



JAPAN AIRLINES CO., LTD. TRANSITION BOND FRAMEWORK

日本航空株式会社トランジションボンド・フレームワーク





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JAPAN AIRLINES
Japan Airlines Co., Ltd.
Transition Bond Framework

1. JAL Group's ESG Strategy and the Significance of Transition Bonds Issuance

Japan Airlines Co., Ltd. (hereinafter, "The Company" or "JAL") has developed the following Transition Bond Framework (hereinafter, "this framework") with the aim to promote ESG management as set forth in JAL Vision 2030 and to accelerate efforts toward net zero CO₂ emissions by 2050.

JAL has obtained a second party opinion from Sustainalytics, an independent external reviewer, that this framework is aligned with the Green Bond Principles 2021 (ICMA), Green Bond Guidelines 2020 (Ministry of the Environment, Japan), Climate Transition Finance Handbook 2020 (ICMA), and Basic Guidelines on Climate Transition Finance (May 2021) (Financial Services Agency, Japan; Ministry of Economy, Trade and Industry, Japan; and Ministry of the Environment, Japan).

JAL will issue Transition Bonds based on this framework.

1.1 Overview of the issuer

The Company was founded in 1951. The JAL Group is composed of the Company, 80 subsidiaries and 51 affiliated companies (as of September 30, 2021), and conducts "air transport business" and "other business". Details are as follows.

Air Transportation business

Air Transport business	The Company, its subsidiaries including Japan Transocean Air Co., Ltd., Japan Air Commuter Co., Ltd., J-AIR Co., Ltd., SPRING JAPAN Co., Ltd. (Formerly Spring Airlines Japan Co., Ltd., corporate name changed as of November 1st), ZIPAIR Tokyo Inc., Hokkaido Air System Co., Ltd., Ryukyu Air Commuter Co., Ltd., and affiliated companies conduct the air transportation business.
Airport Passenger Service	Subsidiaries such as JAL SKY Co., Ltd. provide check-in procedures and boarding assistance for passengers, operational support from the ground, load control, etc.
Ground Handling	Subsidiaries such as JAL Ground Service Co., Ltd. provide airport ground services, such as baggage and cargo loading, marshalling, cabin cleaning and aircraft cleaning.
Maintenance	Subsidiaries such as JAL Engineering Co., Ltd. are engaged in maintenance service for aircraft, engines and aircraft parts, management of parts and aircraft painting.
Cargo	Subsidiaries and affiliated companies such as JAL Cargo Service Co., Ltd. conduct cargo and mail handling, management of warehouse (cargo handling facility).
Passenger Sales	Subsidiaries such as JAL Sales Co., Ltd. carry out sales of domestic/overseas travel using air transport services, ticket sales, reservations, information and inquiries by phone.
Airport Peripheral Business	Subsidiaries and affiliated companies such as JAL Royal Catering Co., Ltd. provide the production of in-flight meals.
Others	96 companies, including 49 subsidiaries such as JALPAK Co., Ltd., JAL Information Technology Co., Ltd., AXESS INTERNATIONAL NETWORK, Inc., and JAL Card, Inc. and 47 affiliated companies, are engaged in planning/sales of package tours using air transport, baggage delivery, system development and operation, provision of reservation and ticketing system for travel agencies or credit card business, etc.

1.2 Sustainability Management

JAL Group strives to solve social issues through its business and contribute to the realization of a sustainable society.

In accordance with the JAL Group Corporate Policy to “Pursue the material and intellectual growth of all our employees; Deliver unparalleled service to our customers; and Increase corporate value and contribute to the betterment of society,” we are working to maximize economic value (business profit) and social value (contribute to solving social issues). We will flexibly adapt to changes in the environment, increase economic value through sustainable corporate growth, and contribute to creating a sustainable society where everyone can live a safe, secure and comfortable life.

【Main efforts and medium-term goals for sustainability】

JAL has set a medium target for each of the "4 areas / 22 issues" that JAL Group is working on. JAL Group will aim to realize a sustainable society through daily business activities and promote ESG management to achieve the SDGs.



