4
Strengthening Management Resources

About This Chapter

- Maximize the Value of Human Capital, the Main Driver of Value Creation
- Improving Productivity and Creating New Value Through the Utilization of Intellectual Capital
- Addressing the Sustainability of Natural Capital, a Prerequisite to Achieve Both Corporate and Social Sustainability

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Message from the Executive Officer in charge of Human Capital

Linking boldly reforming systems and structures to the solid growth of each and every employee

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A Virtuous Cycle of Value Creation, Employee Returns, and Engagement is the Core of the JAL Group's Human Capital Strategy

In JAL Group, human capital refers to the skills and experience of individual employees. Human capital investment is nothing more than investment to promote employee growth. Based on this recognition, we believe that the strength of JAL Group lies in the fact that our employees, who perform a variety of duties, demonstrate a high level of expertise in their respective positions, while at the same time possessing the ability to make decisions based on shared values, as symbolized by JAL Philosophy.

Even in situations of change and uncertainty that cannot be handled by manuals, decisions based on shared values are naturally made in individual frontlines. This "invisible strength" is one of JAL Group's intangible assets and is the strength of its unique human capital.

Human capital is not just another management resource; it plays a key role in value creation. By investing in human capital, we promote employee growth and enhance value creation, while at the same time enhancing employee return and engagement. Then, based on the value created by highly engaged employees, we will continuously return profits to employees. Based on the basic policy of aiming for such a virtuous cycle, we will create a framework that allows each employee to realize that their potential is directly connected to the growth and future of the Group.

Organizing the direction of measures from both individual and organizational perspectives to link the new framework to solid growth

The human strategy topic for FY2024, was To Change. While JAL Group has the aforementioned strengths, it is undeniable that our corporate culture, which emphasizes safety and security above all else, tends to put us on the defensive, and our systems and ways of thinking have become fixed. However, with the rapid environmental changes, such as the labor shortage, it is now necessary to not only make small improvements in human resources, but also to "first try to change things and then correct them if there are any flaws". With this in mind, in order to create opportunities for our employees to exercise their abilities and grow, we have broken down the existing personnel system as much as possible. We introduced new systems and structures that allow young employees, senior employees, and highly specialized, diverse human resources to exercise their abilities.

I feel that we were able to make such a bold change because many of our employees wanted to change. On the other hand, while opposition is bound to accompany major changes, I see these frictions as something that brings about positive opportunities. Nevertheless, we are still halfway there. The question for the future is whether our employees are fully aware of the content and significance of the newly introduced system, and whether they have a widespread awareness of the need to utilize the system for their own growth. To this end,

● Human Resources Strategy

In addition to the development, placement, and growth of diverse human resources to achieve medium- to long-term growth, we will establish an "organization" that enables diverse "individuals" to demonstrate their strengths.

Individual Growth Support

Providing growth opportunities and strategic placement

- Develop abilities
- Enhance diversity
- Expand areas of activity
- Gain knowledge

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Maximize the Power of Individuals through the Organization

Create a workplace where people can take on the challenge of creating new value

Foundation for Value Creation

- Putting JAL Philosophy into practice
- Promote health and productivity management

High engagement | **Value Creation** | **Employee Return**

interactive communication is important. Rather than simply sending out one-way information, it is important for each organization to scrutinize how well each employee understands the new system and their impressions are of it.

In JAL Group Medium Term Management Plan-Rolling Plan (MRP) 2025, the direction of the human resources strategy to support medium- to long-term growth is to focus on "maximizing individual strength through the organization" in addition to "supporting individual growth," which has been emphasized to date, and to realize medium- to long-term growth from both sides. With regard to individuals, we will actively support the growth of diverse human resources and respond flexibly to the growth of each individual, while linking this to our business strategy. We will also promote the creation of an organization that makes the most of each individual's personality and abilities. A strong basis for growth for both the individual and the organization will be built under a solid foundation on which diverse human resources can work together toward a common goal.

It has been a year in which we made significant changes to what needed to be changed, but at the same time, there are ways of thinking that must not be changed, namely JAL Philosophy and health and productivity management. The former is a set of values that all employees, working in a variety of occupations and workstyles, can share in order to move forward in the same direction. The latter is the notion that the company will put top priority to the health of its employees and their families with tender loving care. These two pillars are the source of JAL Identity and will continue to be at the center of our human resources strategy.

Promote optimization of human capital portfolio and productivity improvement

In our human resource strategy, "optimization of human capital portfolio" and "productivity improvement" are important themes along with individual and organizational growth.

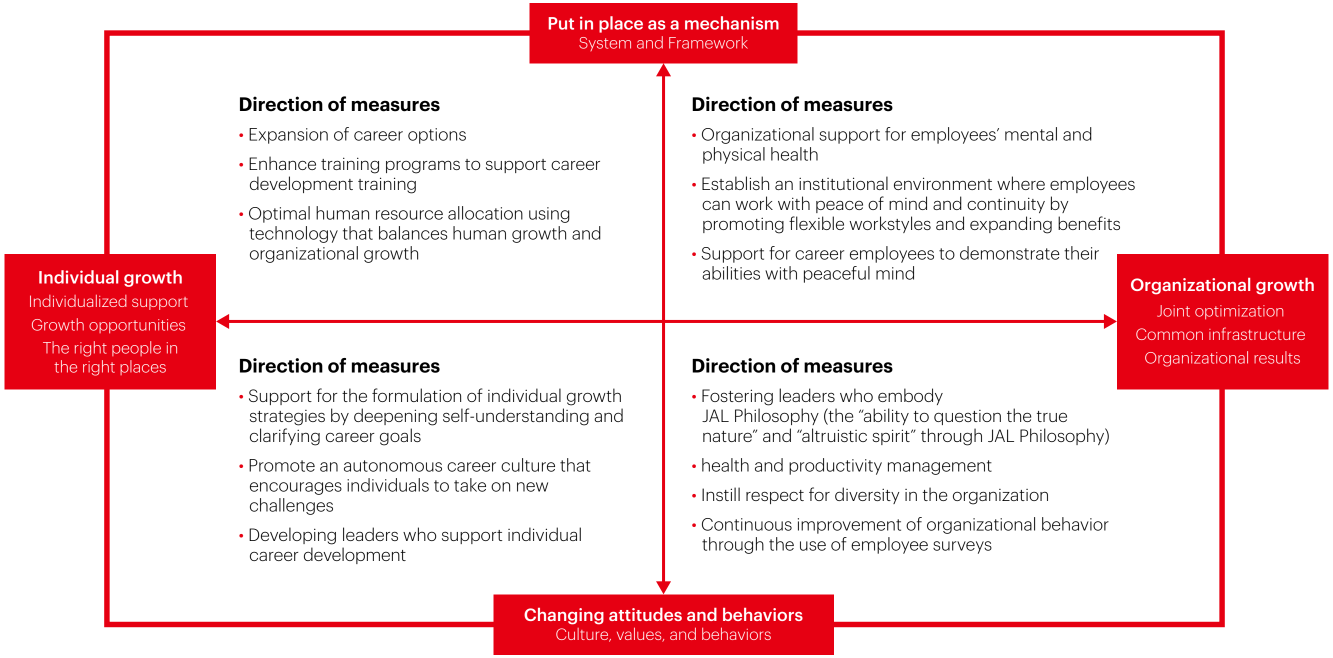
With regard to the human resource portfolio, in order to promote the transformation of the business portfolio to one that does not rely solely in the aviation business, it is necessary to achieve optimal human resource allocation for a variety of positions. In line with the business structural reform, we firstly need to fathom and visualize measures in what kind of skills and how many human resources are required for each business as human resource portfolios change along with the growth of the business. Thereafter, we will promote the creation of a system that compensates for the skills and experience of each employee by comparing them with each other to achieve optimal placement and also by education and training.

In the past few years, data on employees' skills and experience has been collected, and going forward, we can expect to match their skills with AI. Furthermore, we intend to open up the visualized human capital portfolio to employees so that they can proactively chart their own careers and take action based on this portfolio, thereby realizing their career ownership.

To improve productivity, we are not only addressing issues such as labor shortages and intensifying competition for human resources, but also promoting DX and automation of operations in addition to improving the skills and abilities of individual employees in order to shift human resources to growth areas. Through these efforts, we will deepen our business structural reforms by improving the productivity of ground operations, especially in the full service carrier (FSC) business, while creating new time and spare capacity to create an environment in which each employee can focus on more rewarding work.

By promoting these measures across the entire company, we will continue to enhance the job satisfaction of our employees and at the same time, strengthen the competitiveness of the company as a whole, with the aim of achieving our long-term management targets.

● **Both Individual and Organizational Approaches**



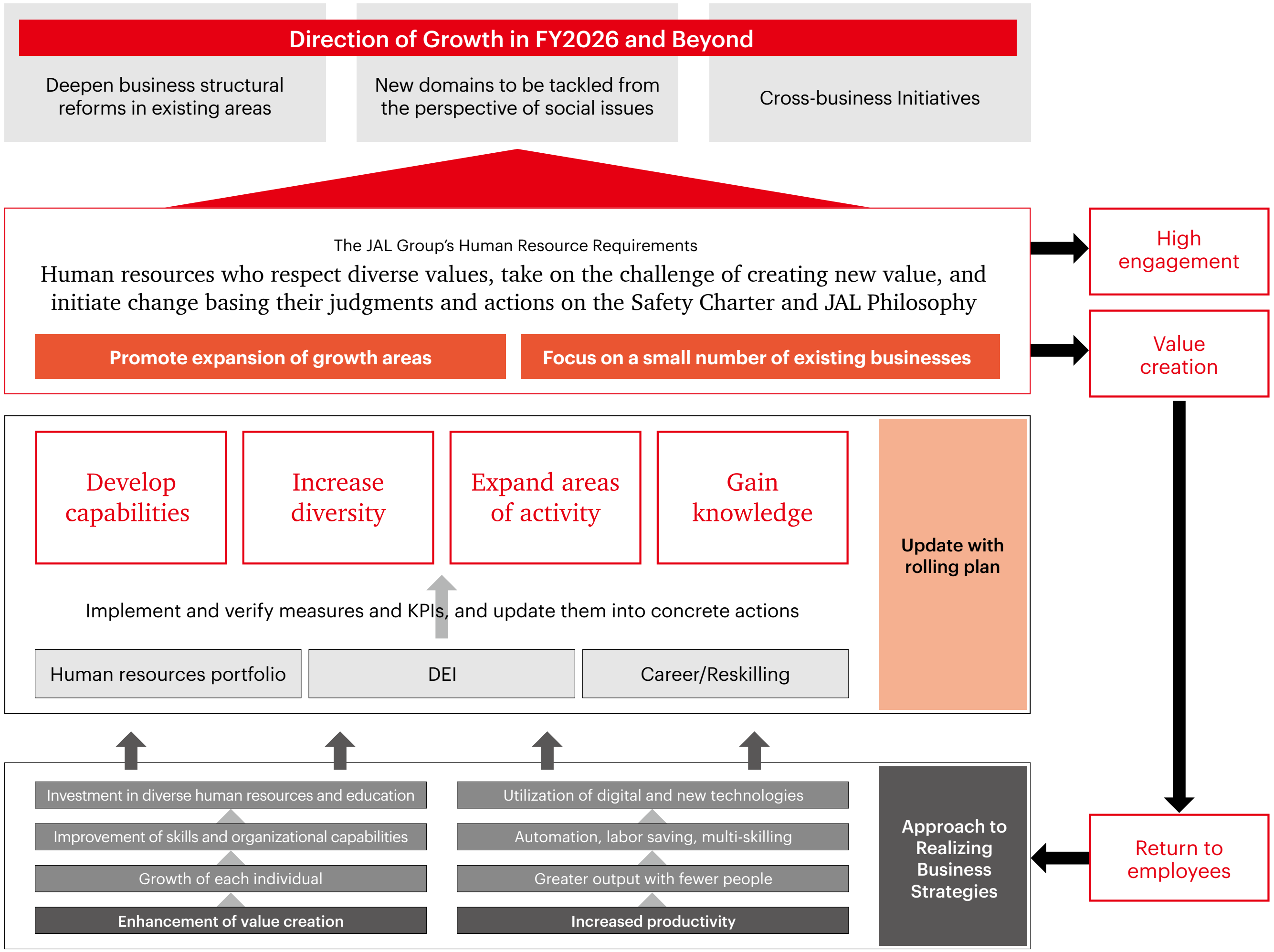
Outline of Human Resource Strategy

The JAL Group aims to achieve sustainable growth by deepening business structural reforms in existing areas and taking on the challenge of entering new areas that address social issues. In moving these reforms forward and giving actual shape to the direction of our business, the capabilities of our diverse human resources are becoming more important than ever before.

In an increasingly complex and diverse business environment, we believe that the key to supporting the sustainable development of our business is to create an environment in which diverse human resources can play an active role in a variety of fields, each of whom can demonstrate their high level of skills and expertise in their respective fields and create new value while feeling a sense of fulfillment and significance. Based on this belief, the JAL Group has focused on the four items defined as the mid- to long-term objectives of human capital investment: developing capabilities, increasing diversity, expanding areas of activity, and gaining knowledge, as well as the fundamental initiatives that support each individual's success, and has organized specific measures according to this framework to promote its human capital strategy. Underlying this framework is the spirit of respecting diverse values and taking on the challenge of creating new values, with the Safety Charter and the JAL Philosophy as the foundation for judgment and action, which also resonates with the ideal human resources sought by the JAL Group.

While the effects of our efforts to date are steadily emerging as results, there are still gaps in our targeted engagement and value creation performance indicators. We will continue to update this human capital strategy and focus on creating an organization that makes the most of the power of our diverse human capital, while deepening business structural reforms and aggressively taking on new challenges in new areas. We will then return the results of these efforts to our employees in the next round of human resource investment, creating a virtuous cycle that will once again lead to improved engagement and enhanced value creation.

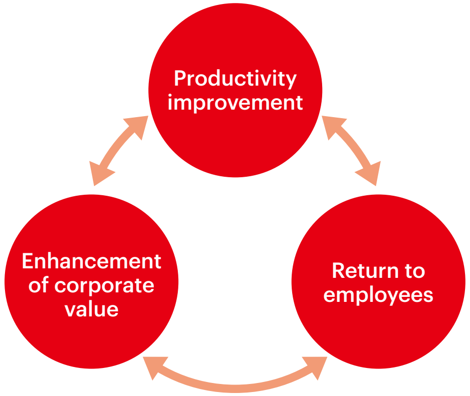
● **Update of Human Resource Strategy**



JAL Group aims to improve productivity

While the FSC and LCC businesses are expected to continue to grow, mainly due to inbound demand, the working-age population in Japan is declining faster than expected. Securing human resources to support the growth of the JAL Group, including the expansion of the scale of international flights, is an important issue. We are focusing on productivity improvement initiatives to efficiently create high value and achieve sustainable growth and continuous returns to our employees.

The JAL Group's goal of productivity improvement is not only to steadily improve efficiency so that we can steadily expand our scale in the FSC area, but also to build a system that can create added value on a sustainable basis by securing human resources to shift to further growth areas. To this end, we will visualize the progress and numerical effects of productivity improvement and accelerate efforts in each business and division.



Productivity Improvement Initiatives

Productivity Improvement Initiatives

To date, the JAL Group has established the Productivity Improvement Committee in order to efficiently operate the operational structure of the contact center, airport, and sales areas with existing personnel, and has been building measures to resolve issues in each area. Through the activities of the Productivity Improvement Committee, we are targeting efficiency gains equivalent to 30 percent (2,700 employees) by FY2030.

Efforts to date have resulted in steady progress in implementing DX in ground operations. Specifically, self-service is underway for manned operations at reservation centers, airports, and sales (e.g., reservation changes when schedules change, responses to domestic flight standby results, and seat reservation responses for groups). In addition, the introduction of aircraft to support high-added operations in the frontline and automation efforts are underway to improve productivity through mechanization and automation. To date, as of FY2024, 370 employees worth of benefits have already been realized, and by the end of FY2025, 890 employees worth of efficiencies are expected to be realized.

Thirty percent efficiency improvement in FSC ground operations

- Promote DX in ground handling operations, aiming to streamline the workload by a cumulative total of 2,700 employees by FY2030 and increase revenues from new business.
- Reduce the number of manned operations at reservation centers and airports by expanding self-service operations.
- Promote the introduction of aircraft that support high-load work and take on the challenge of mechanizing and automating some operations.

Future Initiatives for Productivity Improvement

In order to build a system that will work to create new added value, we aim to increase profits and improve productivity while maintaining a workforce appropriate to the size of each business potential.

By implementing the productivity improvement measures formulated by the Productivity Improvement Committee with each division, we will establish an efficient operating structure for FSC and through this, improve the profitability of the domestic flight business, grow international flights, and strengthen the human resource basis for growth areas.

