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Strengthening Management Resources

(Human Resources, DX, GX)

What We Want to Convey in This Chapter

- Maximize human capital values, the source of growth
- Utilize intellectual capital to create new innovations and challenges to increase productivity (DX Promotion)
- Measures towards a sustainable natural capital, the basis of a sustainable value creation

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Instill the Significance of Human Capital Management in All Employees to Enhance Value Creation

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Enhance Engagement and Value Creation through Ongoing Investment in Human Capital

The JAL Group defines the ideal candidate profile as one who respects diverse values, takes on the challenge of creating new value, and sparks change. Underlying this definition is the recognition that the driving force behind ESG management is nothing other than human assets, in other words, our employees. We believe that increasing the capabilities and diversity of

individual employees and enhancing their human capital will lead to stronger promotion of ESG management, and that this is also the significance of human capital management as described in recent years.

Looking at our current situation from this perspective, I can confidently say that the strength of our diverse talent is the greatest strength of the JAL Group. At the same time, however, I am concerned that despite the diversity of our talent, there may not be enough opportunities for them to fully demonstrate their individual abilities, and that the environment may not be conducive to this.

In addition, looking at the external business environment, there is the issue of difficulty in securing talented human resources as the birthrate declines and the population ages at an accelerating rate. The volatility risk in the airline industry has become apparent in the wake of the COVID-19 pandemic, and there is a strong sense of urgency that the industry as a whole is becoming less attractive as a place to work.

As senior vice president of Human Resources Division, I will design and promote an effective human resource strategy that can flexibly respond to changes in order to resolve these internal and external issues. The core of this strategy is to prepare a diverse field in which diverse human capital can play an active role through human capital investment to improve engagement* and raise values, thereby creating a virtuous cycle in which the enhancement of creative capabilities is realized, and the results are returned in the form of the next investment in human capital. Investment in human capital enhances each employee's ability to create value, which in turn becomes a competitive edge for the Group and improves its performance. By returning the economic value thus gained to employees, employee engagement will increase. Furthermore, understanding how their business contributes to corporate citizenship activities and how much social value they create will also increase engagement. Increasing employee motivation and ability in terms of both economic and social value will also lead to the creation of new value. Realizing and accelerating this cycle is the human capital management that the JAL Group aims for.

From this perspective, the JAL Group has set indicators for engagement, value creation, and return as the outcomes that human capital management aims to achieve.

*In the Medium-Term Management Plan-Rolling Plan (MRP) 2024, we have positioned the improvement of engagement as one of the results of our investment in human resources. The percentage of highly engaged employees, which is used as an indicator, currently stands at 53.8 percent, and we are working toward our goal of increasing this to 65 percent by FY2025.

Percentage of Highly Engaged Employees

2018	2019	2020	2021	2022	2023	(FY)
56.8	54.4	54.4	51.7	51.7	53.8	(%)

Have Employees Empathize with Human Capital Management

In the Human Resource Strategy Rolling Plan 2024 announced this time, the ideal candidate profile, recognition of issues, and direction of measures remain the same, but the contents and expressions have been slightly changed. This is the result of careful consideration on how to communicate clearly the significance of our human resource strategy and investment in human resources to the employees, and how to make them perceive it as their own matter.

No matter how diverse our talents are, if their vectors are not aligned, it will not lead to the strength of the entire organization. Although the JAL Group has up to now been thoroughly committed to the basic perception of flying aircraft safely, I feel that the awareness of the challenge of creating new value has not fully penetrated throughout the Group. We felt that it was necessary to send a clear message to each and every employee about where we are going so that we can improve our operational efficiency in our existing businesses and become a small but elite organization, while at the same time taking on the challenge of creating new value in new businesses and other areas.

In this plan, the specific initiatives were organized into four categories defined as the medium-to-long term objectives of human resource investment: "Developing capabilities," "Increasing diversity," "Expanding the field of success," and "Gaining

knowledge,” along with “Foundational initiatives.” Additionally, by setting specific numerical targets for each category, we clearly communicated to employees “what kind of talent we want them to grow into.”

Emphasis is placed on our foundational initiatives. In other words, to build a base where our diverse human resources can act in a variety of areas. Personally, I find this to be the first and foremost continuous measure that should be implemented. To do so, there are two pillars, namely to practice JAL Philosophy (refer to page 24), which summarizes the attitude and values that all JAL employees must hold, and to promote Health and Productivity Management where each and every employee can display their individuality and abilities. JAL Philosophy, which has been penetrated within the JAL Group, must be handed down to the next generation. Organically linking the practice of JAL Philosophy in each department will also evolve in building new value creative measures.