Management targets in the Medium Term Management Plan



Priority issues in the Medium Term Management Plan

Environment

22 Issues	Main initiatives	Target for FY25
Addressing Climate Change	Reduction of CO ₂ emissions	Aircraft Operation: Below 9.09 million tons Ground Facility: [FY2030 Target] Emissions vs FY2013 50%
Effective Use of Limited Resources	Reducing single-use plastic	No use of virgin petroleum plastic in cabin/lounge 100% switch to eco friendly materials at Cargo/Airport service
	Reducing food loss and waste	Recycle rate 100%
	Paper reduction	Paperless in cargo warehouses: Complete paperless in JAL flights
Prevention of Environmental Pollution	Industrial waste reduction	Final disposal rate: Keep below 1%
Noise Reduction	Operation with low-noise aircraft	Ratio of ICAO Chapter 4 standard compliant aircraft: 100%
Biodiversity Conservation	Prevention of illegal wildlife trade	Number of illegal wildlife transported: 0 times
	Use of certified products	Ratio of paper items with FSC® certified paper used in flight: 100%

Communities

22 Issues	Main initiatives	Target for FY25
Route Network Expansion	Preserving and development of regional routes including island routes	More than 62 sites
Increase Inbound Tourism	Promotion of passengers from outside of Japan boarding on domestic flights:	1,505,000 people
Improving Convenience in Travel	Commercialization of drone logistics/ eVTOL air taxi service	FY23: commercialization of drone logistics FY25: commercialization of eVTOLs
Regional Revitalization	Increase of tourists to regional areas	+10% v.s. FY19 result
Community Relations	Promotion of volunteerism	Track participation
	Nurturing the next generation	Track participation in programs
Disaster Restoration Assistance	Disaster relief	Track the value of charity miles donated

People

22 Issues	Main initiatives	Target for FY25
Promotion of Diversity and Inclusion (D&I)	Promotion of diverse talent participating actively in work Management targets Priority issues	Group Female Managers Ratio: 30%
Workstyle Innovation	Improvement of working productivity	Total work hours: 1,850 hours
	Promotion of diverse workstyles	Cumulative total number of people who used systems to work remotely: Track usage statistics
Health and Productivity Management	Improvement of health check-up participation rate	Ratio of check-ups taken by employee: Keep 100%
	Ratio improvement of gynecological checkups	Ratio of breast cancer check-up taken: 70% Ratio of uterine cancer check-up taken: 70%
Respect for Human Rights	Conducting of Human Rights Due Diligence	Specification of issues and conducting of improvement plans
Human Resources Development	Enhancement of employee training	Tracking training hours per person
Improving Accessibility	Promotion of boarding passengers who feel barriers to travelling Priority issues	Ratio of such passengers onboard: 2.5 times v.s. FY19 result
Prevent the Spread of Infectious Diseases	Activation of medical items transportation Priority issues	+50% v.s. FY19 result

Governance

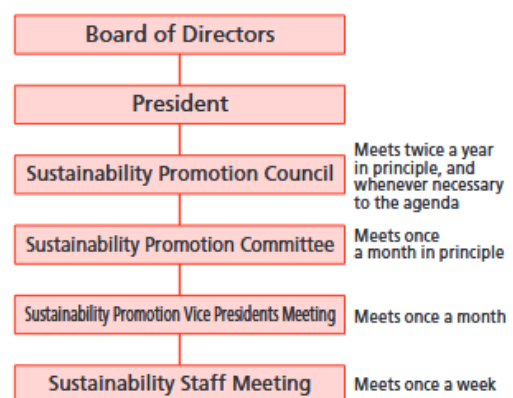
22 Issues	Main initiatives	Target for FY25
Fair Business Practices	Compliance to the Corporate Governance Code Priority issues	Keep 100% compliance rate
	Function improvement of Board of Directors	Ratio of Outside Directors: Over one third
	Prevention of information leakage	0 cases
	Prevention of corruption and bribery	0 cases
Disclosure	Reinforcement of information disclosure in Sustainability pages of the Corporate website	Number of views: Over 1,000,000
Responsible Procurement	Supply chain management Priority issues	Soundness confirmation ratio of primary suppliers: 100%
Promotion of BCM	Improvement of BCP effectiveness	Number of exercises conducted per BCM: 2 times

【Promotion System】

JAL has set the Sustainability Promotion Council, chaired by the President, and has established a system that can accelerate ESG management promotion with the aim of achieving SDGs by enabling the Board of Directors to confirm the progress.