The JAL Group will also review its productivity target indicators, introducing not only "sales per employee" but also "value added per hour" and "labor hours per production volume. Particular emphasis will be placed on improving profitability on domestic flights, and the PDCA cycle of initiatives using the indicators of "profit per hour" and "input hours per production volume" will be promoted to enhance efficiency gains.

Clarify productivity indicators for each business potential.

- Establish new indicators to measure the effectiveness of productivity improvement and evaluate value-added creation and productivity by indexing the sum of profit and personnel expenses, as well as labor hours per unit of production.
- Clarify efforts at each segment and division to improve value-added per hour, and accelerate the response.
- Establish a dashboard to visualize the effects of productivity improvement efforts, and publicize the effects of these efforts in an easy-to-understand manner.

How to Measure Productivity Improvement

(1) Profitability per hour

- Productivity will be evaluated from a perspective that includes personnel expenses.

a) Profit per hour

$$\frac{\text{Operating profit + Personnel expenses}}{\text{Total labor hours}}$$

(2) Input hours per production volume

- Productivity is also evaluated in terms of labor hours per production volume (ASK, number of flights, among others).

b) Input hours per production volume

$$\frac{\text{Total labor hours}}{\text{Production volume (ASK, number of flights, among others)}}$$

Progress of Each Measure

To realize a virtuous cycle of engagement, value creation, and employee return, we are developing organizational measures based on the framework of four themes (Developing Capabilities, Enhancing Diversity, Expanding Areas of Activity, and Gaining Knowledge), which we have defined as our medium- to long-term objectives for human capital investment, and the human capital infrastructure initiatives that support these objectives. While the effects of our efforts to date are steadily emerging as results, there are still gaps in the targeted performance indicators. We will continue to verify the progress and results of each measure and further promote efforts to improve issues.

	Topics	Measures		KPI FY2024	KPI FY2025	Summary
Value Creation Through Continuous Human Resource Investment	Develop capabilities	Secondment and dispatch of employees within and outside the group		500 employees per year		• Approximately 480 employees have been seconded or dispatched outside the Group, with a target of 500 employees in FY2025. • A total of 97 employees within 10 years of their employment, will be dispatched, continuing at an annual scale of 100 employees in FY2025. For details, see p. 71 • The number of posts under the performance-based remuneration system has been expanded to 27 posts, and will be further expanded in FY2025, including system reforms.
		Dispatch of employees overseas and outside the company within 10 years of their employment		Up to 100 employees per year		
		Expansion of performance-based remuneration system		30 posts	100 posts	
	Enhance diversity	Women's advancement in the workplace		Ratio of women managers: more than 30%		• Achieve a ratio of women managers more than 30 percent, and work to increase diversity at decision-making levels in the organization, such as directors and vice presidents, while maintaining the 30 percent level. • The Group will hire 80 locally hired overseas staff. In FY2025, we will continue to hire a diverse range of human resources, including non-Japanese with specific skills. • Fifty-three locally hired overseas staff were dispatched to Japan. The number will be maintained at 50 employees in FY2025, fostering a global mindset by increasing diverse points of contact. For details, see p. 71 • More than 800 employees with disabilities are active in the Group. We are continuing to expand areas of activity and support retention.
		Number of foreign employees hired in Japan		80 employees per year	100 employees per year	
		Expand dispatch of foreign employees to Japan		Number of dispatched employees: 50 per year		
		Increase in the number of employees with disabilities		20% compared with FY2022	30% compared with FY2022	
	Expanding areas of activity	Early promotion of young employees		Expansion of promotion		• New grading system will be applied from FY2024. Publicize examples of S evaluations within the Group to create an environment in which anyone can check the results. • One hundred employees will be transferred through open recruitment, which will continue in FY2025 to support flexible and diverse career development. For details, see p. 71 • The new system started in October 2024. This system will be continued in FY2025 to expand the scope of activities.
		Internal and external mobility through public recruitment		100 employees per year		
		Promotion of senior employees		Expansion of roles		
	Gain knowledge	Expansion of career recruitment		50% of annual recruitment		• The ratio of career hires for business planning positions is 50 percent. Continue to recruit according to business needs and provide onboarding support. • Implemented a highly specialized human resource system and appointed 12 employees. Continued to implement the new system in FY2025. For details, see p. 72 • As of the end of FY2024, the cumulative number of participants in specialized training was 376 employees; target is to have a cumulative total of 900 employees by the end of FY2025, and to synchronize this with existing mandatory training.
		Introduction of highly specialized human resources system		Expansion of appointments		
		Promote DX education	Basic education	Specialized education		
			All employees	Cumulative total: 400 employees	Cumulative total: 900 employees	
Infrastructure	Human Resource Infrastructure Initiatives	Organizational managers: Leader's Workshop		Participation rate 100%		• Implemented leadership training based on the JAL Philosophy, with a participation rate of 99.4 percent among organizational managers. Continuing with the goal of achieving a 100% participation rate in FY2025 as well. For details, see p. 72 • Although not selected for the Health and Productivity Stock Selection, the number of companies certified as Certified Health & Productivity Management Outstanding Organizations Recognition Program increased to 30 companies, ahead of the FY2025 management targets. Continue to strengthen health and productivity management to support employee health. For details, see p. 72
		Promotion of health and productivity management		Selected as a Health and Productivity Stock Selection (JAL)		
				+20% Compared with FY2022	+30% Compared with FY2022	

Targets Results for Human Resources Measures

Engagement
Percentage of highly engaged employees
FY2024 results: 58.1%
FY2025 target: 65%

Value Creation
Sales per capita
(vs. FY2019)
FY2024 results: +20%
FY2025 target: +38%*

Return to Employees
Investment in human capital per employee
(vs. FY2019)
FY2024 results: +10%
FY2025 target: +15%

* These figures are targets set as of April 2024. In FY2025 and beyond, the Group plans to adopt the concept of "value added per hour" instead of "per capita" as a productivity indicator, in light of the promotion of diverse workstyles.

Developing Capabilities

Providing Opportunities for Education and Challenges to Maximize Individual Capabilities

Overseas and External Assignments within the First Ten Years of Employment

FY2023	FY2024	FY2025
46 employees per year	**97** employees per year	**100** employees per year (Target)

We send employees overseas and outside the Group at an early stage in their careers to provide an environment where they can experience diverse values and challenge themselves while shaping their own values through discussion, dialogue, and practice with people who have different values. By doing so, we aim to expand the range of our employees' experiences, further improve their mindset and skill sets, and add depth to their growth.

In FY2024, we dispatched 97 employees through such programs as the Silicon Valley Self-Transformation Program in Silicon Valley, U.S.A., and the Overseas Cross-Border Challenge Program to gain practical overseas business experience at companies in different industries in Asia for a period of about three to four weeks.

In FY2025, we will continue to provide opportunities for human resource development and challenges with the goal of dispatching 100 employees per year.

Engaging in lively discussions in the actual place as part of the Overseas Cross-border Challenge Program (our employees are in the bottom right).

Enhancing Diversity

Providing Opportunities to Gain Various Experiences Regardless of Attributes

Dispatch Locally Hired Overseas Staff to Japan

FY2023	FY2024	FY2025
64 employees per year	**53** employees per year	**50** employees per year (Target)

We are promoting the dispatch of locally hired overseas staff to Japan as part of our human resources strategy. By incorporating local market sensitivities into our strategies and operations, we are contributing to business structural reforms centered on the international flight domain, as well as creating growth opportunities for the locally hired overseas staff themselves.

Experiences in different cultures and market environments bring new perspectives to the organization and help foster a global mindset in the Japanese side of the organization. Such interactive learning and networking contribute to sustainable business operations and a stronger human resource base.

We will continue to maximize the power of our diverse human resources to achieve sustainable growth and deepen our business structural reforms.

Locally hired overseas staff posted to Japan from overseas and playing a central role in overseas sales strategies as managers

Expanding the Sphere of Activity

Eliminate Restrictions that Hinder Success and Promote Employees to Positions that Match their Abilities.

Transfers Within and Outside the Group through Open Recruitment

FY2023	FY2024	FY2025
85 employees per year	**100** employees per year	**100** employees per year (Target)

With an increasing number of human resources with diverse attributes and experience, we are building an environment where each employee can autonomously develop their career and demonstrate their abilities, regardless of length of service or age. We have expanded the framework for open recruitment to a wide range of fields, both existing and new, airline and non-aviation, and in FY2024, 100 employees across the group were transferred to open recruitment. We are creating new value by appointing employees who are willing to take on new challenges and play a role in opening up future possibilities, as well as in areas that are key to our growth strategy.

In addition, from FY2024, we are expanding the fields in which each employee can demonstrate their abilities by establishing a framework for selection-type appointments with promotions and expanding the scope of open recruitment to include areas outside JAL Group.

Employees who raise their own hands for public transfers and take on the challenge of new areas of business.

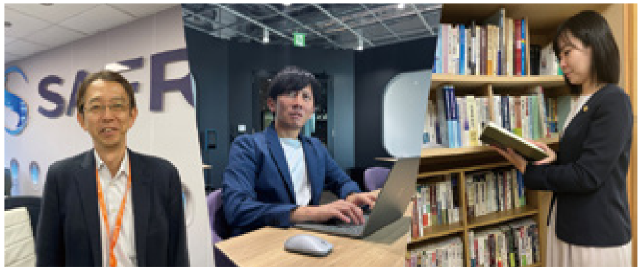
Gaining Knowledge

Deepening Internal Knowledge and Acquiring Missing Knowledge from Outside the Group

Human Resource Policy for Highly Specialized Personnel

FY2023		FY2024		FY2025
Introduced the system	→	12 appointments	→	Ongoing operation

In response to the increasing importance and scarcity of highly specialized human resources and traditional management personnel, during the time of business diversification work sophistication continue to advance, we introduced the highly specialized human resources system in FY2023, and in 2024, the first year of operation, we made 12 appointments to posts with specialized expertise. Based on the knowledge and technology cultivated over many years, we have expanded the scope of appointment to include business and corporate areas such as DX, marketing, SAF procurement, and financial and legal affairs, in addition to appointing specialists in fields that require a high level of expertise, such as aircraft maintenance and design and electrical technology, to cover a wide range of expertise. By clarifying the positions that require such a high level of expertise, we will create an environment that allows each employee to develop their career independently, while strengthening the knowledge and competitiveness of JAL Group as a whole.



From left to right, employees with high expertise in aircraft interior design, retailing strategy, and legal affairs.

Human Resource Infrastructure Initiatives

Foundation for Diverse Human Resources to be Successful in Diverse Fields

• Build human resources and organizational strength with JAL Philosophy

The driving force to advance our business sustainability, and to realize a healthy profit creation and sustainable value is the human resource and organizational abilities. In FY2024, as we considered the true causes of repeated safety problems, we returned to JAL Philosophy and reaffirmed the importance of expanding our job performance and people skills. To this end, from FY2025 we are promoting human resource development throughout JAL Group by strengthening learning opportunities for managers and leaders, who are the key to organizational revitalization. By thoroughly refining management services and human skills based on JAL Philosophy, we will nurture human resources and organizations in which the principles of JAL Philosophy can live on and build a foundation for sustainable value creation.

• Promotion of health and productivity management

Thirty JAL Group companies have been certified as Certified Health & Productivity Management Outstanding Organizations Recognition Program 2025. Through JAL Wellness 2025, we are addressing lifestyle-related diseases, cancer, mental health, tobacco control, and women's health as priority issues. In particular, we support flight safety with each and every flight through appropriate health duty management for flight crews and cabin attendants. We will continue to create a workplace environment where diverse human resources can maximize their abilities based on mental and physical health.

Employees practicing JAL "Honkino! Radio Gymnastics" during a JAL inhouse event.

TOPIC

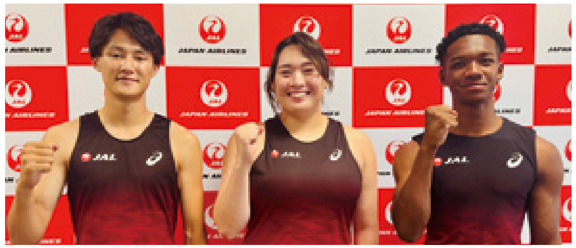
JAL Athlete Employees Tackling the World

JAL Group supports all athletes, including JAL Athlete employees, because the image of athletes taking on challenges overlaps with JAL's goal of becoming "the world's most preferred and valued airline group".

Currently, JAL has 11 athlete employees, three of whom participated in the Olympic Games Paris 2024 and won three medals.

In addition, JAL Athlete Academy, which provides children with advice on how to enjoy sports and improve their athletic skills, will be expanded to regions outside Japan from 2024, increasing our relationships and connections with people around the world and contributing to the development of the next generation.

Each of us will continue to support athletes and contribute to the progress and development of corporate citizenship activities by continuously challenging each one of us to do something new.



From left to right, UZAWA Towa (200m), KITAGUCHI Haruka (javelin throw), and MURATAKE Rachid (110m hurdles) represent Japan at the World Athletics Championships Tokyo 25

KANO Koki, who won gold medals in both the individual and team competitions in épée at the World Fencing Championships

Employee Roundtable Discussion

SHINOZUKA Tomohiro
Station Operations Planning
Planning Group

NAKAMURA Ryota
International Route Marketing
Network Planning Group

OKADA Hitomi
Legal Affairs

EJIRI Yuko
Human Resources Division
Deputy Senior Vice President

MATSUSHITA Mei
Life and Commerce
In-flight Sales Group

NAGAYASU Shun
JAL Agriport Co.,Ltd.

The Future of JAL Group Created by Diverse Human Resources -The Challenge of Employees to Support Value Creation

JAL Group defines the kind of human resources we seek as "people who respect diverse values, take on the challenge of creating new value, and initiate change, with Safety Charter and JAL Philosophy as the foundation for their decisions and actions." Focusing on this image of human resources, we asked employees in both airline and non-aviation domains about their thoughts on job satisfaction in their current jobs, future career plans, and the future of JAL Group.

Feeling a Sense of Fulfillment by Working in an Environment where you can be Yourself

EJIRI JAL Group is committed to human resource management that maximizes the power of its human resources, with an emphasis on "supporting individual growth" and "maximizing individual power through the organization." What do you find rewarding about working in various organizations?

NAKAMURA I joined the company with a desire to "support Japan's infrastructure" and "do work that connects to the rest of the world." The job I am currently in charge of in the FSC international flight domain is a job where I can realize exactly those aspirations, and I find it very rewarding to be able to utilize the skills I have cultivated in the airport frontline and in sales to contribute to solving corporate citizenship activities to revitalize human flow and logistics.

OKADA I changed my job from a law firm to JAL, and I find it very rewarding to be able to use my expertise in the field of aviation, which I love, while contributing to solving the issues faced by everyone in the frontline. In addition to the fact that I can feel that my advice is actually being utilized in the frontline since I changed jobs at JAL, I am also motivated by the direct feedback of gratitude I receive.

SHINOZUKA In the past, airports were centered on manned counters, but the landscape of airports in Japan and overseas is changing as they become increasingly unmanned and digitalized. The job of promoting DX at airports contributes to such changes, and the sense of scale and responsibility that affects so many people is very rewarding. At the same time, in my daily work, I feel the "goodness of people" of JAL Group, and I feel comfortable working here.

NAGAYASU I have also experienced the "goodness of people" of JAL Group in the organizations and departments I have worked in. In addition, I strongly feel that the group has a culture that encourages people to take on new challenges. I transferred from JAL Kansai Aircargo System (JALKAS) to JAL Agriport under the Career Challenge Program, and my supervisor encouraged me to do so. I am now involved in new initiatives at JAL Agriport, such as the export business of agricultural products, utilizing my experience in handling export cargo, and I find it very rewarding to be able to open up new sales channels where there are none.

MATSUSHITA The Life and Commerce Department to which I belong, has members with diverse backgrounds, but all of them have a strong sense of pride and responsibility in working for JAL. I feel that the sense of unity that comes from this mindset is what makes working for JAL so rewarding. I also believe that JAL Group has an excellent educational program and an environment in which we can grow autonomously.

EJIRI A workplace where we can realize our corporate citizenship activities, an environment where we can grow together with diverse members, an environment where we can challenge ourselves to achieve our goals and realize our aspirations, and a desire to please our colleagues and customers are common to all of us, even if we work in different organizations and departments.

Promoting the Growth of the Entire Organization by Integrating Diverse Perspectives

EJIRI Please tell us about what you are working on for your personal growth and what kind of career you would like to pursue for your future growth.