The content and progress of each initiative will be described in detail in the following pages. If I would choose one point, it would be the focus on DX Human Resource Development, which is part of gaining knowledge. Building digital value is an indispensable element in future sustainable growth. Regardless of the division or specialty, it is necessary for each and every employee to possess the mindset and knowledge to examine how they can incorporate digital technology into their jobs. Of course there is a difference in the extent of knowledge required in each job, but we are considering measures under this understanding and enabling each and every employee to fully demonstrate his or her individuality and abilities.

Work to Strengthen Human Resources as a Representative of the Employees

In assuming the important responsibility of senior vice president, Human Resources Division, I see my role as a representative of the employees as well as a part of the top management.

Looking back on my own career, I realize that there are many capable employees around me, both senior and junior, and I truly feel that the JAL Group's talent is second to none. On

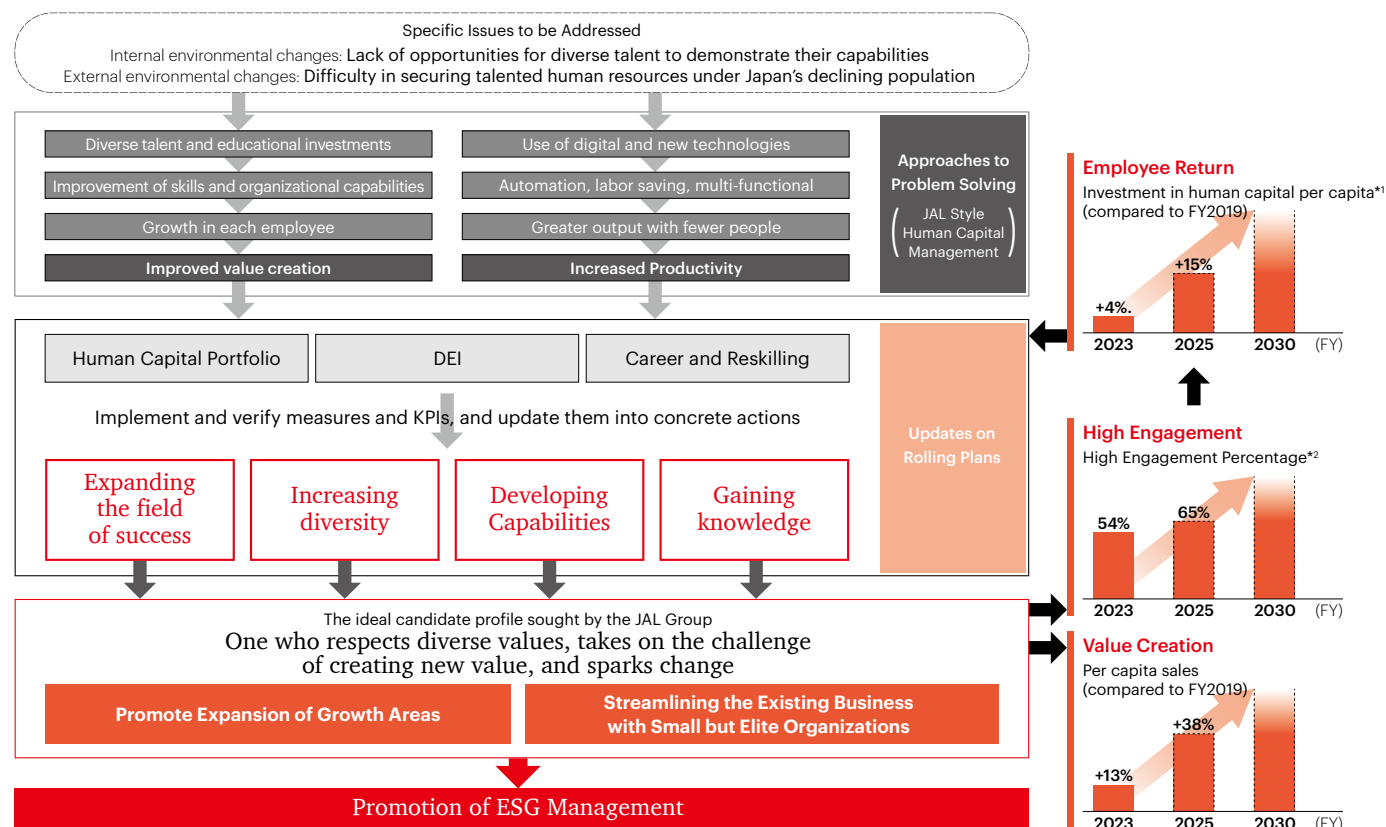
the other hand, I often feel that it is a waste of talent for the Group if the employees are unaware of their own value or do not fully utilize it. My mission is to further enhance the value of human assets, and to link this to the overall value improvement of the Group.