The main agenda of the Sustainability Promotion Council is as follows;

- Progress management of key issues/annual targets for initiatives in order to realize sustainability
- Management review of climate change risks and opportunities
- Review of the Environment Management System
- Review of the Human Rights Due Diligence



In addition, as a lower organization of the Sustainability Promotion Council, the Sustainability Promotion Committee will hold a monthly meeting. The related officers will confirm and discuss the progress on the meeting.

1.3 Environmental Management

We pledge the JAL Group Environmental Policy based on identified critical items to resolve environmental issues.

【JAL Group Environmental Policy】

In order to realize the policy advocated in 'Passing on our precious Earth to the next generation' within the JAL Group Code of Conduct "Commitment to Society", JAL Group will set up its own driving force and strive to sustainably conserve the environment as a member of the society, and undertake all preventive measures for any counteracting phenomena, based on this Policy.

JAL Group Code of Conduct "Commitment to Society", passing on precious Earth to the next generation

1. JAL Group sincerely accepts the fact that our air transport business impacts the environment significantly. To fulfill our responsibility of passing on our precious Earth to the next generation, we will raise the awareness of every employee and preserve the environment in every aspect. We will also strive to protect the environment by building partnerships and cooperative relationships with a wide range of people, including stakeholders, customers, business partners, suppliers and investees.

Compliance with laws and regulation

2. JAL Group complies with laws and regulations, and ordinances, norms such as international conventions, and industrial and company standards, concerning the environment.

Mitigating impacts of operations on the environment

3. JAL Group establishes and operates environment management systems, and strives to mitigate impacts of operations on the environment by executing the following actions without any fail;

(1) Address to climate change;

Toward the realization of a Decarbonized Society

- ① Reduce the CO₂ emissions from aircrafts.
- ② Reduce the CO₂ emissions from ground facilities, vehicles, etc.

(2) Effective use of limited resources;

Toward the realization of Circular Economy

Ensure 4R (Refuse / Reduce / Reuse / Recycle), and utilize resources in every aspect of our business, by reducing food losses, use of plastics products, etc.

(3) Prevention of environmental pollution;

- ① Prevent environmental pollution by reducing waste.
- ② Prevent environmental pollution by handling hazardous chemical substance appropriately.

(4) Noise reduction;

- ① Promote replacement of lower noise aircrafts.
- ② Proactively study and introduce noise abatement operational procedure.

(5) Biodiversity conservation.

- ① Fulfill our responsibility towards Biodiversity conservation, as a company engaged in air transport business.
- ② Minimize the impact on ecosystem by mitigating the impact on environment from our business operation.

Pursuit of environment-friendly technologies

4. JAL Group pursues environment-friendly technologies, such as enhancement of manufacturing development of Sustainable Aviation Fuel to solve environmental issues in coordination with its stakeholders.

Enhancing awareness

5. JAL Group strives to increase awareness of the environment of all JAL Group officers and employees and take steps to preserve the environment in every aspect. In addition, it proactively conducts awareness-raising activities toward society.

Information disclosure

6. JAL Group honestly and actively discloses impacts of operations on the environment and environmental initiatives, and maintains dialogue with stakeholders.

Continual Improvement

7. JAL Group strives to pursue continuous improvement by periodically checking both its impact on the environment and achievement of its effort on environment conservation, and reflecting the outputs from such checks on its initiatives.

1.4 JAL Vision 2030

JAL Group has set the new Medium-term management plan to overcome the crisis amidst the COVID-19 pandemic and attain our grand design “JAL Vision 2030”. All members of the group are now determined to make dedicated efforts for achievement of this vision, driven by the two key themes “Safety and Comfort” and “Sustainability”, amid a time of upheaval with drastic changes in values.