MATSUSHITA Although the inflight sales business I am engaged in is positioned as a non-aviation business, I see it as containing airline elements. In my previous job at a railway company, I was involved in connecting multiple businesses through loyalty programs, so in the future I would like to take on the challenge of providing new value having a bird's eye view and connecting non-aviation and airlines businesses. In this respect, current JAL Group has a great strength in the high level of expertise that each business and department possess, but I also feel that this is sometimes perceived as a vertical approach. By further strengthening cooperation among businesses and departments, I feel that there is a great potential to connect airline and non-aviation operations and bring out new value.

NAGAYASU Currently, with the aim of enhancing my expertise, I am studying to gain a deeper knowledge of the characteristics and attractiveness of strawberries and other agricultural products and to communicate this to our customers. At the same time, the seminars and study groups I attend for JAL Agriport's public relations and advertising effectiveness allow me to broaden my perspective through new ideas from a public relations perspective, and I feel the synergy of this as I can directly apply what I learn to my current job. In my future career, I would like to contribute to the growth of the entire group as well as return the learning and experience from my current position to JALKAS.

SHINOZUKA This year, I would like to learn from the DX Human Resource Development Program and use it to advance my career. I would like to learn about the DX promotion measures being promoted in each division so that I can not only give back to Airport Operations Division's DX efforts but also expand them horizontally. I would like to support the challenge and growth of the group by making use of my own past experience.

NAKAMURA In the international route marketing, which I am currently in charge of, the perspectives of various departments such as cargo, flight operations, cabin attendants, and airports are important. For this reason, I would like to continue to take seriously the opinions and advice of the people in each department and continue to take on the challenge of creating new value while incorporating multiple perspectives. Furthermore, in order to respond flexibly to environmental changes in the corporate citizenship activities and business environment, I would like to contribute to the creation of an environment in which everyone can actively take on challenges without fear of change and with a sense of purpose to "aim for a better future."

OKADA I strive to update my knowledge in the legal field in which I specialize on a daily basis, and through output at in-house seminars and consultation meetings regularly held by Legal Affairs, I am working to not only consolidate and organize my own knowledge, but also to dissolve organizational barriers. In addition, as part of my mission as a highly specialized manager, I would like to contribute to the development of human resources by converting personal knowledge into organizational knowledge in the future.

EJIRI I recognize that in order to promote the growth of the entire group, it will be important to broaden our knowledge through exchanges and cooperation with other departments, not to mention career recruitment and transfers utilizing the Career Challenge Program. I am relieved to see that everyone is taking these actions voluntarily on a daily basis. I reaffirmed that JAL Group will continue to absorb diverse voices and promote an environment that allows us to take on challenges proactively and flexibly, without being bound by organizational boundaries.

The Future of JAL Group as Envisioned by Each of Us

EJIRI Finally, what is your vision for the future of JAL Group?

OKADA I hope that cross-organizational efforts will become even more active, and that the atmosphere of "Let's make JAL Group more exciting together!" will be further fostered. This way, I believe growth will accelerate both individually and as an organization.

NAKAMURA I want JAL to be at the forefront of the market. To achieve this, I believe it is important for all employees and all areas of the Group to aim for medium- to long-term growth.

SHINOZUKA While safety is a prerequisite, I would like to see JAL Group boldly taking on the challenge of new services to improve customer convenience and differentiate ourselves from our competitors.

NAGAYASU Like the JAL FUTURE MAP that depicts the future relationship between JAL and society, I envision a future in which the entire group is involved in solving regional issues and communicating the attractiveness of our services.

MATSUSHITA I would like to see JAL Group continue to be a company where each business and organization can pursue the best service and continue to take on challenges, even in the midst of daily environmental changes, in order to realize Group Corporate Policy of delivering "unparalleled service to our customers."

EJIRI I am very excited about creating the future together with all of you, and I expect that new values will emerge from your challenges. In order to support such challenges, I will continue to support each and every employee's aspirations for who they want to be, and strive to make our Group a company that is loved by our customers and the community. Thank you very much for your time today.

Message from the Director in Charge of DX

Focusing on digital as the core of our operations, we create new value for our customers, employees, and society

SUZUKI Keisuke
Executive Officer
Senior Vice President, Digital Technology Division
President and Representative Director, JAL Digital Co.,Ltd.

In addition to digital technology to support business management, we are now moving to an "offensive" digital technology to promote business innovation.

With the progress of IT, various airline operations are established on the foundations of an IT system. The JAL Group's IT and digital technology as intellectual capital will continue to be the foundation for the unwavering pursuit of flight safety. Our digital business units, with their IT skills and in-depth knowledge of aviation systems, play an important role in supporting our business operations by constantly improving their digital knowledge and ensuring the stable operation of our systems.

On the other hand, looking at the environmental changes surrounding the JAL Group, sit is essential for us to improve the efficiency of human resources and productivity in response to structural changes in Japanese society, such as a declining population. We need to rapidly implement digital business transformation (DX) to leverage the remarkable technological innovations of recent years, such as AI and data utilization, as a competitive advantage and the source of corporate value.

The productivity gains brought about by digital business transformation will not only contribute to the maintenance and expansion of existing businesses but will be an important driving force in business structure reform that will reinvest the resources generated by the new value creation. In addition, by directly providing new social and economic value to customers, companies, and society through the use of digital technology, we will promote CX strategies and ESG strategies, aiming to realize a society and future in which many people and various things can freely move about and be an exciting society.

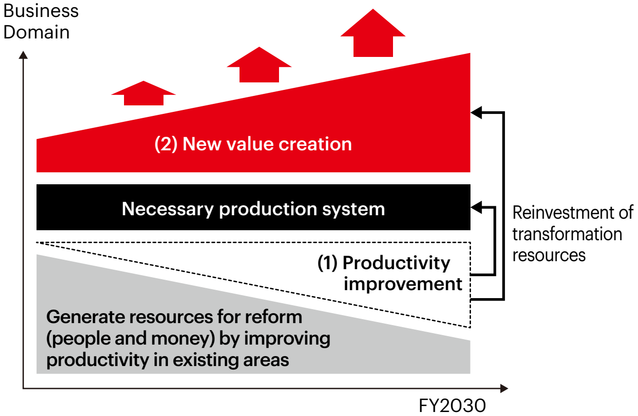
DX Promotion Topics: Consciousness Reform and Co-creation

In promoting DX, we are focusing on consciousness reform and co-creation between the Digital Department and the Operations Department.

Regarding consciousness reform, in order to implement a business reform with digitalization to change the consciousness and culture throughout the Group, a DX promotion project was launched in FY2024 based on the three DX Vision policies of changing the company, changing customer experience, and changing society. In order to promote DX in the midst of accelerating ground speed innovation in digital technology, agile and speedy decision-making that values the autonomy and initiative of employees is crucial. For this reason, both top-down decision-making and direction by the President and Senior Vice President of each division, as well as bottom-up ideas and implementation from the frontline, are vital. Aiming to instill an awareness and culture of change throughout the entire company by sending a strong message from the top, a declaration of intent to promote DX was made by all division Senior Vice Presidents, and in June 2025, President Tottori sent a message to all employees.

The next point is co-creation, in which the digital department not only takes the lead from a technological standpoint, but also works closely with each department that is actually responsible for daily operations. For this reason, we have been working to build a system that allows the Digital Department and the Administration Department to work in unison at all stages

● **Concept of business transformation through digitalization**



of DX, from the conceptualization stage to the implementation of DX. One of the issues that emerged is the lack of speed due to the insufficient knowledge in operations by the DX division. To accelerate DX, in FY2025 the existing Digital Technology Division and JAL Information Technology were merged to form the new JAL Digital Corporation. While the Digital Technology Division has served as a bridge to the Administration Division and JAL Information Technology in the past, JAL Digital, which brings together the digital Human Resources Management of the JAL Group, will drive the creation of new value for customers, the company, and society through more direct and deeper collaboration and co-creation with the Administration Division.

Accelerating DX Through the use of "AI" x "Data"

After the points on organization and structure for DX promotion, the following is a description of digital technology that forms the core of DX promotion. In other words, AI and Data. Where digital technology, including AI, will evolve, the utilization of accumulated intellectual capital, namely data, will become an essential element for the JAL Group's sustainable business growth. We will proactively harness the power of this technological innovation and use it as a driving force to powerfully promote DX. AI and Data are no longer just a back-up for each of our businesses. We will place them at the center of our business, fundamentally transforming conventional business processes and creating new value for our customers, the company, and society.

Regarding AI, we have set up the AI-Centre Concept, in which distributed data and business systems are interconnected, with AI at the center. We will promote business support and AI-ization of business operations using JAL-AI, the generated AI system used by the JAL Group. In terms of data, in order to advance the utilization of data dispersed throughout the airline company, we will not only develop a data infrastructure, but also consolidate and accumulate data, aiming to utilize it in AI.

Aim is to create social value in EX, CX and beyond

This is a description of the three value we aim to create.

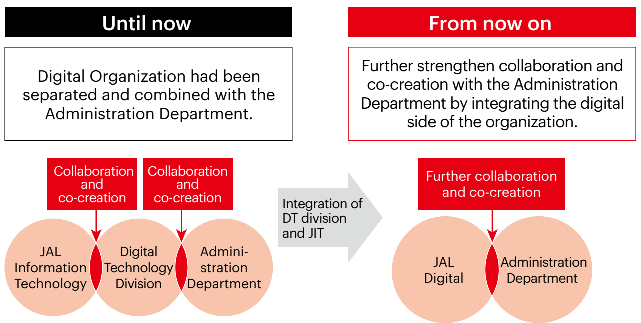
The first is the creation of Employee Experience (EX). We aim to create a more rewarding and comfortable work environment through the use of data to enhance business sophistication and productivity, and through business process innovation.

Next is the creation of Customer Experience (CX). We aim to provide customers with stress-free experiences through digital technology and services that integrate digital and human resources.

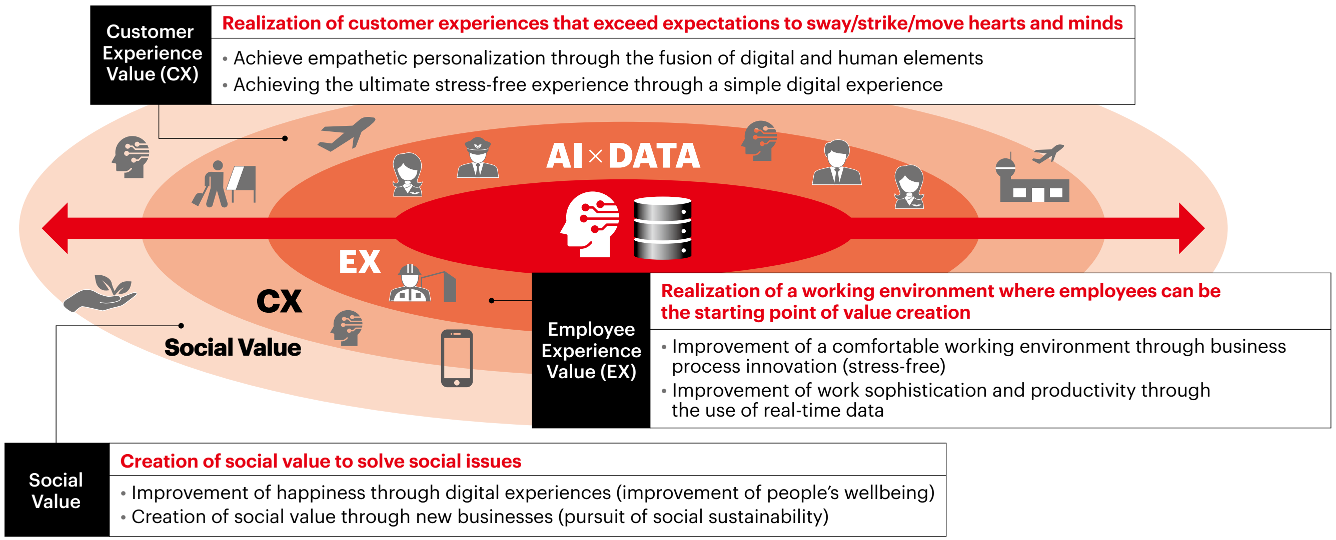
In addition to these improvements in EX and CX, we will also realize value creation for society as a whole. We will pursue the improvement of people's happiness and a sustainable society through new start-ups.

Last but not least, the unlimited possibilities of business transformation through AI and data-driven digitalization are key factors that will determine the future of the JAL Group. DX promotion is not a fleeting measure but is unceasing and continuous and a source of creating future value. JAL Digital, launched in FY2025, will stand at the forefront of this DX promotion and take on the challenges for a stable system operation in this uncertain society, as well as take up challenges in reforming business through digitalization and create future value.

● Reinforcement of DX promotion system through the establishment of JAL Digital



● AI and data are the core technologies for DX promotion

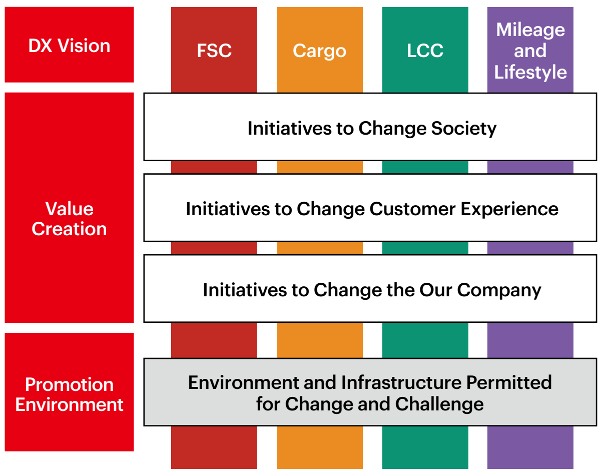


Progress of DX Strategy

Promoting the DX Strategy through Cross-Business Initiatives

The JAL Group has a DX Vision that provides new social and economic value through the transformation brought about by the use of digital technology. This will realize a society and future where many people and many goods can freely move about. To realize this DX Vision, in FY2024, a system was established to promote value creation across all business domains. Furthermore, based on this DX Vision, the JAL Group as a whole has formulated a DX Roadmap that clarifies our goals, current issues, and specific measures to be taken. In line with this roadmap, the entire company is united in its efforts to focus on improving customer experience (CX) and employee experience (EX). Going forward, we will further develop these efforts and focus more on creating social value including the creation of relationships and societal connections and digital transformation in non-airline domains.

● DX Initiatives Across Businesses



Initiatives to Change the Our Company

In the area of EX improvement, each division is making steady progress in specific initiatives that leverage the power of digital technology. For example, in the maintenance division, the use of technology to predict aircraft tire wear has not only improved maintenance quality, but also realized workstyle innovation for maintenance engineers. This initiative has enabled the planned replacement of tires, which not only improves maintenance quality, but also leads to workstyle innovation for maintenance engineers. In the flight operation division, we have also realized the introduction of lightning protection avoidance support technology to reduce the workload of the cockpit crew. Furthermore, in the cabin attendant departments, we are working on a trial to automate report generation using generative AI. We will continue to promote such digitally-enabled operational reforms throughout our company, aiming to improve productivity so that each and every employee can create more value in their daily work.

Initiatives to Change the Customer Experience

In the area of CX improvement, we are also leveraging the power of digital to enhance a more seamless and personalized customer experience. For example, on all Airbus A350-1000 aircraft, we have introduced the ability to pair the JAL app on the customer's smartphone or tablet with a personal monitor in the inflight. This allows customers to control their personal monitor directly from the JAL mobile app in their hand, providing a more comfortable and personalized inflight experience. On domestic flights, JAL aims to simplify procedures at airports and reduce waiting time. As part of this effort, we have improved customer convenience by completely automating the entire process, from applying for a standby seat to actually arranging a seat, which previously had to be done at the counter or on a dedicated aircraft. For international flights, we also provide a service that sends important boarding information to your smartphone or other mobile app at the appropriate time. This service allows passengers to smoothly grasp the process up to departure and travel with more peace of mind. We will continue to make maximum use of digital technology to provide a seamless and personalized environment for our customers.

TOPIC

Maintenance Operations DX using Tire Wear Prediction Technology

To eliminate the unplanned nature of aircraft tire replacement, we have combined operational knowledge and specialized technology to accurately predict and plan the timing of tire replacement. This not only improves safety and quality, but also streamlines maintenance work and realizes workstyle innovation for maintenance engineers.

Streamlining Cabin Report Preparation Using JAL-AI

JAL-AI is being installed on tablet-type devices carried by cabin attendants in an effort to streamline inflight reporting. Instead of writing a report entirely from scratch, AI generates a detailed report by simply selecting simple keywords and options. The time saved can be used to provide more attentive and higher quality hospitality to each and every customer, thereby further improving the quality of service.

Photo by HAYASHI Noriko for Microsoft.