Therefore, what I emphasize is maintaining close communication with our employees. As an example, we gathered young and mid-career employees from various organizations to thoroughly discuss what our human resource policies should

be. The ideas from these discussions are being utilized in the initiatives we are currently working on. Feedback from the employees is positive, such as, “It is concrete and easy to understand,” and “I feel a change in how deeply we are delving into these matters.” We are definitely feeling a change.

We promise to continue to work together with our employees to confirm and verify the results of our human resource strategy and human capital investment.

Update on Human Resource Strategy



*1 Basic wage per employee + development investment amount *2 Ratio of employees, who selected 4 or 5 in the 5 scale employee awareness survey.

Human Resource Policies ① Expanding the Field of Success

When aiming at creating value by leveraging diversity, and with the increase of human resources with a diversity of attributes and experiences, there were restrictions in appointing and arranging the activities of our employees due to a uniform of standards based on the number of working years and age. In order to enable the JAL Group's talent to maximize their individual abilities, we are removing these constraints through three measures: "abolishing the seniority system and allowing young employees to be promoted earlier," "internal transfers through open recruitment" and "promoting active participation of senior employees."

By creating an environment in which employees of all ages can play an active role with greater motivation and autonomy, the JAL Group will work to improve productivity and create new value.

System to abolish the seniority system and promote younger employees

As the business environment changes rapidly, operations are becoming more sophisticated and complex. It has become important to encourage employees to develop in a faster pace than ever before, and to lead them to further success. To this end, from FY2024, we have revised the system to enable employees with high ability, regardless of age or years of experience, to be assigned and promoted to posts and grades according to their ability. We plan to proactively publicize examples of successful appointments within the Group to promote the growth and success of our employees. In this way, we will create an environment where diverse talent can take on

Details of the Revised System

- (1) Introduction of a system for selection and promotion regardless of the year of appointment
- (2) Elimination of the applicable period of time in grade and post-hire period requirements from the promotion review process

Measures and KPIs	Indicators	FY23 Results (Estimate)	FY24 Target	FY25 Target
A system that abolishes the seniority system and allows younger employees to be promoted at an early stage	—	Finalized the system design	Expand appointments	
Internal and external transfers through open recruitment	Number of transfers	85 persons per year	100 persons per year	
Promoting active participation of senior employees	—	Finalized the system design	Expand the role	

challenges and demonstrate their abilities, leading to the creation of value for the Group.

Internal and external transfers through open recruitment

We are building an environment in which each employee can develop their own career based on their own abilities and interests, and on their own initiative and responsibility, allowing them to proactively design their careers and demonstrate their abilities even in rapidly changing business environments. Transfers through open recruitment was introduced with this concept in mind and was initiated as part of the autonomous career policy. In FY2022 there were 30 such transfers, but in FY2023, the number increased to 85 across the Group, with a gradual increase in domains, including transfers to head office departments, airports outside Japan, group airlines, and other locations. Open recruitment was also held for the new Doha branch office which began operation from April 2024. We will continue to work



JAL staff in Doha who transferred to the Doha branch through internal recruitment process

towards our goal to transfer 100 employees per year.

In addition to this open recruitment system, in

FY2023 we introduced a new Self-nomination Assignment System that allows employees to raise their hand to be assigned to a department where they can envision their own career path. The system allows employees who meet certain criteria to specify the department they wish to transfer to, undergo selection, and if they pass the screening, be assigned to the desired department. In FY2023, the first year of the program, two employees were transferred under this system. We will continue to periodically implement this program to improve employee autonomy. Through these two measures, we are expanding the career options of our employees.

Promoting the active participation of senior employees

For the JAL Group to achieve sustainable growth and increase its corporate value, the active participation of each individual talent is indispensable. Senior employees with abundant experience and skills are expected to demonstrate their abilities even more.

From October 2024, we will revise systems related to senior employees.

The new system will expand their roles, revise job descriptions and remuneration, and promote further active participation of senior employees through their proactive involvement in duties and talent development. This will enable senior employees to envision career plans that leverage their experience and allow them to remain active for longer, thereby enhancing engagement.

Human Resource Policies ② Increasing Diversity

The JAL Group aims to be diverse in both attributes and knowledge including experience. We will transform ourselves into a highly diverse company to enhance our corporate value and business potential over the medium to long term. Through measures such as “promotion of women to management positions,” “hiring non-Japanese employees in Japan,” “dispatching overseas employees to Japan,” and employment of people with disabilities,” we will create an organization where diverse human resources work and incorporate various perspectives, experiences, and knowledge.

We will continue to strive to create opportunities to play an active role without being bound by stereotypes, and to become a company where everyone can develop their own career in their own way.