【Overview of Management Strategy】

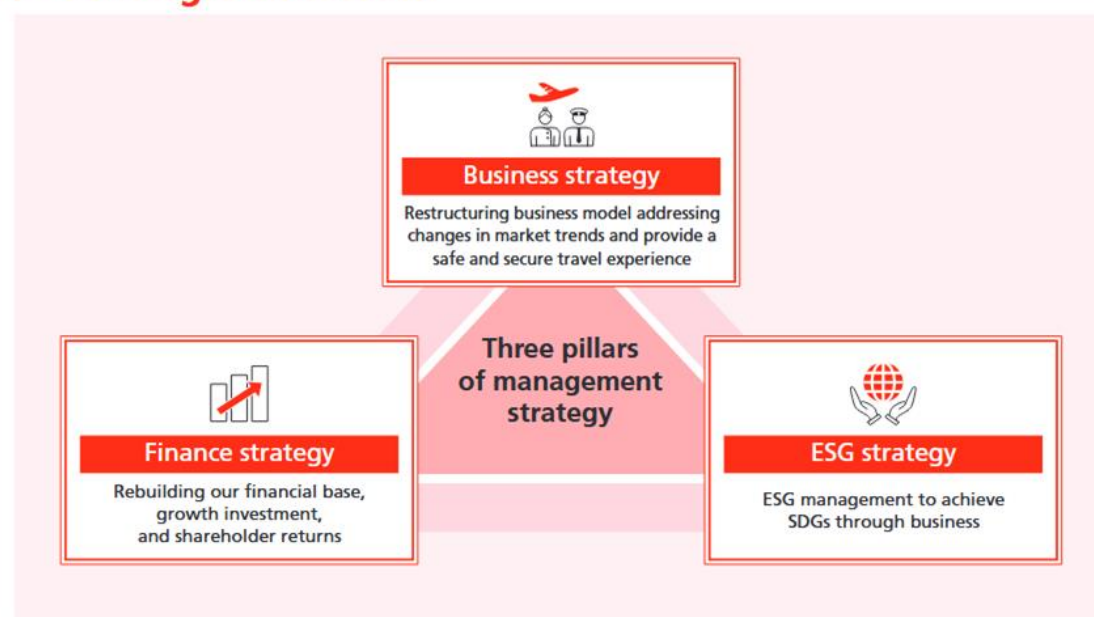
Based on unprecedented environmental changes due to COVID-19 pandemic and the business environment surrounding JAL Group, we set the "ESG Strategy" as one of the three strategic pillars in "JAL Group Medium-Term Management Plan for Fiscal years 2021-2025", in addition to "Business Strategy" and "Financial Strategy".

Changes in the Business Environment



* vs 2019: Statistics of IATA (International Air Transport Association)

