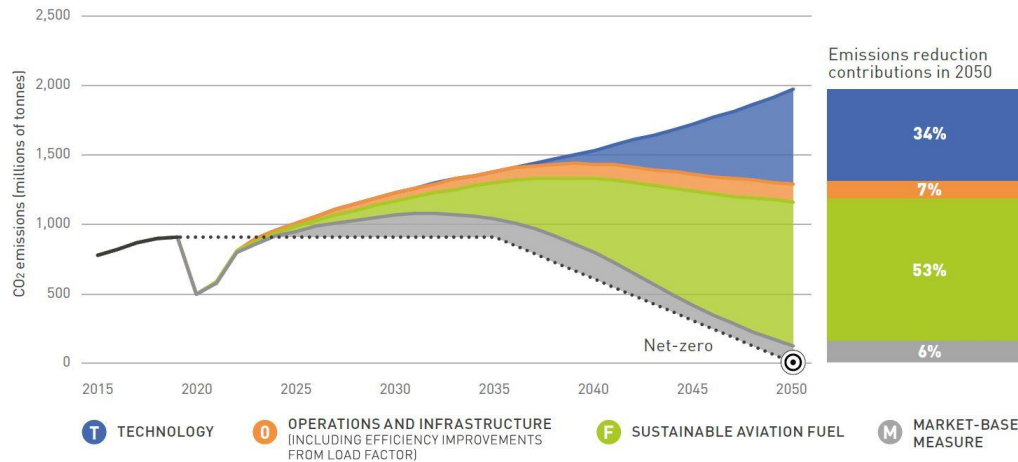
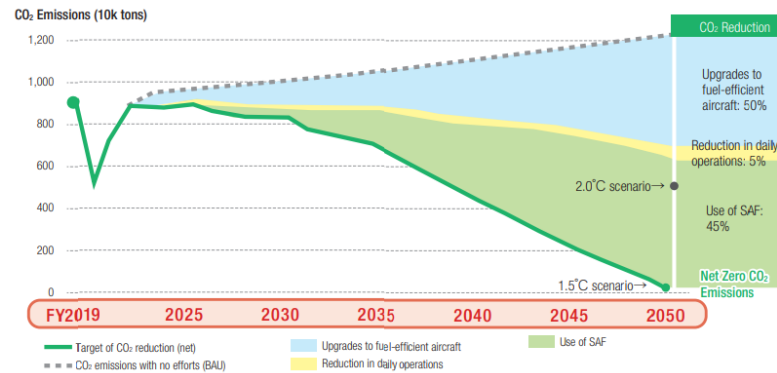
- Aims to achieve medium-term targets and ultimately net zero CO₂ emissions by 2050 through steadily upgrading to the latest fuel-efficient aircraft based on a stable financial base, reducing emissions in daily operations by promoting JAL Green Operations, and increasing the amount of SAF.
- Established a governance structure to accelerate the promotion of management with the president as chair. The Sustainability Promotion Committee meets monthly to review progress and discuss initiatives among executives concerned.

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Science Based Targets and Pathways (Element 3)

- 2025** | Reduce approx. 0.5 million tons and maintain total emissions below the amount of FY2019
- 2030** | Maintain the total emissions below 90% of FY2019 (SAF ratio: 10%)
- 2050** | **Net zero CO2 emissions**

JAL Group's Roadmap for Achieving Net Zero CO2 Emissions



Referenced roadmap example (Air Transport Action Group)

Key Points

- Targets of the JAL Group were set in reference to the reports by International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA), the Air Transport Action Group (ATAG) "Waypoint 2050," and the Ministry of Land, Infrastructure, Transport and Tourism's "Roadmap for Promoting Decarbonization of Aviation."
- The Group's medium- to long-term targets are comparable to international scenarios of total e emissions, such as the ICAO's long-term global aspirational goal*, the ATAG's "Waypoint 2050" and the IEA's "Net Zero by 2050."