Promoting more women to managerial positions

We continued our efforts to achieve a 30 percent ratio of female managers in the JAL Group. As of March 2024, the proportion of female managers has increased to 29.8 percent.* We appointed our first female representative director, and as of April 2024, there are eight women executives, bringing the ratio to 22.9 percent. We are making steady progress in diversifying the decision-making bodies at all levels and are striving to enhance corporate value through the creation of new value by ensuring diversity.

Women being promoted to branch and regional managers and airport station managers in each region has accelerated, bringing the total to 27, an increase of four from last year. We continue to expand opportunities for the active roles for women by promoting them cross-functionally based on their abilities. We are also promoting women to management positions in male-dominated workplaces, focusing on narrowing the gender gap in the workplace.

We have also established an ability-based advancement system, including early advancement, and a career support system to create a workplace where not only women but also

Measures and KPIs	Indicators	FY23 Results (Estimate)	FY24 Target	FY25 Target
Promotion of women to management positions	Proportion of female managers	29.8%	Expanding appointments	
Employment of non-Japanese in Japan	Number employed	88 persons per year	Scale of 80 persons per year	Scale of 100 persons per year
Dispatch of overseas hired staff to Japan	Number of dispatches	64 persons per year	Expanding the scope	
Employment of people with disabilities	Number of jobs (vs. FY2022)	+15%	+20%	+30%

everyone who are highly motivated can pursue their desired career. We support the autonomous career development of each employee through various means, such as the JLCAREER, a self-career dock by in-house career consultants, autonomous career development training that allows employees to experience work in other departments, and internal transfers through open recruitment. By creating a workplace where all employees with diverse backgrounds can play an active role, we will maximize the power of the organization and enhance corporate value through the creation of new value.

*This tabulation has been changed to managers who lead the organization (organizational managers) since FY2024.

Proportion of female managers



Active participation of non-Japanese employees

In FY2023, we hired 88 non-Japanese employees in Japan, mainly in the ground handling and maintenance areas. In addition to various types of training and on-the-job training, we also provide Japanese language education, support to blend into Japanese culture, daily life assistance, and promotion of in-house understanding of the culture of the country of origin. We also clearly define career paths and enable career development regardless of nationality. By increasing interactions among employees with diverse cultural backgrounds, we expect to further foster a global mindset and create new value.

Active participation of employees with disabilities

The JAL Group employs over 800 employees with disabilities. Each company within the JAL Group actively promotes employment, enhancing diversity in experience, sensitivity, and values in areas that make the most of individual abilities. In addition to creating an internal environment in which employees with disabilities can work with vigor, we continue to provide various training and programs to deepen the understanding of disabilities among all JAL Group employees. In addition, as new areas of activity, we continue to take on challenges such as plans to improve accessibility for our customers, and provide services like hand-drip coffee and shoe polishing at the JAL First Class Lounge for international flights at Haneda Airport.

Human Resource Policies ③ Developing Capabilities

We believe that in developing individual abilities, it is necessary to have a wide variety of experiences outside the Group and abroad, as well as experience in taking on the challenges of major goals. To this end, we will provide numerous opportunities for employees to develop their abilities through initiatives such as “secondments and dispatches within and outside the Group,” “overseas and external dispatches within the first ten years of employment,” and a “performance-based remuneration system.”

We attempt to realize a business structure reform by having employees with diverse experiences inside and outside the JAL Group as well as overseas, work with high motivation to achieve major goals and maximize and further develop their abilities.

Secondments and dispatches within and outside the group

The JAL Group actively promotes the secondment and assignment of employees within and outside the Group to gain a wide variety of experiences in different environments.

Due to the significant reduction in the number of flights during the COVID-19 pandemic, many of our employees, including cabin attendants, were seconded to positions outside the company. As a result, they were able to gain a variety of experiences that they would not have had under normal circumstances. These experiences led to the development of each employee’s abilities, and now they are contributing to the creation of new businesses and other future projects that are contributing to the growth of the JAL Group. Thus, even after the COVID-19 pandemic was contained, we have continued this system.

In FY2023, we conducted secondments and dispatches for approximately 450 employees annually, allowing them to gain a wide variety of experience in various industries outside the Group, including public organizations such as national and local government agencies, and private enterprises such as various industry organizations, transportation infrastructure, trading firms, and start-up companies. We will continue to do so in the future with a target of 500 employees per year.