AI at the Core of Business Transformation

AI-related Initiatives to Date

The use of AI will play an important role in creating EX, CX, and social value. Since FY2023, we have been using JAL-AI, a generative AI that can be used in natural language, throughout the airline company. In FY2024 we promoted its utilization and added functions, achieving a cumulative utilization rate of 100 percent in support departments by the end of the fiscal year. In addition, the use of JAL-AI is expanding to contact centers, airports, and other frontlines. At contact centers, JAL-AI's knowledge search assists operators, and at airports, JAL-AI is used to assist staff in their work.

As for AI infrastructure, we have defined the AI-Centre Platform for FY2024. This is a digital infrastructure that places AI at the center and creates value by interconnecting customers, employees, data, and cloud services in the digital space. Currently, we are steadily developing a flexible AI execution environment and supporting data on this platform.

Future Initiatives

Future AI initiatives is called and being promoted as AI-Agenda This AI-Agenda includes measures to improve operational efficiency in frontline support departments and support departments, and to increase AI literacy among all employees. We will continue to promote AI-Agenda and the AI-Centre Platform mentioned above, with the aim of realizing a future workstyle in which AI agents will play an active role in every aspect of work.

In the current fiscal year, we will first aim to improve CX in specific business areas. This includes the use of AI in some customer service operations and the use of AI in personalized services and marketing. In EX improvement, AI will be able to search the accumulated internal knowledge to improve employee productivity through efficient information retrieval.

In addition, a new JAL AI College will be offered to help employees acquire the highest level of AI literacy in the industry. This program defines the level of AI literacy required for each employee's role in AI and provides the most appropriate AI education program for each level. Through this initiative, we will systematically develop human resources with the necessary level of AI literacy as an organization and ensure that each department is equipped with the necessary AI literacy.

On the other hand, AI functions have recently been incorporated into various cloud infrastructures and cloud services, and a wide variety of AI services are rapidly emerging. In light of this situation, there is an urgent need to establish governance for the ethical use of AI, strategic implementation and utilization, and appropriate acquisition processes, to name a few. Basic principles and rules for AI use have already been established, however, in addition to the basic principles and rules already in place for AI use, we will develop and expand rules and operations aimed at multiple perspectives, such as ensuring consistency between business and IT, reducing risk, ensuring compliance, and ensuring the performance of the AI system itself, in order to strengthen governance in the use of AI across the entire airline company.

Based on the foundation of governance, we will promote functional expansion and human resource development of AI to improve productivity and create value for the airline company, customers, and society.

● JAL Group's AI Strategy for the Future

Promotion of AI-Agenda → AI-centre platform development → Realization of future workstyle

TOPIC

Achievements of Business Efficiency using JAL-AI

Assists as a Personal Communication Tool

JAL-AI can be installed in Google Chat and used as a personal assistant. Not only is it possible to adjust schedules without opening calendar tools, but it can also provide information and create documents as a generated AI, helping to improve business productivity.

Assists Ringi Creation in Support Departments

JAL-AI prepares Ringi documents on your behalf, requiring only the uploading of documents and the inputting of some information. It is expected to reduce the time required to prepare Ringi documents, an indirect task, and the reduced time will be used to realize value creation.

Assists as a Contact Center Operator through Knowledge Search

Search for knowledge used in the contact center, such as reservation ticketing and airport information, can be carried out enabling the contact center staff to respond to customer inquiries more quickly. This is expected to improve customer satisfaction and productivity.

Message from the Director in Charge of Green Transformation Strategy

Reduce the environmental impact and spread awareness of sustainability in society through our business

OGAWA Noriko
Executive Officer
Senior Vice President, Procurement Division,
Deputy Vice President, General Affairs Division
Chairperson, Sustainability Promotion Committee

We will continue to fulfill our responsibility to society by taking a sincere attitude toward our relationship with environmental issues

From an environmental perspective, the JAL Group recognizes that aircraft are the second largest source of CO_2 emissions per unit of transportation volume after automobiles, and we feel a strong sense of responsibility in response to the critical scrutiny from society. Balancing our responsibility as a social infrastructure to safely and efficiently transport numerous passengers and cargo with our social responsibility to reduce environmental impact is, as an executive in charge, a key challenge.

In recent years, frameworks for CO_2 emission reduction in the aviation industry have been developed and strengthened, including the adoption of CORSIA[*1] by the International Civil Aviation Organization (ICAO) and the start of the GX-ETS[*2] , emission trading system in Japan. The JAL Group is also actively participating in these frameworks and is making strategic efforts by disclosing information in accordance with TCFD. At the JAL Group, investments that contribute to global environmental conservation, such as reducing CO_2 emissions, are not only linked to creating social value but also positioned as growth investments for the future of the JAL Group, with resources allocated strategically. Achieving sustainable growth while reducing environmental impact is a crucial theme in realizing sustainability.

We are also focusing on the conservation of biodiversity. Rich nature that nurtures diverse species is a shared heritage of humanity and serve as an essential foundation for the JAL Group, which generates passenger flows based on tourism resources. We sincerely recognize that our activities depend on nature. Since 2023, we have been pioneering industry-wide disclosure of information based on TNFD, while identifying priority in Japan and abroad for conservation efforts.

*1 A system that requires airlines operating international flights to purchase eligible credits for "85% of their 2019 carbon credits in excess of the amount of carbon emissions."
*2 A framework for carbon emissions trading in GX League established by METI.

Communicating effective strategies and progress both internally and externally toward achieving the ambitious goals declared ahead of the industry

In 2020, JAL Group became the first Japanese airline to declare its goal of achieving net zero CO_2 emissions by 2050. In response, JAL Group Medium Term Management Plan for FY2021-2025 announced in 2021 drew up a roadmap to "reduce total emissions to below the FY2019 level by FY2025" and "to reduce total emissions by 10 percent from the FY2019 level by FY2030". The Green Transformation strategy is based on the three pillars of "upgrading to fuel-efficient aircraft," "use of Sustainable Aviation Fuel (SAF)," and "operational innovations". Based on this strategy, our Group have continued to work together in FY2024 to reduce CO_2 emissions with our stakeholders.

This roadmap is not only a milestone for achieving net zero CO_2 emissions by 2050, but also an important message to show both internally and externally how JAL Group is committed to decarbonization. As such, we believe that it should be constantly verified and refined in light of internal and external environmental changes.

In the recently released Rolling Plan 2025, we have examined the progress of our roadmap based on external factors such as strengthened environmental regulations and technological innovation, as well as internal factors such as changes in our business plan. While the basic policy and targets remain unchanged, the scenario has been modified to include the reduction effects of "carbon credits" and "new technologies for removal of CO_2 " in addition to the three existing pillars.

In FY2025, each and every employee will continue to work on these five pillars in their respective areas of responsibility across the entire company.

We would like to expand our attitude of looking toward the future, not only within the company, but also throughout society.

In promoting the Green Transformation strategy, I place particular emphasis on fostering environmental awareness in each and every employee. From the standpoint of business division units, we tend to focus on immediate issues such as numerical targets for each fiscal year, but I believe that it is the role of chairperson of the Sustainability Promotion Committee to address to the entire company so that our eyes will be focused a little further into the future.

It is only 25 years until 2050 in which our goal to achieve net zero CO_2 emissions. We believe that it is the responsibility of every adult living today to imagine what the Earth will be like then, and the environment in which children will be living, and take an action to leave even a slightly better future. We aim to instill this awareness and sense of responsibility toward the future not only within our company but throughout society as a whole.

A symbolic initiative in this effort is the "Let's Fly with Used Cooking Oil" project, which collects used cooking oil from households for domestic SAF. In collaboration with the administration and the retail industry, we have started providing used cooking oil collection bottles to participants in the project. In one year since its launch, over 10,000 people have joined, contributing to ensure stable supply and cost reduction of domestic SAF. The project is also positioned as an opportunity for individuals to realize that their actions contribute to reducing environmental impact.

The same is true of our efforts to conserve biodiversity. For example, through our coral restoration support tours in Okinawa, we communicate the necessity and significance of protecting precious ecosystems to our customers and encourage them to participate in conservation activities. We hope to spread nature-positive actions throughout society through air transportation, which only airlines can do.

By sharing future perspectives and actions for a better future with many people, the JAL Group can contribute to increase social sustainability simultaneously as enhancing our corporate value. This is the very reason why JAL Group is committed to sustainability.

Issues to be solved for environmental conservation and positioning of Green Transformation strategy

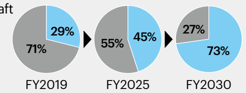
Environmental Policy https://www.jal.com/en/sustainability/environment/environment-management/policy/

- Addressing climate change (Green Transformation Strategy) https://www.jal.com/en/sustainability/environment/climate-action/
- Conservation of biodiversity https://www.jal.com/en/sustainability/environment/biodiversity/
- Effective use of limited resources https://www.jal.com/en/sustainability/environment/limited-resources/
- Prevention of Environmental Pollution https://www.jal.com/en/sustainability/environment/pollution-prevention/
- Reduction of Noise https://www.jal.com/en/sustainability/environment/noise-reduction/

Green Transformation Strategy

Efforts toward FY2030 Target

Aircraft renewal
- Increase percentage of fuel-efficient aircraft
  Middle-Large aircrafts -15–25%
  Narrow body aircraft -15%
- New Aircraft: A350, 787, A321neo, 737-8
- Existing Aircraft: 777, 767, 737-800

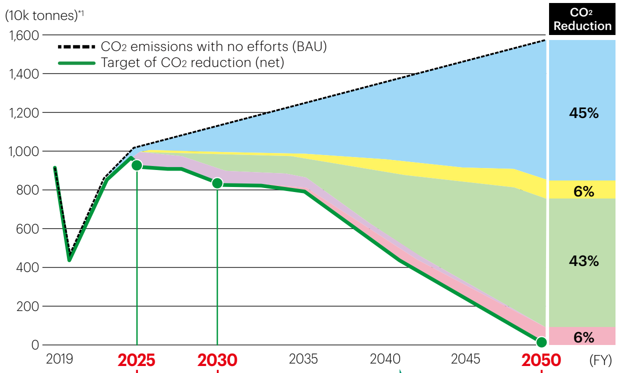


Operational innovations
- Promote JAL Green Operations including Group Airlines
- Demonstrate and deploy fuel consumption-saving technologies (e.g., riblet-shaped coating films)

SAF
Toward 10% replacement of all onboard fuel in FY2030,
- Intensify cooperation with domestic SAF producers and expand procurement
- Secure feedstocks for domestic SAF (e.g., household used cooking oil), and contribute to local production for local consumption
- Expand overseas procurement points, oneworld joint procurement

Carbon Credit
- Utilize CORSIA-eligible credits
- Regional development using carbon credits (e.g., efforts to create blue carbon in Karatsu City)

New Technologies for Removal of CO_2
- Promote and introduce new next-generation technologies by funding companies with technology to remove CO_2 from the atmosphere



FY2025 Management Target	FY2030 Target	2050 Target
Emissions Less than FY2019 (9.21 million tonnes)	Emissions FY 2019 -10% (8.28 million tonnes)	Net Zero CO_2 Emissions

Initiatives for Environmental Cost Reduction
- Promote cross-industry efforts to raise awareness of SAF
- Public-private partnership to promote stable supply and use of domestic SAF
- Expanding the Environmental Value Sales Program (JCSP*2) created by the use of SAF

*1 Scope1 emissions from aircraft *2 JCSP: JAL Corporate SAF Program

Environmental Management, TCFD and TNFD Governance and Risk Management

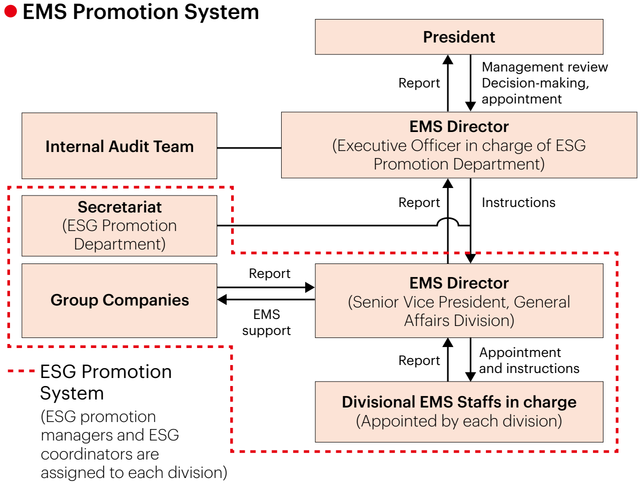
Environmental Management System

Based on the JAL Group Environmental Policy, we have established an Environmental Management System (EMS) to promote environmental conservation activities in a precise manner while making continuous improvements. Goals and action plans tied to our management targets such as reducing CO_2 emissions and single-use plastics are set and carried out by each subsidiary and division. We confirm legal compliance, system conformity, and achievement of targets through quarterly reviews and annual internal audits. When nonconformity is detected, corrective actions, analysis of causes, and review of effectiveness of actions are conducted. In addition, those with high urgency are addressed within the framework of a risk management program.

JAL Royal Catering Co., Ltd., which provides inflight meals, obtained ISO 14001:2015, the international standard for Environmental Management System (EMS), in 2021 and passed the renewal audit in 2024 and the maintenance audit in 2025.

In 2024, we assigned an ESG promotion manager and ESG coordinator to each division under the EMS promotion system. We are promoting ESG strategies on a company-wide basis while leveraging the knowledge and networks of all JAL Group companies to reduce risks and maximize opportunities in all ESG areas.

● EMS Promotion System



Comprehensive Approach to TCFD and TNFD

JAL Group aims to comprehensively address climate change and biodiversity, which are particularly important issues for the sustainability of society, because the preservation and restoration of nature strengthens the social infrastructure. We analyzed the risks and opportunities that various social issues, including environmental issues, pose to society and business risks, and began disclosing information in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in 2021, and in 2023, we made an advance disclosure of information in compliance with the Task Force on Nature-related Financial Disclosures (TNFD).

Governance

The JAL Group's Board of Directors receives regular reports (three times in FY2024) regarding executive initiatives on climate change and biodiversity, and exercises a strong supervisory function. In execution, the Sustainability Promotion Council, chaired by the president, formulates basic policies, sets important targets and manages progress, and deliberates and decides on policies to deal with issues. The Sustainability Promotion Committee, chaired by Executive Officer in charge of ESG Promotion Department, deliberates on individual issues identified through the EMS and issues confirmed through the GX Related Officers Committee (seven meetings in FY2024), whose secretariat is the specialized division for Green Transformation strategy launched in April 2023.

The Board of Directors has identified eight key issues (materiality) in overall sustainability to address social issues through business. The Medium-Term Management Plan incorporates addressing climate change into its management strategy. Based on our strong will to achieve sustainable business operations and increased corporate value through steady efforts to address these issues, we reflect external ESG assessments and the targets for reduction of CO_2 emissions as indicators in our officer remuneration.

In addition, we place respect for human rights and conservation of biodiversity at the core of our management issues. We promote sustainable business strategies in line with the TNFD framework, and strive to build a sustainable supply chain, including respect for human rights and appropriate labor practices.

Agenda Items for the Board of Directors Meeting and Sustainability Promotion Council for FY2024

- Progress status of key sustainability issues and annual targets
- Revision of JAL Group's Road Map towards net zero CO_2 Emissions by 2050
- Disclosures on TCFD and TNFD, EMS review
- Monitoring and evaluation of human rights due diligence

Note: Please refer to p. 22 for the Governance Structure

Risk Management

The JAL Group defines risk as an event or action that may impede the achievement of the organization's mission, objectives, or goals, and conducts semiannual risk surveys and assessments. Those assessed as particularly important are positioned as priority risks, and the Group Risk Management Council, chaired by the president, confirms the status of risk management and deliberates and decides on countermeasures. With regard to environmental issues such as climate change and biodiversity, which are key issues in our management strategy, we implement risk management through the PDCA cycle based on the EMS, while taking into consideration relevant laws, regulations, and policy trends in the international community.

Basic Concept

The JAL Group recognizes that an action to climate change is a particularly important issue for the sustainability of society. In June 2020, we announced our commitment to achieve net zero CO_2 Emissions by 2050, in order to steadily promote various initiatives, including the reduction of CO_2 emissions in order to fulfill our responsibilities as an air transport operator. For more information, please refer to our TCFD disclosures.

JAL Group Environmental Policy
https://www.jal.com/en/sustainability/environment/environment-management/policy/

Strategy

Scenario Analysis

In 2018, the JAL Group participated in the "Project to Support Analysis of Scenarios of Climate Risks and Opportunities in line with TCFD Recommendations" organized by the Ministry of the Environment of Japan and predicted the society in 2030 based on two scenarios (RCP8.5*1 , RCP2.6*2) of the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC), that is, keeping global warming to below 4°C and below 2°C by the end of the century.