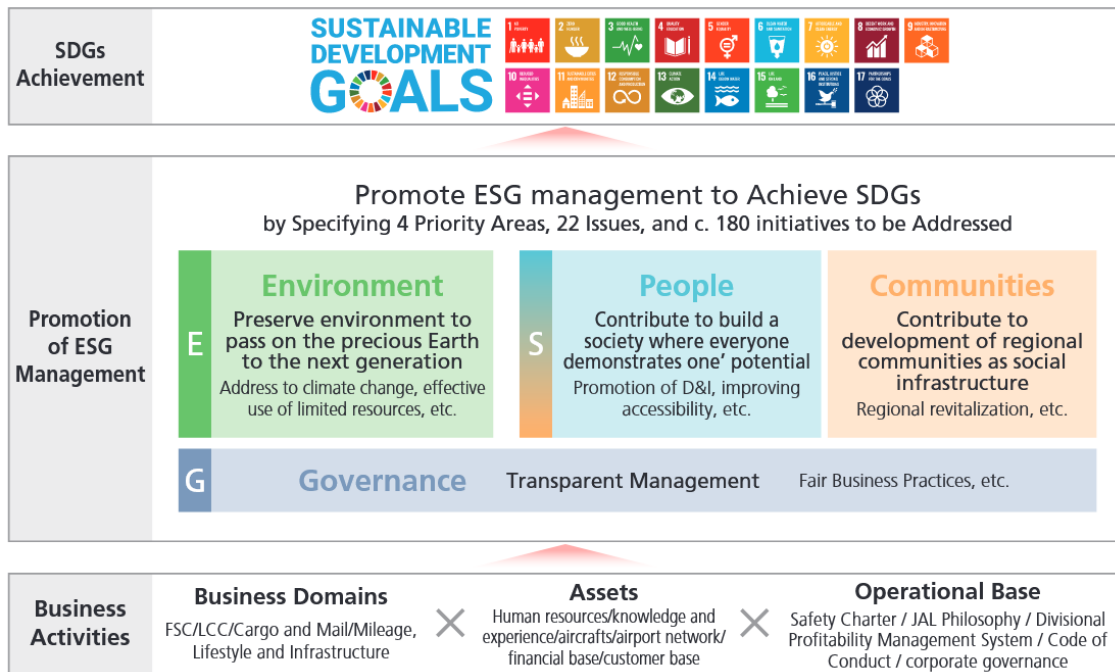
► Strategic Overview



【ESG Strategy】

As there is a growing momentum for society as a whole to pursue sustainability and realize true wealth and happiness, we will promote ESG businesses more than ever in our business activities and work toward achieving the SDGs by 2030.

JAL set the issues in the four areas of Environmental, People, Local Communities and Governance, and aim to solve social issues realize a sustainable society through business activities.



【Target of Net Zero CO₂ Emissions by 2050】

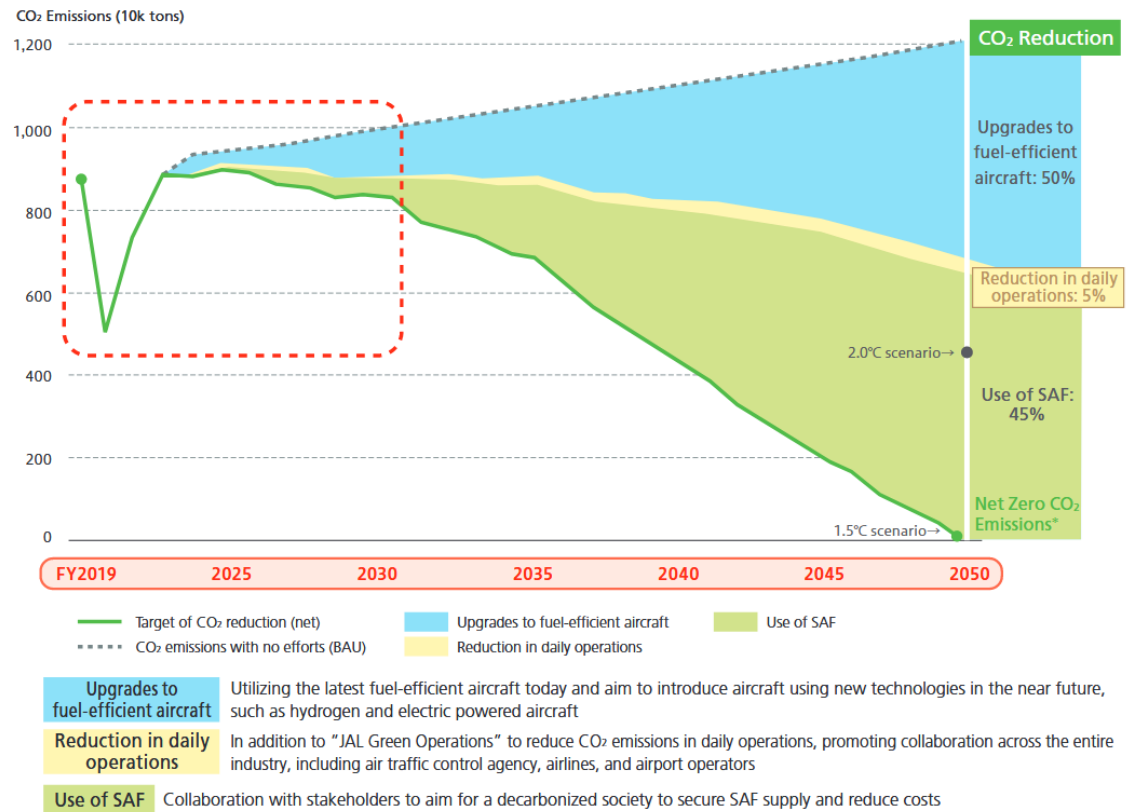
We have incorporated the acceleration of addressing climate change in the Medium-Term Management Plan.