Measures and KPIs	Indicators	FY23 Results (Estimate)	FY24 Target	FY25 Target
Secondment and dispatches within and outside the Group	Number of secondments in the Group	450 employees per year	Scale of 500 employees per year	
Overseas and external assignments within the first ten years* of employment	Number of assignments	46 employees	Scale of 100 employees per year	
Performance-based remuneration system	Number of posts introduced	Expanded to nine posts	30 posts	100 posts

* Planning for Japan Airlines businesses

Overseas and external assignments within the first ten years of employment

By proactively sending employees overseas and outside the Group at an early stage in their careers, particularly those within their first ten years of employment, we aim to place them in environments where they can challenge themselves while being exposed to diverse values, thereby expanding their range of experiences, and adding depth to their subsequent growth. We believe that this will provide employees with experiences that they would not be able to gain from domestic internal positions, and we will work to expand their capabilities through this program.

In FY2023, 46 employees were newly dispatched overseas and outside the Group. As an example, our employees were assigned to our overseas branch offices as well as short-term employment at companies in different industries in Asia, and

training to companies in Silicon Valley in the U.S.A. We will continue to dispatch young employees with the goal of 100 persons per year.

Expanding the performance-based remuneration system

The JAL Group expects high performance from Group companies that play a central role in business structure reform. Therefore we introduced a remuneration system with a significantly higher performance-linked ratio for the presidents of certain Group companies, effective from FY2022. The introduction of this system will create a virtuous cycle that motivates and encourages employees to take on further challenges by creating opportunities for them to gain experience in achieving major goals, thereby developing their abilities, and rewarding them with remuneration commensurate with the results they have achieved. This will encourage the creation of new value, such as business expansion in new business areas and diversification of revenue sources.

In FY2023, we increased the number of eligible Group companies. Currently we have introduced this system for a total of nine positions. We are aiming to expand the number of positions covered by this system to 100 by FY2025. We plan to achieve this ambitious goal not only by increasing the number of Group companies covered by the system, but also by gradually expanding the system to positions other than president roles.



Training in the U.S. A. as part of an overseas dispatch program

Human Resource Policies ④ Gaining Knowledge

In order to enhance the sustainability of the JAL Group's business potential, it is necessary to deepen the experience and knowledge in areas that the JAL Group has cultivated over the years, such as aviation, while at the same time proactively incorporating the experience and knowledge from outside the Group that is needed in new areas. Through "Career Recruiting," "Human Resource Policy for Highly Specialized Personnel," and "DX Human Resource Development," we will incorporate both types of experience and knowledge to ensure the sustainable growth of the JAL Group.

Expanding career recruitment

JAL Group actively recruits people in order to acquire human resources with skills and experience honed in various industries and environments for the future diversification of our business. Many of our experienced employees are working in fields that require a high level of knowledge, such as business creation and digital promotion, and are working to create new value by leveraging their diverse knowledge from outside the Group. Many career hires are promoted to management positions and are involved in important decision-making in the Group.

From FY2022, we have established a platform called JAL Next Career GATE and have begun year-round recruitment. We also offer the JAL Alumni Network as a platform for interaction between JAL and former employees who have since moved on to other fields, facilitating career return hires through this network. Furthermore, from FY2023, we have also introduced referral recruitment as a way to accept highly trusted human resources as colleagues through referrals from employees.

Through these various recruitment methods, we have set a target of increasing the ratio of career hires to 50 percent per year in FY2025. In FY2023, we already covered 40 percent, and will continue our efforts in career recruitment to achieve this target. We will continue to actively incorporate knowledge from outside the Group by hiring people with a high level of expertise and diverse knowledge and experience, thereby increasing the

Measures and KPIs	Indicators	FY23 Results (Estimate)	FY24 Target	FY25 Target
Career Recruitment	Career Recruitment Ratio	40% of annual hiring	50% of annual hires	
Human Resource Policy for Highly Specialized Personnel	—	Finalized policy design	Policy Implementation	
DX Human Resource Development	Training participants	Specialized education 80 students	Basic training/all employees, specialized training/900 employees	

diversity of knowledge within the Group and leading to the sustainable growth of the JAL Group.

Introduction of a human resource policy for highly specialized personnel


Since FY2024 the JAL Group introduced a Human Resource Policy for Highly Specialized Personnel due to the importance and scarcity of highly specialized talent with the increasing diversification of business and sophistication of operations.

Under the previous system, career paths were limited to those aiming for managerial positions in the organization, making it difficult for them to develop their careers based on their expertise, despite the increasing importance of highly specialized talent. In addition, because the Group did not have a system in place to appropriately reward highly specialized talent, it was unable to systematically train and secure the human resources needed to carry out its business potential. In response to these issues, we have changed the career paths of our employees to a double-track system that allows employees to aim for either traditional managerial positions, which require organizational management, or highly specialized positions, which require highly specialized skills. In addition, we have established a system in which highly specialized talents are evaluated based on the substitutability and scarcity of their expertise, and their compensation is determined. The system will be applied to both the aviation business domain and the growth domain for the positions that fall under this system.