*1 RCP8.5 scenario: High level reference scenario in the IPCC Fifth Assessment Report (scenario corresponding to the maximum greenhouse gas emissions in 2100)
*2 RCP2.6 scenario: Low stabilization scenario in the IPCC Fifth Assessment Report (lowest emissions scenario developed with the goal of limiting future temperature increase to below 2°C)

4°C scenario

The 4°C scenario is an extension of the status quo. (The structure of the aviation industry remains largely unchanged.)
*The assumption that the CORSIA scheme will progress under the current plan

Government — Development of policy toward low carbon transition
- Introduction of carbon tax in some countries/regions
- Stricter fuel-efficiency regulations
- Slowdown in low carbon/decarbonization trend
- Limited support for development and diffusion of next-generation aircraft and sustainable aviation fuel (SAF)

(Strengthen and maintain relations with the government)

New market entrants — Continuing increase in LCC entrants
- Entry of LCCs, targeting price-sensitive customers, at a similar pace

Suppliers (Feedstocks) — Rising feedstock costs
- Reduction in costs to change to SAF due to slow diffusion of SAF
- Rising crude oil-derived conventional fuel prices

(Invest in SAF development)

Suppliers (Aircraft manufacturers) — Continuous improvement in fuel efficiency
- Improved fuel-efficiency of aircraft
- Progress with supersonic aircraft development

(Investments in next-generation aircraft development at the same pace)

Airline industry/Company — Cost increase
- Heightened regulations and higher carbon prices (small impact)
- Fuel-efficiency improves but next-generation aircraft development and SAF diffusion slows down, no large change in business landscape
- High dependence on conventional jet fuel and rising fuel costs due to soaring crude oil prices

Action: Review routes based on fuel-efficiency, strengthen BCP, intensifying climate change

(Invest in SAF to a certain extent)

Customers — Growing demand for international flights
- Demand growth especially in developing countries
- Growing logistic demand due to population increase and economic revitalization (cargo)
- Limited interest in decarbonization, no shift to railway, etc.
- More flight cancellations and delays as extreme weather conditions intensify

(Create business plans in anticipation of demand growth, develop routes to meet demand, expand codeshare, strengthen weather information gathering and analysis)

Alternatives — No change

Continue efforts to improve fuel-efficiency, implement measures against rising fuel costs, consider measures to prepare for physical risks

2°C scenario

In the 2°C scenario, review of supply chains and business model may be necessary due to diffusion of SAF and modal shift.

Government — Development of policy toward low carbon transition
- Introduce carbon tax for decarbonization/low carbon society
- Stricter fuel-efficiency regulations
- Support SAF development and diffusion toward decarbonization
- Restrictions on departures/arrivals of aircraft loaded with old jet engines with high greenhouse gas (GHG) emissions in some countries/regions (pay fines)
- Tighter restrictions on land use in some countries/regions as part of climate action, affecting feedstocks (crops) required for SAF production

Action: Strengthen relations with the government (Lobby SAF diffusion)

(Consider developing SAF made from feedstocks other than agricultural products)

Suppliers (Feedstocks) — Fluctuations in feedstock costs
- Difference in cost between regions where SAF is widespread and fuel costs fall and regions where supplies do not keep up and prices do not fall

Action: Actively invest in SAF development
Secure SAF, strengthen relationships with suppliers

(Promote open innovation)

Suppliers (Aircraft manufacturers) — Continuous improvement in fuel efficiency
- Progress with development of next-generation aircraft
- Increased needs for fuel-efficient next-generation aircraft

(Strengthen relations with aircraft manufacturers and increase investments in next-generation aircraft development)

New market entrants — New entrants using electric-powered aircraft
- Emergence of new carriers, primarily those using electric-powered aircraft for transport

Airline industry/Company — Shift to a low carbon society intensifies
- Growing air travel demand due to economic development in developing countries
- Slowdown in growth due to shift to environmental-ly-friendly transportation such as rail and ship
- Stricter regulations, rising carbon prices
- Adoption of SAF progresses

Customers — Growing demand for international flights
- Demand growth especially in developing countries
- Growing environmental concerns, shift to environmental-friendly mobility/transportation modes, such as rail and ship

(Reduce transport costs by improving fuel-efficiency and reducing costs)

Action: Review aircraft investment plan, secure SAF and build supply chains, review routes taking into account refueling

Alternatives
- Modal shift to rail and ship

(Coordinate with railways, etc.)

Engagement with suppliers, industry associations, and government is essential to ensure SAF stability

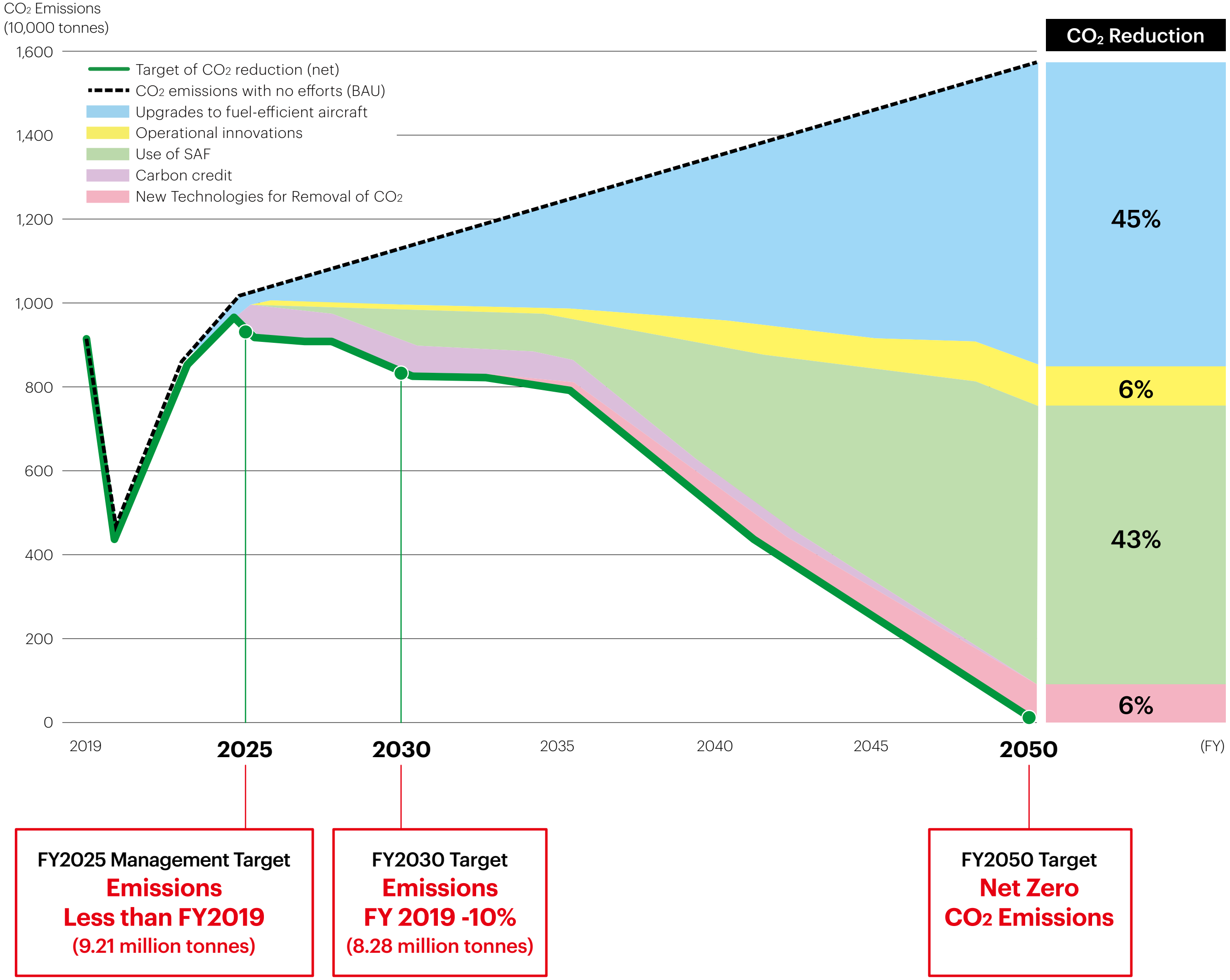
JAL Group's Transition Plan to Achieve Net Zero CO_2 Emissions

Based on the 1.5°C scenario, the JAL Group set a target of net zero CO_2 emissions in 2050 at the shareholders's meeting in June 2020. Subsequently, a specific roadmap was created in consideration of risks and opportunities based on the IEA SDS Scenario*3 and other factors, which was reflected in the "JAL Group Medium Term Management Plan 2021-2025" in 2021 and updated in 2025.

With regard to the reduction of CO_2 emitted by JAL Group's aircraft, we are studying scenarios for CO_2 reduction by 2050, referring to the latest study materials at ICAO, IATA and the latest scenarios such as "WAYPOINT 2050"*4 of ATAG*5 , and discussing future issues and measures to take. In preparing the scenarios, we calculated the total CO_2 emissions by 2050 by setting the growth of RTK (Revenue Ton Kilometer) based on total demand for both international and domestic flights, and reflected the effects of each initiative.

*3 IEA SDS Scenario: Sustainable Development Scenario, a roadmap to fully achieve the Sustainable Development Goals set by the IEA (International Energy Agency).
*4 See: https://aviationbenefits.org/environmental-efficiency/climate-action/waypoint-2050/
*5 ATAG (Air Transport Action Group): A global coalition that promotes sustainability in the airline industry.

● Revision of JAL Group's Road Map towards Net Zero CO_2 Emissions by 2050



* Direct CO_2 emissions from aircraft (Scope 1)

Risks and Opportunities

Climate change will have a negative impact on the air transport business, which is based on the premise of operating in a "safe and secure society," and as a result, it may pose an enormous risk to the business continuity. Especially in recent years, there have been many examples of physical risks manifested by climate change.

In addition, the response to climate change, including the reduction of CO_2 emissions by airlines, may have various financial impacts, such as upgrading to fuel-efficient aircraft and responding to carbon pricing.

The JAL Group organizes and examines these factors that affect its business in accordance with the TCFD classification of risks and opportunities related to climate change and lists them in the table below. The classifications of "timing" and "impact of occurrence" are as specified below.

The following was reviewed at the Board of Directors meeting on July 30, 2025.

Classification	Impact Period
Short term	FY2025 (the applicable period of the current Medium Term Management Plan)
Medium term	FY2026–FY2030 (period up to JAL Vision 2030)
Long term	FY2031–FY2050 (period until net zero CO_2 emissions are achieved)

Classification	Revenue or expense as incurred (annual)
Small	Less than JPY 3 billion
Medium	More than JPY 3 billion but less than JPY 30 billion
Large	More than JPY 30 billion

Risks

Classification		Risk Overview	Time	Impact of risks	Our response to risk reduction	Actions in FY2024
Transition risks Policy and Regulations Technology Market Reputation	Carbon Credits	Increased cost of purchasing carbon credits due to tighter CO_2 emission regulations in various countries	Short to long term	Small to medium	• Procurement of carbon credits at stable and reasonable prices • Public-private partnership through the Scheduled Airlines Association of Japan for analysis of supply-demand balance and cost projections for CORSIA Eligible Emissions Units. • Formation and participation in the domestic carbon emissions trading market through participation in the GX League • Fostering the carbon credit industry	• Participation in procurement events organized by the International Air Transport Association (IATA) to promote CORSIA Eligible Emissions Units • Participation in the GX League in April 2024 and submission of 2030 emission targets • CVC investment in Bezero carbon Limited • Obtained J-Blue Credit certification through seaweed farming in collaboration with Karatsu City and Kyushu University • Purchased J-Blue Credits through Hokkaido Air System (HAC) to support Okushiri Town in promoting decarbonization through kelp
	SAF	Insufficient supply due to delays in development, production, and dissemination of SAF Impact on balance of payments due to high prices of SAF.	Short to long term	Medium to large	• Procure SAF with long-term and price advantage from individual or alliance producers • Active involvement in domestic SAF production and expansion of SAF procurement points • Requests for support from both manufacturers and users for SAF the government and other relevant parties in cooperation with the aviation industry, energy industry, etc. • Foster social momentum to promote the use of SAF throughout the supply chain	• Collaboration with domestic and foreign companies to coordinate and conclude procurement contracts to replace 1% of SAF in FY2025 • Promoted the "Let's Fly with Used Cooking Oil" project (53 collection points established by municipalities and retailers nationwide as of the end of FY2024) • Participation in the "MORISORA Project," an initiative aimed at producing bioethanol derived from domestic wood that can be used for SAF • Started medium to long-term advocacy activities for stakeholders, including exchanges of opinions with petroleum wholesalers' planning divisions • Launched "JAL Corporate SAF Program", which provides SAF certificates that indicate the CO_2 reduction rate achieved by using SAF by the Japan Airlines flights • Participation to Scope 3 environmental value trading demonstration test launched with seven companies including Narita International Airport Corporation to promote the use of SAF.
	Ground Vehicles	Increased costs of electrification of vehicles and using alternative diesel fuels	Short to medium term	Small	• Requests for support from the government and other relevant agencies for the replacement of vehicles with electric-powered ones and uses alternative diesel fuel.	• Utilized subsidies for new introduction of electric vehicles • Participation in the "Study Group on CO_2 Reduction in the Airport Sector" organized by the Ministry of Land, Infrastructure, Transport and Tourism
		Delays in the development of airport facility infrastructure for the use of electric vehicles	Short to medium term	Small	• Requests for support from the government and other related parties for the development of airport infrastructure for the use of electric vehicles • Build momentum to promote airport infrastructure development	• Requests for installation of charging infrastructure • Participation in the "Tokyo Hydrogen Supply System Study Council, Including Pipelines"

Risks

Classification		Risk Overview	Time	Impact of risks	Our response to risk reduction	Actions in FY2024
Transition risks Policy and Regulations Technology Market Reputation	Aircraft	Delay in development of aircraft using new technologies such as hydrogen and electric power, and development of airport infrastructure	Long term	Large	• Collaboration with next-generation aircraft development startups • Collaboration and cooperation with government, airframe and engine manufacturers	• Collaboration with next-generation aircraft development startups "H2FLY GmbH" and "ZeroAvia Inc.". • Establishment of a new department dedicated to the utilization and promotion of next-generation aircraft and new technologies • Participate in the "Public-Private Council on New Technologies for Decarbonizing Aircraft" and promote initiatives in line with the "Roadmap for New Technologies for Decarbonizing Aircraft"
	Demand	Decrease in preference due to delayed response to climate change, and slowdown in growth of air transport demand in Japan due to modal shift	Medium to long term	Small to medium	• Promote the value of air travel based on thorough CO_2 reduction efforts • Build momentum by strengthening communication of environmentally friendly measures, such as the "Sustainable Challenge" project, communication of SAF's planned procurement progress, participation in symposiums, etc.	• Implementing the "Sustainable Challenge" project • Speaking at the "Carbon Neutral Sky" Symposium Vol. 3 co-hosted by the Agency for Natural Resources and Energy.
Physical risks Acute Chronic	Operation	Impact on revenue and expenditures due to decrease in total passengers and increase in flight cancellations caused by climate disasters due to severe extreme weather events and changes in precipitation and climate patterns	Short to long term	Medium	• Strengthen crisis management capabilities against typhoons and other disasters • Strengthen efforts to avoid impact of turbulence, lightning strikes on flight operations • Strengthen efforts to avoid impact of high temperature weather on employees • Public-private partnerships, including participation in study groups on disaster response at airport facilities	• Conducted a review meeting after the typhoon season to discuss successful response cases and issues with Group companies and airports, and reflect the results in typhoon preparations for the following season. • Broadcasting inflight videos to encourage passengers to always fasten their seatbelts to prevent injuries caused by sudden turbulence during the flight. • Set aside for cabin attendants to strengthen their response and ensure that both crew and passengers take measures to prevent injuries caused by turbulence. • Continued the operation of "Lilac", a lightning strike avoidance support system, as a lightning strike countermeasure. • Decided to introduce air-conditioned vests for ground handling staff and maintenance engineers to prevent heat stroke.
	Demand	Impact on air transportation business of a pandemic outbreak of infectious disease caused by ecological and other changes due to rising average temperatures	Long term	Large	• Provide a "safe and secure" flight safety environment through infectious disease countermeasures • Formulate flexible flight operation plans based on passenger demands.	• Conducted a review of the COVID-19 pandemic and revised the Business Continuity Plan (BCP) based on the assumption of an unknown viral infectious disease outbreak to be able to respond flexibly and quickly to the gap between demand and supply.
		Due to long-term climate change, decrease in demand due to abandonment of tourism resources (lack of snow, abandonment of landscape, changes in local products, etc.)	Long term	Large	• Creation of "relationships and societal connections" between people and people, people and goods, and regions through air transportation to solve social issues. • Promotion of tourism resource conservation activities in cooperation with local governments and companies in each country and region • Promotion of efforts to preserve tourism resources by taking advantage of the characteristics of the air transportation business	• Released of "JAL FUTURE MAP" depicting the future of creating "relationships and societal connections through air transportation" • Launched "FURUSATO (hometown) Musubi," a matching platform connecting regions and cities • Launched "JAL Tabi-Academy," a program to visit local communities and learn about local issues • Expanded collaboration agreements with local governments and local businesses (Sapporo City, Setouchi Village, Hawaii, etc.) • Promoted red tide monitoring in cooperation with Hokkaido University, using scheduled flight aircraft to detect red tide outbreaks at an early stage and promptly provide information to fishery-related personnel to prevent damage to the fishing industry.