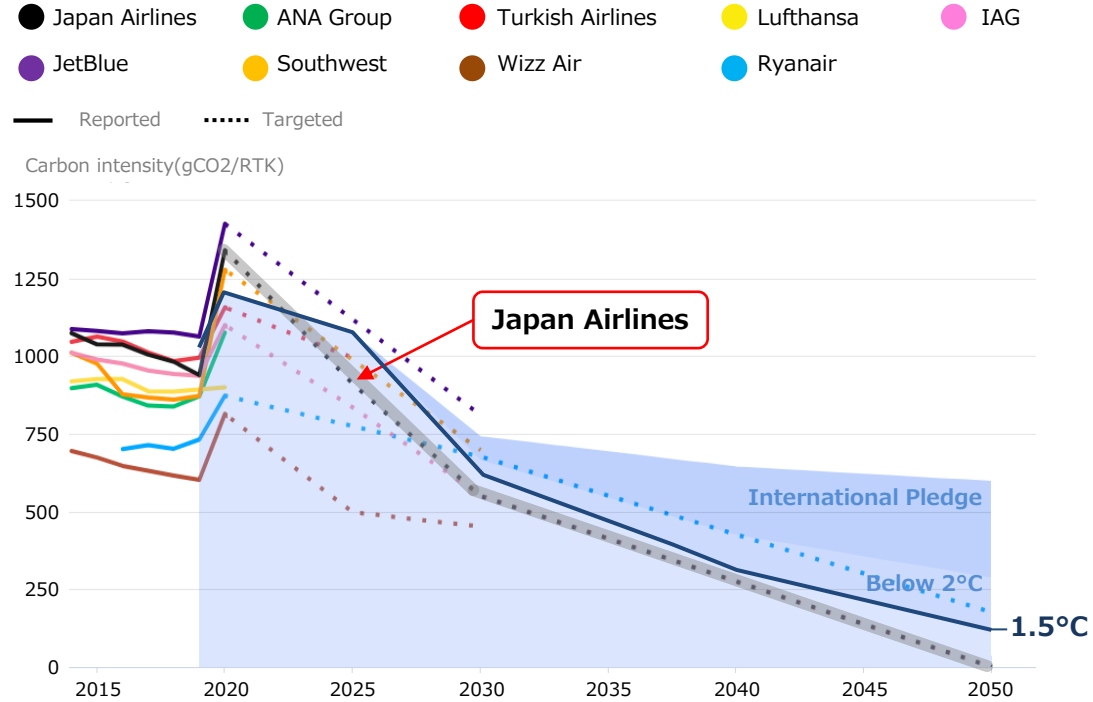
*On October 7, 2022, the 41st ICAO Assembly newly adopted the long-term global aspirational goal (LTAG) for international aviation to reach net zero CO₂ emissions by 2050. ICAO also states that achieving LTAG requires the combined effect of multiple CO₂ emission-reduction measures, including the adoption of new and innovative aircraft technologies, streamlined flight operations, and the development and increased production of sustainable aviation fuels (SAF). Although the JAL Group's transition strategy was developed prior to the above adoption of the LTAG, the Group's goals are aligned with the LTAG, and the key measures for achieving carbon neutrality by 2050 are the same as those listed by ICAO.

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Science Based Targets and Pathways (Element 3)

TPI and Comparison with Other Companies in the Same Industry

	(gCO2/RTK)	2020 Results	2025 Targets	2030 Targets	2050 Targets
TPI Benchmark	International Pledges	1202	1071	739	595
	Below 2°C	1202	1071	662	284
	1.5°C	1202	1071	616	108
Japanese companies	Japan Airlines	1341	911*	550	0
Other companies that disclose intensity targets on TPI	IAG	1100	835	552	0
	Ryanair	873	775	677	176
	Wizz Air	814	498	452	
	Southwest	1278	988	698	
	JetBlue	1426	1118	811	
	Turkish Airlines	1157	995		
	Lufthansa	900			
	IndiGo	863			



* The target value calculated by TPI as of early December 2022 is used in the review. JAL announced an intensity target of 818.7 gCO₂/RTK in FY2025 on later December 2022 (more ambitious than that of TPI).

Key Points

- JAL's target under TPI is consistent with the 1.5°C scenario and is more ambitious than those of other carriers.

Committee | Results

Japan Airlines Co., Ltd. : Transition Finance

RESULTS:

Approved for Climate Innovation Finance Promotion Grants Scheme

Main Opinions

Transition strategy

- Due to the change in CORSIA baseline, the importance of introducing fuel-efficient aircraft has increased, along with the use of SAF and credits. The funds of this project are used for important efforts.
- It is a high-quality project with thorough scenario, and a transition plan that can withstand international standards has been established.
- As the importance of freight transportation is increasing in business strategies, ambitious targets are set including them.

Others

- It is important to consider the impact of loan procurement on the transition plan. This project is exemplary in identifying the amount of reduction per fuel-efficient aircraft.
- As the competition for SAF procurement intensifies, it is important to consider various procurement methods.

This document focuses on the contribution of transition finance to the realization of Japan's carbon neutrality by 2050 and the Paris Agreement and does not cover any of the risks associated with transition finance as a financial instrument. It should be noted that even the approved cases of this scheme, there are credit risks and other risks (in the case of bonds, price fluctuation risks, liquidity risks, etc.) as in ordinary financing.