This will enable new career paths for personnel with highly specialized duties to support the airline business domain and growth areas, increase employee engagement, further promote value creation by leveraging advanced expertise, and promote the development of human resources for the targeted duties.

Human resource development programs

The qualities expected of JAL Group employees are defined in the JAL Philosophy, and we conduct personnel exchanges that transcend the boundaries of companies and job categories within the Group. In addition, we are developing leaders and safety and service professionals through specialized training for each job category and each company's own education and training. To create new value, we will continue to expand our investment in human resources and increase more development opportunities inside and outside the company.

 JAL Group Basic Education and Training Program
<https://www.jal.com/en/sustainability/human/career/#training>

DX Human resource development

The JAL Group is promoting its DX strategy through Customer Experience (CX) and Employee Experience (EX). To accelerate a systematic DX, under the acknowledgement that a human resource development program is indispensable, we launched a DX Human Resource Development Program in November 2023.

We have defined the roles and required skills for each human resource profile and are currently developing DX human

resources through six programs. To ensure the effectiveness of the development, we will not only provide training programs, but also integrate them with career paths, assign and place them to actual projects, monitor and follow up on training and results, and establish a system that enables the creation of sustainable business results and the formulation of improvement measures.

Among the six programs, the Strategy Program and the Transformation Promotion Program include not only classroom learning but also case studies and practical coaching. These programs aim to develop human resources who can understand business and customer experience challenges, comprehend digital technologies, conceptualize DX strategies, and embody project planning and promotion. The Utilization Program also goes beyond classroom learning, using case studies and practical support to develop human resources who can identify optimal solutions and digital tool usage from business challeng-



Snapshot from a Design Thinking Lecture

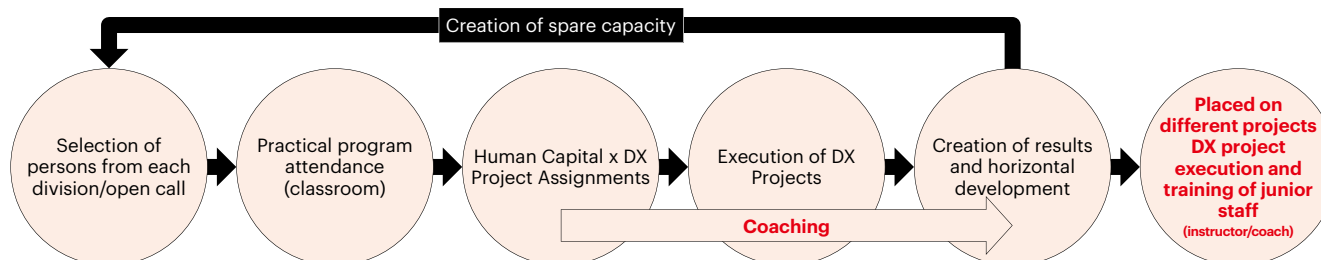
es and independently drive improvements in their immediate work environment.

In addition, the Awareness Program for all JAL employees involves creating a common language and fostering a mindset for the formation of a DX culture through dialogues among employees in workshops. We will continue to systematically develop DX human resources.

Outline of DX Human Resource Development Program

Program	The Kind of Human Resources We Aim For	Learning
Executive Program		
Digital Strategy Program Management for Vice Presidents	People who "drive the formation" of DX culture	<ul style="list-style-type: none"> Transformation mindset Deepen and promote understanding of DX
Digital Strategy Program in Practice	People who "design" DX	<ul style="list-style-type: none"> Transformation mindset Deepen and promote understanding of DX
Digital Transformation Promotion Program	People who "plan and execute" DX	<ul style="list-style-type: none"> Mindset and skills for DX strategy development
Digital Utilization Program	People who make everyday work inconveniences "easier"	<ul style="list-style-type: none"> Improve operations with digital tools
Digital Awareness Program	People who make DX "take root as a culture"	<ul style="list-style-type: none"> Creation of a common language and mindset for the formation of DX culture

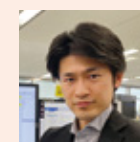
System to Realize Both Human Resources Development and Business Results



Comment

To be the center of the vortex and create a great wave of change

This program was a very practical opportunity for me to learn not only the skills and knowledge, but also the thinking necessary for a leader to promote change and solve actual business problems. I strongly feel that I would like to use what I learned to create new value for the airline group, not only in my position at the Airport Operations Division, but also through collaboration in many other areas beyond the boundaries of the division and the Group. I also consider it my mission to pass on what I have learned through the program to my colleagues in the workplace, and I will work to help build momentum for change throughout the JAL Group.