Opportunities

Classification		Opportunity Overview	Time	Impact of opportunities	Our response to expanding opportunities	Actions in FY2024
Opportunities Resource Efficiency Energy Sources Resilience Markets Products and services	Operation Aircraft	Reduction in fuel consumption through improved fuel efficiency and CO_2 reduction through improved infrastructure, including operational innovations, technological improvements to aircraft, and more sophisticated air traffic control. (credit purchase cost reduction)	Short to long term	Large	• Reduction of CO_2 through innovations in daily operations and aircraft upgrades • Collaboration with manufacturers, government, and other related parties for introduction of more sophisticated air traffic control and aircraft with new technologies • Diversified financing (ESG finance) • Steady introduction of fuel-efficient aircraft (Airbus A350-900, A350-1000, Airbus A321neo, Boeing 787-9, Boeing 737-8)	• Applying riblet shapes in a large area on international route • Deepened public-private partnerships through participation in study groups on CO_2 reduction in the aircraft operation sector • Conducting daily coordination with aircraft manufacturers to ensure receipt of aircraft • Issuance of two transition bonds (totaling JPY 80 billion in June FY2024) • Introduced A350-1000 aircraft for international flights and started retiring 777-300ER aircraft • Signing of purchase contracts for 20 Airbus A350-900, 11 Airbus A321neo, and 10 Boeing 787-9 aircraft • Signing of a contract for the purchase of 17 additional Boeing 737-8 aircraft
	SAF	Diversification of fuel supply sources to ensure a stable supply of aircraft fuel and reduce prices and costs	Short to long term	Small to medium	• Procurement of SAF consisting of multiple manufacturing methods • Building momentum to expand the use of SAF in Japan through all-Japan SAF in Japan through ACT FOR SKY, etc. • Contributing the procurement of used cooking oil and wood-derived bioethanol as feedstocks for SAF • Collaboration between the public and private sectors through public-private councils, etc. to solve technical and economic issues in domestic SAF production, such as CAPEX support for SAF production and supply side through GX Transition Bonds, support for business operation costs including SAF feedstock procurement, and the way of incentive support • Foster social momentum to promote the use of SAF throughout the supply chain.	• Participation in the ACT FOR SKY Symposium • Promotion of the "Let's Fly with Used Cooking Oil" project (collection points will be set up at 53 locations nationwide, including municipalities and retailers, by the end of FY2024) • Participation in the "MORISORA Project," an initiative aimed at producing bioethanol from domestic wood that can be used for SAF. • Responded to requests for support through participation in the SAF Public-Private Council, and to various issues in the realization of support. • Reaching out to stakeholders with a long-term perspective through advocacy activities. • Launched the "JAL Corporate SAF Program", which provides SAF certificates that indicate the CO_2 reduction rate achieved by using SAF by the Japan Airlines flights. • The Scope 3 environmental value trading scheme demonstration test started in cooperation with seven companies, including Narita International Airport Corporation, to promote the use of SAF.
	New Technologies	Diversification of CO_2 reduction methods by utilizing CO_2 removal technologies such as Direct Air Capture	Long term	Medium	• Invested in and strengthened collaboration with startups which have a technology of removing CO_2 from the atmosphere.	• Invested in Heirloom, a U.S. startup with direct air capture technology using limestone. • Organizing a discussing session in "CCUS World" held at Makuhari Messe with Captura Corp which Japan Airlines invested in March 2024, to help Captura expand its business.
	Ground Vehicles	Reduction of CO_2 through the use of alternative fuels and the use of special airport vehicles that combine various power sources	Short to long term	Small	• Procurement of biodiesel fuel, use of electrically powered special vehicles • Promote decarbonization at airports through public-private partnerships	• Expand the number of airports newly introducing alternative fuels to diesel (eight new airports) • New introduction of electric vehicles (from FY2024, new introduction of aircraft towing vehicles, high-lift loaders, belt loaders, eGPUs, etc., instead of only conventional electric towing tractors)
	Demand	Increasing preference and air transport demand through appropriate response to diversifying customer needs	Short to long term	Medium	• Provide low-carbon, environmentally friendly products and services (JAL Corporate SAF Program, JAL Carbon Offset) • Expand disclosure of information on measures to combat climate change, including reduction of CO_2 • Build momentum by strengthening communication of environmentally conscious measures.	• Launch JAL Corporate SAF Program • Expand the number of contracts for this program (10 companies in FY2024) • Implement the "Sustainable Challenge" Project • Speaking at the "Carbon Neutral Sky" Symposium Vol. 3
		Securing new sources of revenue through the creation of new businesses based on low carbon	Short to long term	Large	• Create new businesses utilizing the JAL Group assets. • Promote investments that contribute to CO_2 reductions by utilizing Internal Carbon Pricing (ICP) (ICP is used as one of the evaluation items in the selection of new medium-sized aircraft types) • Fostering human resources to lead a decarbonized society	• Partnership with Lime Co., Ltd. to promote electric micromobility • Conducted verification with KDDI Corporation and KDDI SmartDrone Inc. toward the realization of a drone-based pharmaceutical delivery business model • Three investment decisions utilizing ICP • Co-hosted "Airplane Workshop 2024" with Institute of Industrial Science, The University of Tokyo to provide opportunities for middle and high school students to think about sustainability. • Jointly developed an educational program for schools on SAF with JTB Corp.

Indicators and Targets

Due to the nature of the air transportation business, direct emissions from aircraft account for about 99 percent of CO_2 emissions. Based on this fact, we are addressing the reduction of CO_2 emissions from aircraft as a top priority issue. In addition, we have set high targets for the reduction of CO_2 emissions from non-aircraft sources, such as ground facilities and ground vehicles, which account for about one percent of total emissions, and are working across the organization to achieve these targets. In order to overcome various challenges related to technological innovation and market formation, we will lead the industry with cutting-edge initiatives while strengthening cooperation and collaboration with various stakeholders in Japan and overseas, in line with the international framework for CO_2 reduction and consistent with the "Clean Energy Strategy" of the Japanese government.

Achievements and targets for CO_2 emission reductions (Indicators and Targets)
https://www.jal.com/en/sustainability/initiatives/

Targets and Initiatives to Reduce CO_2 by 2030

In May 2021, the JAL Group became the first Japanese airline to set a specific target for FY2030 (10% reduction in total emissions compared to FY2019) as a milestone toward achieving net zero CO_2 emissions by 2050. To date, we have taken the lead in promoting the decarbonization of the global airline industry through such initiatives as the joint procurement of SAF in alliances and the use of ESG finance for aircraft renewals. Going forward, we will continue to accelerate our existing initiatives, including the steady renewal of fuel-efficient aircraft, reducing CO_2 Emissions in Daily Operations (JAL Green Operations), and the strategic procurement of SAF with specific targets set, using carbon credit, and new Technologies for Removal of CO_2.

● CO_2 Reduction Targets and Results

		Base year	Year 2024	Year 2025	Year 2030	Year 2050
Direct Emissions	Aircraft	FY2019 Result 9.21 million tonnes[*1]	FY2024 Result 9.69 million tonnes	FY2025 CO_2 Reduction target: Total emissions: less than 9.21 million tonnes. Less than FY2019	FY2030 CO_2 Reduction target: Total emissions: less than 8.28 million tonnes. * 90% compared to FY2019 * Indirect emissions: less than 54,000 tonnes.	Net zero
Direct Emissions	Non aircraft	FY2019 Result 96,000 tonnes	FY2024 Result 89,000 tonnes		Total emissions: less than 62,000 tonnes * 65% compared to FY2019	Net zero
Indirect Emissions	Non aircraft	FY2013 Result 80,000 tonnes	FY2024 Result 57,000 tonnes	Total emissions: less than 54,000 tonnes * 67% compared to FY2013	Total emissions: less than 40,000 tonnes * 50% compared to FY2013	Net zero

*1 Including 120,000 tonnes for FY2019 CO_2 emissions of Spring Japan Co.,Ltd which became a consolidated subsidiary in 2021.

● Efforts toward FY2030 Targets

Aircraft renewal	· Increase percentage of fuel-efficient aircraft[*2] (FY2019 29% ⇒ FY2030 73%) · Through collaboration with start-up companies, contribute to the technological development of next-generation aircraft (hydrogen and electric)  ©ZeroAvia
Operational innovations	· Promote JAL Green Operations including Group Airlines · Demonstrate and deploy fuel consumption-saving technologies (e.g., riblet-shaped coating films)
SAF	Toward 10% replacement of all onboard fuel in FY2030, · Intensify cooperation with domestic SAF producers and expand procurement · Secure feedstocks for domestic SAF (e.g., household used cooking oil), and contribute to local production for local consumption · Expand overseas procurement points, oneworld joint procurement 
Carbon Credit	· Utilize CORSIA-eligible credits · Regional development using carbon credits (e.g., efforts to create blue carbon in Karatsu City) 
New Technologies for Removal of CO_2	· Promote and introduce new next-generation technologies by funding companies with technology to remove CO_2 from the atmosphere

*2 Percentage of A350, 787, A321neo, 737-8

TOPIC

Karatsu City's Blue Carbon Initiatives Received J Blue Credit® Certification

In January 2025, the Saga Prefecture Karatsu Bay Wakame seaweed Cultivation Experience Project for Developing Human Resources for the Future, a joint initiative of Kyushu University, Karatsu City in Saga Prefecture, Karatsu Municipal Sashi Elementary School, and local fishermen, received J Blue Credit® certification. The CO_2 captured by the wakame seaweed cultivated through this project is absorbed and stored as blue carbon in the marine ecosystem, contributing to the mitigation of climate change. The JAL Group will continue our efforts to expand climate change mitigation measures using algal beds, provide learning opportunities for children who will lead the future, and maintain and revitalize local aquaculture industries.

Priority Measures

Upgrading to Fuel-efficient Aircraft

The JAL Group is currently upgrading our fleet to more fuel-efficient and low noise models. The latest models reduce approximately 15 percent to 25 percent CO_2 emissions compared to previous. In January 2024, we introduced the Airbus A350-1000 aircraft for international flights. From FY2027, we will introduce 20 new Airbus A350-900 aircraft, which are currently our mainstay aircraft for domestic flights, into our international flights. The Group decided to introduce 10 additional Boeing 787-9 aircraft, to our 50+ aircraft already in operation within the JAL Group. On domestic routes, in addition to the introduction of 38 Boeing 737-8 aircraft from 2026 to substitute our 737-800 aircraft, JAL has decided to introduce 11 Airbus A321neo aircraft from FY2028 as the successor to the Boeing 767 aircraft currently in operation.

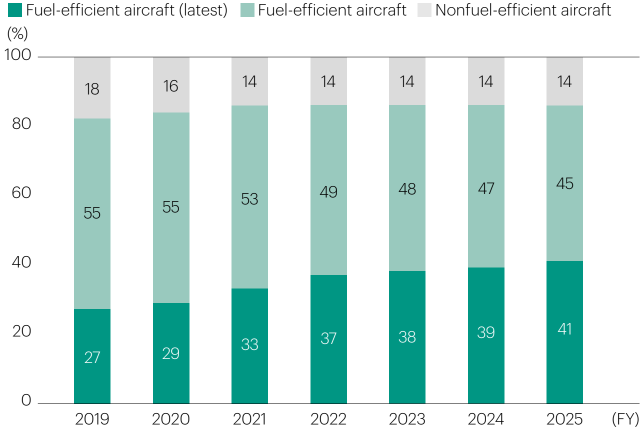
As the development of next-generation aircraft equipped with new technologies powered by electricity and hydrogen is gaining momentum, we are actively collaborating with airframe and engine manufacturers to promote technological innovation. Because the development of infrastructure is essential for next-generation aircraft, we will work with the government, airport companies, and other stakeholders to improve the environment.

Issuance of Transition Bonds to Procure Fuel-efficient Aircraft

In March 2022, the JAL Group issued the world's first transition bond in the aviation industry in order to steadily renew our fleet of highly fuel-efficient aircraft (Airbus A350, Boeing 787 and etc.) We were selected as a model case study for the 2021 Climate Transition Financing Model Project by the Ministry of Economy, Trade and Industry. In March 2023, we became Japan's first airline to finance a transition-linked loan with a specific use of funds, and the loan was selected as a recipient of the Ministry of Economy, Trade and Industry's FY2022 Subsidy for Global Warming Countermeasures Promotion Project. We are actively and continuously utilizing ESG finance by issuing transition bonds for the second time in June 2023, the third and fourth time in May 2024. We are also engaging in dialogue with investors to gain their understanding of our initiatives.

Reference site: ESG Finance
https://www.jal.com/en/sustainability/esg-finance/

● Percentage of Fuel-efficient Aircraft



Fuel-efficient aircraft (latest): Airbus A350, Boeing 787, ATR42-600/72-600
Fuel-efficient aircraft: Boeing 777/737-800, Embraer E170/E190
Current aircraft: Boeing 767, SAAB, Q400

Use of SAF

The JAL Group has set a goal of replacing 1 percent of all fuel on board with SAF by FY2025 and more than 10 percent by FY2030. To achieve this goal, we will promote SAF procurement in Japan and overseas. In Japan, we are working with stakeholders across industry boundaries to promote the use of domestic production and commercialization of SAF. We are also actively participating in the development of future generation SAF, as represented by e-fuel, to promote and expand the use of SAF.

Issues and Initiatives for SAF Procurement

In order to achieve our current goal of replacing 1% of all fuel on board with SAF by 2025, we are promoting SAF procurement both in Japan and overseas, taking advantage of national and regional support programs for the production and use of SAF.

To achieve the ambitious target of "10% or more by FY2030," it is crucial to promote the widespread adoption of domestic SAF while simultaneously expanding overseas procurement sources. The JAL Group has actively contributed to the establishment and distribution of supply chains through domestic SAF procurement in FY2023 and FY2024. Furthermore, to create an environment where domestic SAF can be stably supplied at internationally competitive prices, the JAL Group is proactively communicating its commitment as an end-user of SAF by participating in the "Public-Private Council for the Promotion of the Introduction of Sustainable Aviation Fuel (SAF)," formulating a comprehensive plan to advance decarbonization in the air transportation business, and engaging in the "GX League."

The industry has collaborated to request support, leading to the realization of production-side incentives that help reduce SAF costs—such as subsidies for manufacturing facilities funded by "the GX Economy Transition Bonds" in 2023 and tax benefits related to production infrastructure for strategic goods.

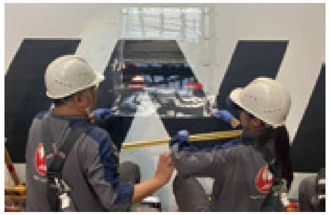
Moving forward, we will continue to support the production and mass production of domestic SAF to contribute to establishing a supply chain with a high CO_2 reduction rate that satisfies CORSIA eligibility criteria. (For details on the JAL Group's domestic SAF initiatives, please refer to "Special Feature 2: From upstream to downstream: JAL Group's initiatives to promote the use of SAF" on p. 91.)

To promote the use of SAF, focus on the value of decarbonization through SAF based on the feedback from our valued corporate customers, we launched the JAL Corporate SAF Program in April 2024. Through this program, we will build momentum for the use of SAF and contribute to the promotion of decarbonization in the value chain.

Reduction in Daily Operations

JAL Green Operations is the name given to our various efforts to reduce CO_2 emissions in our daily operations, including the timing of controls and devising of maneuvering during flight, reducing the weight of the aircraft, and shortening the flight route. We monitor actual flight routes on a daily basis and create flight plans with flight routes that match actual conditions in order to achieve optimization of fuel on board. JAL Group companies are working together to further reinforce and promote in-flight efforts such as the early acceleration and climb method, which has been actively implemented for some time. Together with JAXA and O-well Corporation, we are conducting the world's first flight demonstration test using an aircraft with a riblet applied to the exterior surface coating (image beside). When this technology is put into practical use, it is expected to improve fuel consumption by up to 2 percent and contribute significantly to CO_2 reduction.