Regarding the reduction of CO₂ emissions from aircraft, its scenarios by 2050 in considered, referring to the latest study materials by The International Civil Aviation Organization (ICAO) and The International Air Transport Association (IATA), and the latest scenarios such as Air Transport Action Group (ATAG)'s "WAYPOINT 2050", and proceeding to a discussion of future issues and measures to be taken.

The growth of RTKs (revenue ton-kilometers) based on total demand for both international and domestic routes was set, and total CO₂ emissions up to 2050 was calculated, reflecting the 3 points below.

1. Upgrading to fuel-efficient aircrafts	A long-term fleet plan was formulated based on the total amount of demand forecast up to 2050 to reflect the CO ₂ reduction effects of equipment replacement.
2. Reducing CO ₂ emissions in daily operations	Various internal and external measures to reduce CO ₂ emissions are reflected in the scenario as fuel consumption improvement effects.
3. Development and Use of Sustainable aviation fuel (SAF)	The assumption is that CO ₂ emissions will be reduced by switching to fuel-efficient aircraft and reducing CO ₂ in daily operations, and the remaining amount of CO ₂ emissions will be reduced by SAF.

JAL Group's Road Map towards Net Zero CO₂ Emissions*

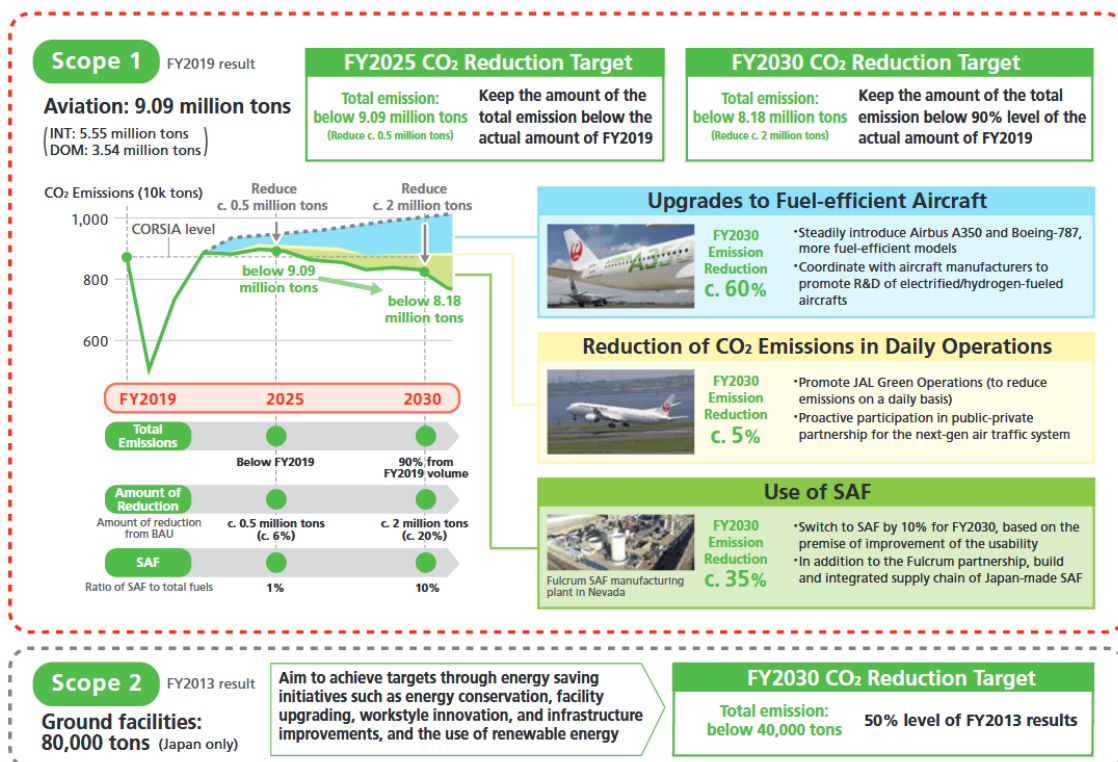


* Achieving a balance between the amount of carbon emissions actually generated by business activities and the amount of reduction achieved through measures = Net Zero Emission (including emissions trading and CCS (CO₂ absorption technology))

【Targets and Initiatives towards CO₂ emission reduction by 2030】

The JAL Group's target for 2030 to keep total emission below 90% level of that of fiscal year 2019 is one of the most ambitious targets for airlines around the world. The Group will strive to achieve our goals by steadily upgrading to the latest aircrafts based on stable financial base, reducing CO₂ emissions in daily operations through the promotion of JAL Green Operations, and expanding SAF load.

As for SAF, manufacturing and distribution overseas is accelerating, and in Japan, the government's "Green Growth Strategy" laid out a concrete path to SAF manufacturing and distribution by 2030. The JAL Group has set an ambitious goal of replacing 10% of fuel loads by SAF in 2030, and will work on SAF commercialization in cooperation with stakeholders in Japan and overseas through public-private partnerships.



【Management Targets under Medium-term Management Plan: Sustainability】