MATSUSHIMA Juntaro
JAL SKY Co.,Ltd.
Station Operation Administration, Narita
Deputy Vice President

DX is accessible and easy for everyone

After attending the Digital Utilization Program, I felt that DX should be something that is familiar and can be handled by anyone. The instructor told us that it is important not to suddenly create a perfect program, but to gradually improve a small program with colleagues. In order to achieve this, I would like to deepen my understanding of DX by first deploying what I have learned in my own organization, and then creating an environment where my colleagues can actually use the program I have created and easily improve it, so that they can feel more familiar with DX.



KAKEGAWA Kohei
JAL SKY Co.,Ltd.
Airport Operations
Haneda Division

Human Resource Policies ⑤ Foundational Initiatives

The JAL Philosophy and Health and Productivity Management are the very values of the JAL Group and the foundation of the JAL Group's human capital. We believe our human resource strategy will thrive on this foundation. Through initiatives to "revitalize the organization to put the JAL Philosophy into practice by organizational managers" and "promote Health and Productivity Management," we aim to strengthen our foundation, increase engagement, and maximize the power of our diverse talent, which is the greatest strength of the JAL Group.


Organizational revitalization through the practice of the JAL Philosophy

Human resources are the driving force to enhance the sustainability of our business and create social and economic value. One of the measures we are taking to increase the depth of our human resources is to focus on developing managers, who are the key to organizational vitality, based on the JAL Philosophy.

The true leader that the JAL Group aspires to be is a leader who can accomplish their assigned tasks, is respected by their subordinates, and can build trusting relationships with them.* For managers who are in constant contact with team members, it is crucial to look after, talk to, and encourage them in their daily work.

The JAL Group has established workshops for managers and opportunities for continuous interaction with external organizations as a chance to reflect on our own actions based on the JAL Philosophy, returning to this fundamental yet challenging issue. The Leader's Workshop for managers provides an opportunity for participants to bring their own organizational issues and find clues to solving them through cross-occupational advice. It also serves as a forum for building a vertical and diagonal network of managers through candid discussions. To create new social and economic value, we value opportunities for managers to broaden their perspectives as members of society and to create connections within and outside the Group.

*Based on the JAL Philosophy Pocketbook "Follow the Merit System"

Measures and KPIs	Indicators	FY2023 Actual (Estimate)	Target for FY2024	Target for FY2025
Organizational revitalization for organizational managers to practice the JAL Philosophy	Participation rate of organizational managers in Leader's Workshop	99.6%	100%	
Promotion of Health and Productivity Management	Selected as a Health and Productivity Stock Selection (JAL)	Selected	Selected	
 健康経営銘柄 2024 Health and Productivity	Number of companies selected for Certified Health & Productivity Management Outstanding Organizations Recognition Program (compared to FY2022)	+13% (26 companies)	+20% (+20%)	+30% (+30%)

Promotion of health and productivity management

JAL has been selected as one of the 2024 Health & Productivity Stock Selection for the sixth time, and 26 companies in the JAL Group have been certified as 2024 Certified Health & Productivity Management Outstanding Organizations Recognition Program. We will continue our efforts, reaffirming that health is the main foundation in taking care of the valuable lives of our customers.

• Both Wheels Supporting Health and Productivity Management

As part of JAL Wellness 2025, we will collaborate with each and every member of the JAL Group and the Japan Airlines Health Insurance Association to address the five key issues: lifestyle-related diseases, cancer, mental health, tobacco control, and women's health. Our goal is to achieve well-being for employees and their families and realize our Corporate Policy.

Additionally, based on our basic policy on Occupational Safety and Health Policy, we will deepen our efforts with the ultimate goal of achieving zero occupational accidents, create a workplace environment where employees can work safely and with peace of mind, and improve productivity. For flight crew health management, industrial physicians, medical specialists, public health nurses, and nurses meticulously monitor the physical and mental health of each individual, providing appropriate support to ensure the safe operation of every flight.

With the strong belief that the health of all JAL Group employees supports aviation safety, we will continue to work on Health and Productivity Management, the foundation for

improving employee engagement and creating value, by creating a work environment where each of our diverse talent can fully express their individuality and abilities.

Highlight

Athlete Employee Activities

Ten athlete-employees work for JAL, among which three participated in the Paris 2024 Olympics and won three medals.

Our JAL athlete-employees hold JAL Athlete Academies across Japan to teach children the joy of sports and give advice on improving their athletic skills. This activity helps increase interaction and connection with the local communities, contributing to the development of the next generation and the growth of related population. JAL will continue to support our athlete-employees as a united team, taking on challenges together and creating value that leads the way. Through these efforts, we aim to contribute to the progress and development of society.