In January 2025, we completed the installation to Boeing 787-9 (JA868J) and started operations in international flights. We will continue advancing decarbonization efforts by verifying the durability and appearance of the large-area application of the riblet coating, as well as evaluating its effectiveness in improving fuel efficiency on long-haul international flights, with the objective of further expanding its application scope.



Installation to Boeing 787-9 (JA868J)

● JAL Green Operations

CO₂ reduction in FY2024

Preparing for Departure	While Parked in Spot	At Take off	In Flight	During Descent	At Landing	Efforts Outside of Operations	Total Amount
108,400 tonnes	16,400 tonnes	23,800 tonnes	4,400 tonnes	28,400 tonnes	12,400 tonnes	30,200 tonnes	224,000 tonnes
1. Optimized Flight Plans 2. Reduction of Onboarded Weight	3. Reduced use of auxiliary power units (APU) 4. Closing Window Shades	5. Ascent with Early Acceleration	6. Adjusting Flight Speed	7. Continuous Descent Operations 8. Reduced Flaps 9. Delayed Flap & Gear	10. Idle Reverse 11. Single-Engine-Taxi-in	12. Engine Washing 13. Improvement of Wing Tips and Fuselage, as well as Riblets 14. Engine Upgrades and Replacement	In FY2024, 2.3% reduction compared to the FY2025 target of 2.5% of total emissions

Other initiatives and data on operational innovations are also available on our website.
JAL Green Operations https://www.jal.com/en/sustainability/environment/climate-action/co2-emissions/

Comment

J-Air Co., Ltd. Wins Osaka Governor's Prize, the highest award, in the 2024 Osaka Climate Change Awards

J-Air Co., Ltd. received the Osaka Governor's Prize, which is awarded to the business units that have made the most outstanding efforts in the Osaka Climate Change Action Prize 2024 (publicly solicited category) selected by the Osaka Prefectural Government.

The Osaka Climate Change Award is given to businesses that have made particularly outstanding efforts to mitigate and adapt to climate change in their business activities as a model for other businesses, with the aim of motivating businesses in Osaka Prefecture and promoting the spread of climate change countermeasures. J-Air has ESG as one of its management strategies and will continue to promote ESG in seven projects from 2020: fuel efficiency, unnecessary goods, DEI, corporate citizenship activities, accessibility, regional development, and health and productivity management. In particular, the fuel efficiency project has reduced CO_2 emissions by reducing aircraft weight, improving on-time departure rates, and reducing engine output by refraining from using reverse thrust after landing on the premise of flight safety. These efforts have been made through a process of trial and error while actively incorporating ideas from employees. As a result, we have been highly evaluated as the most outstanding initiative that serves as a model for other businesses with regard to climate change mitigation and adaptation in their business activities, in terms of contribution, ripple effect, sustainability, and other comprehensive aspects.

This award has given momentum to the ESG Promotion Project Team and the entire airline company's efforts. We will continue to set even higher goals for ESG promotion in the future.

J-Air Co., Ltd.
ESG Promotion Project Team

From left: HARADA Koji, Director General, Environment, Agriculture, Forestry and Fisheries Department; YOSHIMURA Hirofumi, Governor of Osaka Prefecture; HONDA Shunsuke, former President and Representative Director, J-Air Co., Ltd.; KATO Saki; FUJIKAWA Hiroshi; Mozuyan, a mascot of Osaka Prefecture spokesperson Vice Governor

Efforts to Reduce CO_2 in Ground Facilities and Vehicles

The JAL Group has been working towards the target of reducing average unit energy consumption for ground facilities by more than 1% annually over 5 consecutive years. Under the Operator Classification Evaluation System of the Act on Rationalizing Energy Use implemented by the Ministry of Economy, Trade and Industry, the JAL Group has been certified as an excellent operator classification (S Class) for 10 consecutive years since 2015.

To achieve the 2030 carbon half (indirect emissions) target, efforts such as the further promotion of the use of LED in facilities, the introduction of advanced air conditioning control systems, and the purchase of nonfossil certificates (net zero emissions at JAL Headquarters in FY2024) are being implemented. In addition, to reduce CO_2 emissions from special vehicles at airports, we are promoting the deployment of electricpowered special vehicles and increasing the use of biodiesel fuel. Starting with the trial at Kumamoto Airport, in collaboration with local communities and society, the JAL Group has been progressively demonstrating the use of locally produced biodiesel fuel of high purity in vehicles at 19 airports across Japan. Also, Haneda Airport has provided one aircraft towing vehicle to "the Early Implementation Support Project for Fuel Cell Mobility at Airports" and is participating in the hydrogen vehicle test operations.

To further advance CO_2 emissions reduction at airports, it is essential to expand airport infrastructure and collaborate with companies in the vicinity of airports. The JAL Group will continue to promote the use of locally produced recyclable energy at airports throughout Japan.

The towing vehicle provided by the budget of "Early Implementation Support Project for Fuel Cell Mobility at Airports"

New Technology to Remove CO_2 from the Atmosphere

The JAL Group will accelerate our efforts to achieve net zero CO_2 emissions by 2050 by diversifying the approach to decarbonization through the use of new removal technologies beyond the framework of our own value chain.

CVC Investment in Captura, a U.S. startup

In March 2024, through Japan Airlines Innovation Fund, a corporate venture capital fund (CVC) that invests in promising startup companies, we made a funding investment in Captura, a U.S.A. venture company, that serves CO_2 removal technology. Captura aims to commercialize its Direct Ocean Capture (DOC) technology, which efficiently captures CO_2 from the atmosphere by directly extracting CO_2 from seawater. Together with Captura, we introduced the technology to Japanese companies at an exhibition held in Japan in October 2024, helping to raise awareness of the technology in Japan.

Investment in Heirloom, a U.S. startup

In August 2024, we invested in Heirloom Carbon Technologies, a company developing Direct Air Capture technology using limestone without supply constraints. The company began operating its first commercial plant in the U.S.A. in 2023, and is currently developing an industry-leading technology for the operation of a large-scale commercial plant in the U.S.A.

Planning and Participating in Seminars and Symposiums

The JAL Group is working to increase cross-industry engagement on decarbonization by participating in and speaking at seminars and symposiums hosted by government agencies, private companies, and organizations.

Participation in GGX Finance Summit 2024 (October 2024)

We participated in a panel discussion at GGX Finance Summit 2024, organized by Ministry of Economy, Trade and Industry (METI), on the topic of transition planning to address climate change.

Participation in IATA Aviation Energy Forum (November 2024)

At IATA Aviation Energy Forum (800 participants), held by International Air Transport Association (IATA), we participated in a panel discussion on the introduction of hydrogen aircraft and introduced our initiatives. (Image ①)

Participation and speech at the ACT FOR SKY symposium (December 2024)

Vice President Nakagawa, former Senior Vice President of Procurement Division, gave a lecture at the ACT FOR SKY Symposium - Frontiers of Domestic SAF to Pioneer Future Skies (650 attendees) held by ACT FOR SKY, a voluntary organization, in which JAL Group participates to promote the use of SAF beyond industry boundaries.

Participation at Carbon Neutral Symposium for the Sky Vol.3 (January 2025)

We participated in a panel discussion on raising awareness of SAF at this symposium (2,100 attendees), which was jointly organized by Ministry of Land, Infrastructure, Transport and Tourism and Agency for Natural Resources and Energy, METI. (Image ②)

Sponsorship and participation in Tokyo Carbon Credits Conference (April 2025)

Together with Mitsubishi Corporation, we supported the conference co-hosted by BeZero Carbon and South Pole (140 participants), and participated in a panel discussion on the use of carbon credits.

①

②

Special Feature 2

From upstream to downstream: JAL Group's initiatives to promote the use of SAF

The use of SAF is one of the key initiatives toward decarbonization in aviation industry.
The JAL Group has been working to promote the use of SAF as a leading company for more than 10 years.
Based on our experience, we hope to contribute to the construction of the entire SAF value chain, from upstream (procurement of feedstocks), through midstream (commercialization and dissemination), to downstream (promotion of SAF use).
This feature introduces the JAL Group's approach to the entire SAF value chain.

How does the JAL group contribute to building the SAF value chain ?

To promote the use of SAF, it is important to cooperate with companies across industries in each phase such as procurement of feedstocks, commercialization and dissemination, and promotion of SAF use. The JAL Group leverages the partnership we have cultivated through our business and by collaborating with stakeholders to build a value chain.

Promoting the Use of a Wide Variety of Feedstocks

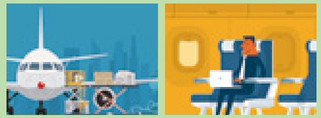
Feedstock		→ Technology*
Used cooking oil	Oil plants	HEFA
Bioethanol (corn, sugarcane, forest residue etc.)		ATJ
Municipal waste		Gasification FT Synthesis
Hydrogen	Carbon dioxide	Power To Liquid

Formation of a market for a stable and permitted supply

SAF production

Procurement and Use of SAF

Providing environmental value to customers who use aircraft



Upstream — Procurement of feedstocks for SAF

Midstream — Commercialization and diffusion of SAF

Downstream — Promotion of use of SAF

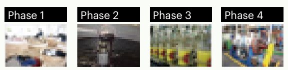
* The names of technologies to produce SAF. The main ones are Hydroprocessed Esters and Fatty Acids (HEFA), Alcohol to Jet (ATJ), gasification Fischer-Tropsch (FT) synthesis, and synthetic fuel.

JAL Group has been continuing its effort on SAF for more than a decade

JAL Group's efforts related to SAF, which began with the first test flight using SAF in Asia, are now expanding throughout its value chain. Some of these initiatives are introduced on the next page.

2009 Succeeded in a test flight with SAF for the first time in Asia

2018 Started to produce domestic SAF using cotton as a feedstock for clothing (succeeded in 2020)



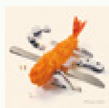
2020

2021 First domestic flight with domestic SAF

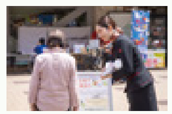
2022 Co-established of ACT FOR SKY, a voluntary organization to commercialize, and promote domestic SAF

Act for Sky

2023 Participated in the Fry to Fly Project, a project to fly with used cooking oil



2024 Launched an initiative with City of Yokohama and others to collect used cooking oil from household as a feedstock for SAF



Upstream
SAF procurement

Establishing a scheme to collect used cooking oil from household, Let's Fly with Used Cooking Oil project

JAL Group is implementing Let's Fly with Used Cooking Oil project to secure feedstocks for SAF. In addition to JAL's headquarter and cafeterias for employees, collection spots have been set up at supermarkets to collect used cooking oil from household, which had previously been discarded.

In the first year, the number of collection spots has increased to approximately 70, and approximately 13,000 customers have participated to date.

JAL's original box and bottle to collect used cooking oil

Midstream
SAF commercialization and dissemination

Promote all-Japan efforts to build a supply chain and promote dissemination

In March 2022, we co-established ACT FOR SKY, a voluntary organization to accelerate cross-industry collaboration and raise awareness for the commercialization and diffusion of domestic SAF. The group was launched with 16 companies at first, and currently there are 45 active companies and organizations. We will continue to discuss solutions to technical and economic issues related to domestic SAF beyond the boundaries of the industry and work together with the public and private sectors to promote the widespread use of domestic SAF.

Member of ACT FOR SKY (as of June 2025)

Downstream
Promotion of SAF use

Start of supply chain for mass production and supply of SAF in Japan

In May 2025, Japan's first domestic SAF made from used cooking oil, which acquired ISCC CORSIA certification*, was supplied to passenger flights at Kansai International Airport for the first time. This marks the start of a supply chain that realizes the practical use and stable supply of domestic SAF.

* ISCC CORSIA certification: A system that certifies the sustainability of SAF to meet the requirements of International Civil Aviation Organization (ICAO) CORSIA.

An event to celebrate the first supply at Kansai International Airport

Revitalizing the market through environmental value created by the use of SAF

The use of SAF by airlines reduces direct CO_2 emissions from aircraft (Scope 1 for airlines), and also contributes to the reduction of indirect CO_2 emissions (Scope 3 for airline passengers) as a whole life cycle from corporate customers who use air transportation for cargo and business trips. By marketing this value to customers, JAL Corporate SAF Program contributes to building momentum for SAF and decarbonizing its value chain.

Members of JAL Corporate SAF Program (as of August 2025)

Comment

Expanding co-creation and environmental value through JAL Corporate SAF Program

As part of our efforts to achieve net zero CO_2 emissions by 2050, JAL Group has established JAL Corporate SAF Program (JCSP) to encourage decarbonization.

JCSP is a solution that enables companies to utilize the "environmental value" generated through the use of SAF and visualize their contribution to CO_2 reductions.

Since awareness of the environmental value of SAF is not yet sufficient, there have been many challenges in establishing a sales system and promoting understanding of SAF as a new products and services. However, multiple departments, including ESG promotion, sales, and public relations, have worked together both internally and externally, to establish a sales scheme, and conduct sales activities for corporate customers. Through cross-divisional cooperation, a flexible and effective structure is being put in place, and we are aiming to surpass the previous year's contract signing results in FY2025. We will continue to collaborate with relevant departments within the company, and as a partner supporting corporate decarbonization management, we will make further efforts to reduce environmental impact and promote environmental value while staying close to the needs of our customers.

ZHOU Linhui
Solution Sales Promotion Department

Biodiversity Conservation (TNFD)

Basic Concept

The JAL Group aims to build a society in which nature and people coexist in harmony through its business activities. Based on the premise of reducing our impact on nature, JAL will create relationships and connections through mobility, and by working to become Nature Positive, JAL will create a future in which everyone can feel affluence and hope, thereby enhancing our corporate value.

Strategy

The JAL Group follows the LEAP approach proposed by the Task Force on Nature-related Financial Disclosures (TNFD) to systematically assess nature-related risks and opportunities based on scientific evidence, and under the concept of double materiality, identifies priority areas and assesses risks and opportunities from the perspective of both the dependencies and impacts of the company's business on nature. In particular, for the airline business, which accounts for the majority of the JAL Group's revenues, interfaces with nature throughout the entire value chain has been identified, as mapped below.

Identifying Priority Areas – Water Risk

The JAL Group recognizes water as an important resource that affects climate change and biodiversity, and is committed to its sustainable management.

JAL's water intake areas are mainly in Japan, where water stress levels are considered low based on analysis using Aqueduct and hence our water-related risks are low. However, the Tokyo metropolitan area (Haneda and Narita), which accounts for 80% of our total water intake, has been identified as a priority area. JAL is actively working to conserve water resources through measures such as recycling water used for washing aircraft parts.

In addition to water, the JAL Group identifies priority areas by focusing on biodiversity itself, including ecosystems such as forests and oceans, as well as the diverse species that inhabit them.

Based on the biodiversity risk filter provided by WWF, the JAL Group recognized that many of its domestic destinations are in areas of high biodiversity risk.

As a result of identifying Sensitive Locations and Material Locations and multiplying them, Hokkaido, Kagoshima, Okinawa, and Tokyo were identified as priority areas, and efforts are being made to cultivate sexually reproducing corals in Okinawa, for example.

For overseas destinations, JAL identified Sensitive Locations by multiplying the four tools recommended by the TNFD (Aqueduct x IBAT x GFW x ENCORE) with Illegal Wildlife Trade (IWT) hot spots. Along with identified material locations, JAL has identified Hawaii and Australia as priority areas where its operations depend on and impact nature, and are promoting initiatives in these areas. For example, in March 2025, restoration activities were conducted at Diamond Head, as well as planting of Hawaiian-native tree species in Honolulu. Both of which were done together with JAL's valued customers.

Water Intake Data ➦ ESG Data https://www.jal.com/en/sustainability/esg/pdf/esg.pdf
Initiatives ➦ Conservation of Water Resources p. 96

● For more information, please visit the company website.
https://www.jal.com/en/sustainability/environment/biodiversity/#strategy

● LEAP Approach Image

Scoping
Set the destinations for the airline business as the scope as location information can be identified. Destinations are the key revenue source covering most of JAL Group's revenue.