For "Environment", JAL works to reduce disposable plastics in addition to CO₂ reduction. For "people", JAL promotes D & I that contains female management rates. For the "local community", JAL practices domestic transport that contributes to regional revitalization.

FY2025 Targets

<div style="text-align: center;"> <p>Sustainability</p> </div>	Environment	<p>CO₂ Emission Reduction</p> <p>Total emission: below 9.09 million tons (FY2019 Result)</p>	<p>Reduction of Single-use Plastic</p> <p>No use of virgin petroleum-based plastic at cabin/lounge (100% switch to eco-friendly materials at Cargo/Airport service)</p>
	People	<p>Promotion of D&I</p> <p>Group Female Managers Ratio: 30% (19.5% as of FY2020 end)</p>	<p>Consistent efforts to encourage various human resources to demonstrate their potential</p>
	Communities	<p>Regional Revitalization</p> <p>Domestic passenger* and cargo transport volume: +10% vs FY2019</p>	

*: Increases in passenger numbers by stimulating tourism demand and creating new flows

1.5 Participation in External Initiatives

- Participation in the UN Global Compact

JAL Group has been participating in the Global Compact, advocated by the United Nations, since December 2004. JAL Group supports and implements the 10 principles of the UN Global Compact in all its business activities, and will acts as a bridge to bring people, their cultures and their hearts closer together as an overall air transport enterprise, and thus contribute to world peace and prosperity.

- JAL Group Actions to Achieve SDGs

JAL Group is taking efforts to solve social issues through their business to achieve the SDGS and realize a sustainable society.

- TCFD participation

JAL Group recognizes that responding to climate change is a particularly important issue for the sustainability of society. In February 2021, JAL Group committed support to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board (FSB), and has disclosed information related to climate change in line with the TCFD recommendations in August 2021. Hereafter, JAL Group will continue to further expand the disclosure in a timely manner.

1.6 Rationale for Transition Bonds Issuance

JAL Group has identified the environment-related issues as one of its priority areas. JAL is working as a whole to promote its overall initiatives under the JAL Group Environmental Policy and Action Plans. The steady execution of its ESG strategy set forth in "JAL Vision 2030" aligns with the 2050 Carbon Neutral declaration of the Japanese government. JAL considers the issuance of Transition Bonds as the funding for our initiatives toward achieving carbon neutral by 2050 and an opportunity to inform our stakeholders of our overall initiatives.