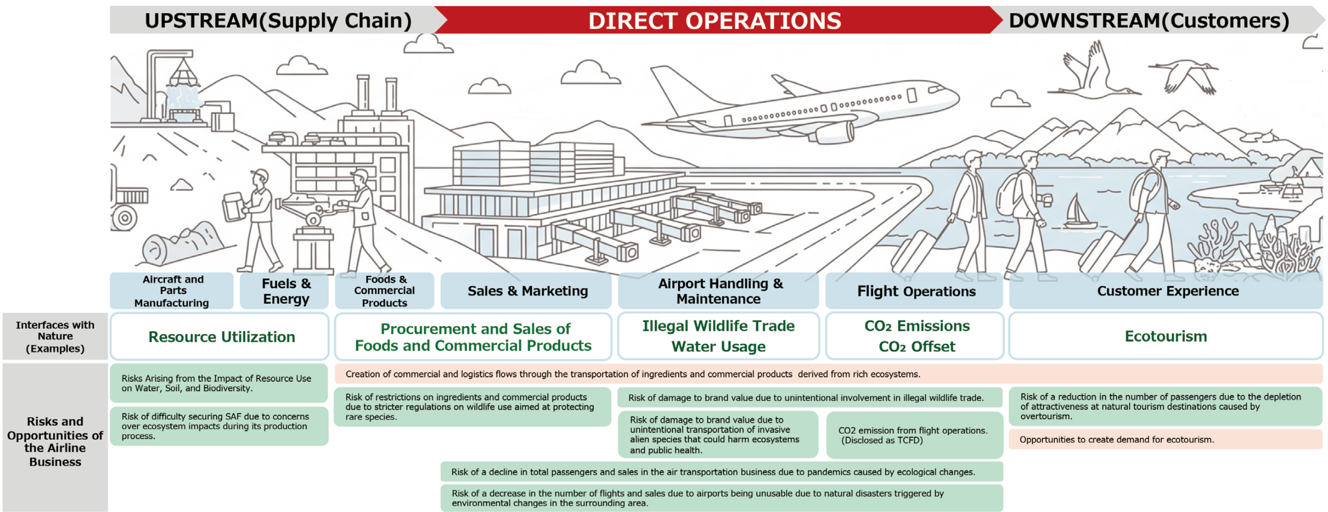
L — **Locate**
Mapped out JAL Group destinations, with biodiversity and water risks, and set them as "Sensitive Locations" to identify points of contact with nature.

E — **Evaluate**
The demand of air transportation depends on the flow of people to natural heritage sites and other natural tourist attractions. It also relies on nature surrounding the airport by means of protection from natural disasters. Hence, the possible environmental pollution to the area surrounding the airport and other factors are to be identified.

A — **Assess**
Based on the identified dependencies and impacts, risk is examined with a focus on destination airports located in areas of biodiversity and water risks. An initial study of future risks was conducted to ensure that overtourism and the reduction of nature do not lead to a decrease in total passengers, while at the same time, opportunities to create the flow of people are being considered through the expansion of initiatives such as ecotourism and crane conservation activities.

P — **Prepare**
Acceleration of initiatives, including the expansion analysis of the JAL Group's biodiversity-related disclosure contents.

● Examples of Interfaces with Nature and Risks and Opportunities along the Value Chain of the Airline Business



Risks and Opportunities

Loss of biodiversity poses a significant risk to the sustainability of the air transportation business, but managing it can also lead to opportunities.

The table below summarizes the nature-related risks and opportunities assessed based on the dependencies and impacts identified in the workshop conducted with WWF Japan experts in 2023.

In addition, based on expert dialogues with Ms. Hamashima, then Director of the Office of Biodiversity Mainstreaming, Ministry of the Environment, and Mr. Haraguchi of MS&AD Insurance Group Holdings, Inc., a TNFD Task Force member, for example, the table is reviewed annually. In the future, JAL will deepen our assessment of risks and opportunities through analysis of financial impact.

Risks

Types of Risks	Overview of Risks	Actions Taken to Mitigate Risks
Transition Risks - Policies and Regulations - Market - Technology - Reputation	Risk of restrictions on ingredients and commercial products due to stricter regulations on wildlife use aimed at protecting rare species.	• Compliance with internal guidelines based on the IUCN Red List, etc. • Use of sustainable ingredients and commercial products.
	Risk of difficulty securing SAF due to concerns over ecosystem impacts during its production process.	Use of SAFs (e.g., ICAO CORSIA-eligible fuels) that consider feedstocks land use and ecosystem conservation and other relevant factors in the production areas.
	Risk of carbon credits being unusable due to concerns over the negative impacts on biodiversity caused by land-use changes.	Purchase of credits that consider land use and ecosystem conservation and other relevant factors in the production areas.
	Risk of a reduction in the number of passengers due to the depletion of attractiveness at natural tourism destinations caused by overtourism.	Realization of sustainable tourism through appropriate management of the flows of people.
	Risk of damage to brand value due to unintentional involvement in illegal wildlife trade.	Educate employees and collaborate with airport authorities to prevent illegal wildlife trade.
	Risk of damage to brand value due to unintentional transportation of invasive alien species that could harm ecosystems and public health.	Thorough implementation of response procedures upon the detection of invasive alien species.
	Risk of restriction on airport operations due to environmental pollution around airports.	Thorough prevention procedures and post-occurrence response procedures.
Physical Risks - Acute Risk - Chronic Risk	Risk of a decline in total passengers and sales in the air transportation business due to pandemics caused by ecological changes.	• Provide a "safe and secure" air-transportation environment through thorough countermeasures to infectious diseases. • Develop flight operation plans based on passenger demand.
	Risk of a decline in total passengers due to the loss of natural tourism resources caused by ecosystem changes.	Promote efforts to restore natural tourism resources in cooperation with local communities
	Risk of a decrease in the number of flights and sales due to airports being unusable due to natural disasters triggered by environmental changes in the surrounding area.	Preservation of the surrounding environment in cooperation with local airports

Opportunities

Types of Opportunities	Overview of Opportunities	Actions to Expand Opportunities
Business Performance-Based Opportunities - Resource Efficiency - Products and Services - Markets - Capital Flows and Financing - Reputation	Opportunities to create demand for ecotourism.	• Balance tourism and nature conservation by promoting responsible tourism through training of tour guides, etc. • Foster relationships and societal connections through the airline network.
	Creation of commercial and logistics flows through the transportation of ingredients and commercial products derived from rich ecosystems.	Contribution to regional economic revitalization through rapid and fresh transportation of foods and commercial products.
Sustainability Performance Opportunities - Protection, Restoration, and Rehabilitation of Ecosystems - Sustainable Use of Natural Resources	Protection, restoration, and rehabilitation of ecosystems to secure tourism resources.	Implementation of measures such as coral sexual reproduction projects and red-crowned cranes conservations.
	Protection, restoration, and rehabilitation of ecosystems to ensure stable supplies of commercial products.	Use of sustainable commercial materials (such as certified commercial materials) in collaboration with suppliers.
	Contribute to biodiversity through the use of unique airline technologies.	Consideration and implementation of new initiatives through the collaboration between industry and academia.

Metrics and Targets

The JAL Group recognizes that biodiversity is influenced by various environmental issues, including climate change, and is committed to implementing comprehensive solutions.

In addition to setting targets directly related to biodiversity conservation, JAL discloses environmental data such as CO_2 emissions, waste, and water consumption. Furthermore, JAL has been disclosing ESG data in accordance with the Core Global Disclosure Metrics required by the TNFD and will keep expanding this in the future.

● For more information, please visit the company website.
https://www.jal.com/en/sustainability/environment/biodiversity/#indicator

Initiatives	Metrics	FY2025 Targets
Reduction of CO_2 emissions	CO_2 emissions from aircraft	Less than 9.21 million tonnes
Reduction of plastics*1	No use of "new petroleum-based" plastics of JAL original items in airport lounges and cabins	100%
	Percentage of eco-friendly materials contained in cargo and airports*2	100%
Reduction of inflight meal waste	Yield rate	not more than 2.5%
Reduction of industrial waste	Final disposal rate	Maintain below 1%
Preservation and expansion of tourism resources	[Okinawa] Number of grown sexually reproduced corals	1,000 colonies by 2026
	[Okinawa] Expansion of tours related to the sexual reproduction of coral	Expansion of tours
	[Hokkaido] Expansion of red-crowned crane initiatives	Expansion of initiatives
	[Kagoshima(Amami)] Mangrove planting in collaboration with industry, government, and academia*3	Eco-tours: 3 times
Utilization of certified commercial products	Percentage of inflight paper items with international certification in consideration of forest resources	100%
Prevention of illegal wildlife trade	Number of illegal wildlife transports	0 times
Incorporating biodiversity considerations into the ingredients and commercial products	Number of violations of internal guidelines related to ESG risk in ingredients and commercial products	0 times
Reducing the impact on ecosystems surrounding airports	[Tokyo] Number of incidents of improper management of water containing hazardous substances	0 times

*1 Single-use plastic products provided to our customers
*2 Items that do not use new or reduced petroleum-based raw materials, such as biomass, recycled plastic, and certified paper
*3 Project based on an industry-academia-government collaboration agreement with Uken Village, Sophia University, and ITOCHU Corporation

Priority Measures

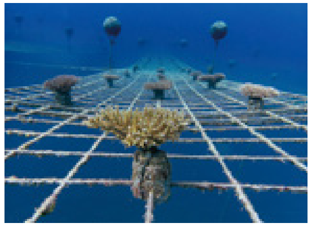
Sexual Reproductive Coral Regeneration Project

Coral reefs in Okinawa are an important natural resource that not only attract people with their beauty, but also play many roles as a place for living organisms to coexist. However, due to rising sea water temperatures and other factors, coral reefs have been depleting and their regeneration is an urgent task.

Since 2020, Japan Transocean Air (JTA), has been supporting coral reef restoration in the Yaeyama and Kumejima regions using the sexual reproduction method by establishing the "Council for Sexual Reproduction and Coral Rehabilitation" in cooperation with local stakeholders.

In May 2024, "complete cultivation" of corals through sexual reproduction was realized, and the raised corals reproduced, achieving great success in maintaining genetic diversity and passing them on to the next generation. In 2024 summer, a large number of natural corals were lost due to bleaching caused by abnormal high water temperatures. However, in FY2025, as in the previous year, coral spawning by the reproduced corals were confirmed. To promote tourism and revitalize the local community, tours are also conducted in support of the coral rehabilitation project, which part of the proceeds being used to pay for the project, thereby contributing to protecting Okinawa's rich marine environment.

The JAL Group will continue to support the sexual reproduction and coral regeneration in order to pass on the rich nature to the next generation.



Purple tipped acropora cultivated on wire-type shelves Courtesy of Yaeyama Fishery Cooperative Association

Spawning
Courtesy of Yaeyama Fishery Cooperative Association

Prevention of Illegal Wildlife Trade

The JAL Group has signed the Buckingham Palace Declaration promoted by the International Air Transport Association (IATA) to prevent illegal wildlife trade. In addition to disseminating internal education and promoting initiatives in the frontline, we are strengthening cooperation with related parties. For example, in 2024, we held dialogues with WWF Japan and Tokyo Customs regarding the transportation of animals and plants, and are working to organize a response flow when illegal wildlife trade is discovered.

In the Amami and Okinawa regions, which are home to many rare wildlife species, continuous measures to prevent poaching and smuggling are being taken cooperating with the ministry of environment and the local governments. In 2024, JAL spoke at a seminar hosted by WWF Japan and explained the details of measures at the front line to prevent rare species from being taken out of Amami Airport, including participation in training to learn about related laws and regulations, and the establishment of a communication network including airport-related organizations when a rare species (or suspected rare species) is discovered. Also the difficulty of responding to the situation in a short period of time just before passengers are about to board their flight was raised, as well as concerns about the future of the island's nature from the perspective of creating a sustainable tourism area due to the large number of wildlife, not just rare species, being taken out of the island.

Since it is difficult for a single company to address these issues alone, JAL will deepen the cooperation with companies and organizations with the same ambitions, as well as continuing to lobby the local government and relevant authorities.

Consideration for Biodiversity Regarding Ingredients and Commercial Products

In July 2022, the JAL Group established internal guidelines for ingredients and commercial products we handle in order to give consideration to biodiversity from the perspective of protecting endangered animals and other issues. We are working to disseminate these guidelines within the Group to correctly understand the importance of biodiversity conservation and recognize the relationship between ingredients and commercial products we handle. These guidelines are reviewed as necessary through discussions with internal working groups in light of regulatory and social trends.

Comment

Achieving Nature Positive through Native Species Conservation and Restoration Activities in Hawaiʻi

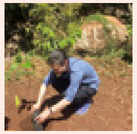
In March 2025, as part of the "'OLU 'OLU! Honolulu!" project on JAL operated flights to Honolulu. I myself participated in the "planting of native species" and "restoration' at the foot of Diamond Head" in Hawai'i, a priority biodiversity conservation area for the JAL Group.

Planting the native species required a lot of effort because each planting was done by hand, but the process of digging in the soil, planting the seedlings, and watering them provided me with an opportunity to imagine the abundance that these seedlings will bring to nature in the future and to feel the strong connection with it.

In addition, restoration at the foot of Diamond Head, organized by a non-profit organization in Hawai'i, involved clearing invasive alien species and turf maintenance. Originally overgrown with invasive species and weeds, illegal dumping and untouched nature had been a problem, but now the area has become a recreational area where locals and tourists gather. Through the restoration, we realized that we were contributing not only to the restoration of nature but also to the enrichment of the lives of the local community.

In order to protect the beauty of Hawai'i's natural environment, which is loved by many of our customers, we will continue our efforts to realize nature positive through our biodiversity conservation initiatives.

● 'OLU 'OLU! Honolulu! Honolulu website
https://www.jal.com/en/sustainability/flight/2024/#anchor_03



CHIMURA Natsuki
ESG Promotion Dept.
Environmental Promotion Group

Basic Concept and Strategy

To fulfill our responsibility of passing on our precious Earth to the next generations, the JAL Group is committed to achieving a circular economy that effectively utilizes limited resources.

In line with the 3R (Reduce/Reuse/Recycle), effective use and conservation of resources will be taken in all aspects of JAL's business operations, by means of reducing food waste and resources, reducing the use of single-use plastics products and conserving water resources, reducing greenhouse gas emissions as well, through these efforts. To achieve this, along with customers, the reduction of food waste and plastic products usage at all touch points is taking place. JAL is also working with our suppliers to reduce waste along the supply chain.

Food Waste Reduction Program p. 116

Priority Measures

Reduction of Single-use Plastics

To address the issue of reducing single-use plastics, which contribute to global warming and marine pollution, the JAL Group established targets in May 2021 aiming for achievement by FY2025. With the cooperation of customers, and through the promotion of the 3R (Reduce/Reuse/Recycle) + 1R (Redesign), regarding all single-use plastics items provided to customers in cabins and lounges, a management target has been set to completely phase out all new petroleum-based products. Also, in cargo and airports, a management target of "switching all items to eco-friendly materials contained" has been set.

● **Management Targets and FY2025 Progress for Reduction of Single-Use Plastics**

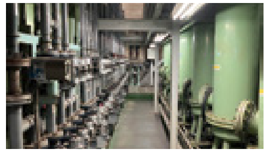
	FY2025 Targets	FY2024 Results
Cabins and lounges: New petroleum-based products	**Total elimination**	96% Eliminated
Cargo and airports: eco-friendly materials contained*	**100% switched**	92% switched

* Items that do not use or reduces the use of new petroleum-based raw materials, such as biomass, recycled plastic, and certified paper

● **Examples of Reduction of Single-use Plastics**

Conservation of Water Resources

The JAL Group is working to conserve and reduce water consumption to address water resource issues. At the aircraft maintenance facility, a target to reduce water consumption by 1 % compared to the previous year has been set. Approximately 240 m³ per day of pure water used in the aircraft maintenance and the component washing process is recycled and recirculated at a treatment facility. The wastewater discharged from the facility is strictly compliant with laws and regulations, and at the wastewater treatment facility in the maintenance facilities the through control of water quality and conservation is being implemented in accordance with the standards. No industrial water is used. At some of our ground facilities, we use gray water and work to conserve water on a daily basis.



● For more information, visit the website
https://www.jal.com/en/sustainability/environment/limited-resources/#anc06

Recycling of Inflight Waste

In accordance with the JAL Group Environmental Policy, as JAL's unique effort from the perspective of resource circulation, recycling of inflight waste is being done by collecting and separating inflight waste such as bottles, cans, PET bottles, used paper cups, newspapers and inflight magazines, collaborating with recycling companies. Since December 2022, on some domestic flights, collecting and sorting of used paper cups for recycling is being done jointly with Nippon Paper Group. Furthermore, along with Tokan Kogyo Co. Ltd., a paper cup manufacturer, a horizontal recycling scheme of "paper cups to paper cups" was established as a three-company collaboration. In June 2024, drinks were served in recycled paper cups on domestic flights departing from Haneda Airport for a limited period. Also, in collaboration with the "choito®" brand, a paper container recycling project by the Nippon Paper Group, JAL sells paper thread towels made partly from recycled paper cups at the JAL SKY MUSEUM, our factory tour facility.