JAL Group's long-term strategy will be reviewed when government policies or other assumptions change.

<Corresponding Sections to the Four Disclosure Elements of the ICMA Climate Transition Handbook>

Disclosure Elements	Sections
1. Issuer's climate transition strategy and governance	1.2, 1.3, 1.4, 1.5, 1.6 2.1
2. Business model environmental materiality	1.2, 1.3, 1.4, 1.5 2.1
3. Climate transition strategy to be science-based including targets and pathways	1.4, 1.5
4. Implementation transparency	1.4, 1.5 2.2, 2.3, 2.4, 2.5

2. Transition Bond Framework

2.1 Use of Proceeds

2.1.1 Eligibility Criteria

JAL will use the proceeds of the Transition Bonds to finance and refinance new and existing Eligible Projects falling within the following project category. In the case of existing investments, allocation is limited to expenditures made within three years from the issuance of the Transition Bonds.

Project Category	Eligibility Criteria	SDGs
Upgrading to Fuel-efficient aircraft Green Bond Principles: Clean transportation (Environmental objectives: Climate change mitigation)	・ 「Targets and Initiatives towards CO ₂ emission reduction by 2030」: Upgrading to fuel-efficient aircrafts such as Airbus A350 and Boeing 787	7.Ensure access to affordable, reliable, sustainable and modern energy for all 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation 13.Take urgent action to combat climate change and its impacts

2.1.2 Exclusion Criteria

The proceeds of the Transition Bonds will not be allocated to projects related to:

- ・ Unfair transactions that do not comply with the laws and regulations of the country, such as bribery, corruption, blackmail, embezzlement, etc
- ・ Transactions that can cause social problems relate to human rights and the environment

2.2 Process for Project Evaluation and Selection

JAL's Finance Department will consult with related business departments and select nominated Eligible Projects. General Manager of Finance & Accounting Division will be responsible to select the Eligible Projects on behalf of the Board.

Eligibility assessments are done in a comprehensive manner based on the Eligibility Criteria. In addition, in the operation and implementation of the project, JAL is working on the conservation of the surrounding environment in each related department.

2.3 Management of Proceeds

JAL's Finance Department will manage the allocation of the proceeds annually using the internal management system until the net proceeds from the Transition Bonds have been fully allocated. The proceeds will be managed in cash or cash equivalents until the net proceeds from the Transition Bonds have been fully allocated. Such allocation will be made within 36 months of the issuance to the Eligible Projects.

2.4 Reporting by the Issuer

2.4.1 Allocation Reporting

JAL will report on the allocation of proceeds on JAL's website annually until the proceeds have been fully allocated to Eligible Projects.

The report will include the aggregated amount of allocation of the proceeds to the Eligible Projects at category level, the amount of unallocated proceeds and the amount of proceeds used for existing investments.

JAL will report timely in the event of a significant change in the allocation of proceeds.

2.4.2 Impact Reporting

Where possible, JAL will report on the following impact metric and the outlines of Eligible Projects on JAL's website, until the proceeds from the Transition Bonds have been allocated.

Project Category	Impact Metric
• Upgrading to Fuel-efficient aircraft	• Annual CO ₂ emissions avoided

2.5 External Review

2.5.1 Second Party Opinion

JAL has obtained a second party opinion from Sustainalytics, an independent external reviewer. The opinion confirmed that this framework is aligned with the Green Bond Principles 2021 (ICMA), Green Bond Guidelines 2020 (Ministry of the Environment, Japan), Climate Transition Finance Handbook 2020 (ICMA), and Basic Guidelines on Climate Transition Finance (May 2021) (Financial Services Agency, Japan; Ministry of Economy, Trade and Industry, Japan; and Ministry of the Environment, Japan).

2.5.2 Annual Review

Within one year from the date of issuance of the Transition Bonds, JAL will obtain a review from Sustainalytics, an independent external reviewer, to evaluate whether its reporting is aligned with this framework. This review will be conducted annually until the proceeds from the Transition Bonds have been fully allocated.