Photo:YUTAKA/AFLO SPORT Photo:NIKKAN SPORTS/AFLO Photo:USA TODAY Sports/Reuters/AFLO

Japan Airlines is an official supporter of TEAM JAPAN in the category of passenger air transportation services.

From left to right, the athletes who participated in the Paris 2024 Olympics: KANO Koki (Fencing - Épée), MURATAKE Rachid (Athletics - 110m Hurdles), KITAGUCHI Haruka (Athletics - Javelin Throw).

Accelerate the Creation of New Value through the Use of Advanced Technology

SUZUKI Keisuke

Executive Officer

Senior Vice President, Digital Technology Division



Establish a New Digital Organization

In April 2024, the JAL Group established a new Digital Technology Division by integrating the existing Digital Innovation Division and IT Planning Division in order to strongly promote company-wide DX.

The purpose of this integration is to break down the organizational barriers of “offensive IT” and “defensive IT,” unify

DX strategies and chain of command, and consolidate digital human resources. By combining the digital value creation cultivated by the Digital Innovation Division with the IT Planning Division’s expertise in system infrastructure construction and stable operation, we will have a stronger driving force to realize company-wide DX involving all divisions.

DX as a Source of Corporate Value Creation

The rapid environmental changes that have occurred in recent years surrounding the digital world have presented us with a strong sense of urgency. Digital technological innovation and its penetration into society has accelerated, and digital has become an integral part of all business activities and consumer behavior. From the perspective of intellectual capital utilization, new technologies such as generative AI and robotics are emerging one after another, fundamentally changing business structures.

Under these circumstances, it is important for companies to make effective use of the wealth of customer data accumulated by their business units on a company-wide scale. Another major challenge is the shrinking of the productive workforce due to the declining birthrate and aging population. In order to maintain and improve service quality with a limited number of staff, it is necessary to increase operational efficiency through digitalization.

The Group needs to shift to value-creating work that only people can do, and employees need to shift to value-creating work that only people can do. This is precisely what is required: an optimal relationship between people and digital technology. Digital is not just a tool; it is the foundation of corporate activities and the source of business competitiveness and differentiation.

DX, which enhances a company’s ability to create value through the use of digital and data, is a pillar of our business strategy and a driver of sustainable growth. Based on this recognition of the current situation, we will rethink the conventional DX by Business Division and by organization and accelerate Group-wide DX by aligning our efforts under a Group-wide strategy and policy.

DX Vision

In order to make this aim clear both internally and externally, together with the announcement of the Rolling Plan 2024, we have set forth the DX Vision of “providing new social and economic value through transformations brought about by the use of digital technology, and realizing a society and future where many people and many things can freely move in and out of each other’s lives, and where people can feel at home.

DX Vision is to create greater value for our customers and society through three transformations. The first is a company that continues to grow (i.e. change the company). We will evolve into a company that is resilient to change by taking on the challenge of new business areas through data-driven strategies and decision-making. The second is services that exceeds expectations (i.e., changing the customer experience). From the customer’s perspective, we will provide a smooth, comfortable, and stress-free service experience. The third is a sustainable future (i.e. a changing society). We will contribute to corporate citizenship activities to revitalize local economies in cooperation with all types of transportation services, and through GX promotion and other initiatives, we will actively work to solve environmental problems and achieve a sustainable society.

These transformations will be driven by both Customer Experience (CX) and Employee Experience (EX). We aim to provide personalized services by carefully understanding the needs of each individual customer, integrating and centralizing the valuable customer data accumulated by the JAL Group, and providing optimal services and information based on the customer’s needs and behavioral history. At the same time, we will also provide personalized CX services for airport and in-flight operations. At the same time, by introducing IoT to airport operations, in-flight operations, and other operations, we will build an environment where employees can provide more customer-oriented services. For example, the automation of baggage transfer using sensors will reduce workload and ensure safer and more reliable transportation. Through these efforts, we will provide customers with high-quality services and employees

with a rewarding work environment.

DX, a company-wide challenge

In order to successfully promote DX, it is essential that the Digital Technology Division not only take the lead, but that the business units that are actually responsible for the business collaborate deeply with each other and create a “co-creation” relationship together. In order to unify the entire company, strong promotion from both the top-down and bottom-up perspectives is also important. Based on this concept, it is important for top management to establish a DX promotion policy, plan.

The Digital Strategy Board was established as a forum for discussion and progress management toward achieving the company-wide DX roadmap by clarifying plans, prioritization, etc. Furthermore, by appointing a DX promotion leader from each division to the Digital Technology Division, we aim to strengthen collaboration with business units and shorten the distance between the division and the frontline, thereby facilitating smoother cooperation. Through these efforts, we aim to improve corporate value by establishing a truly data-driven corporate culture in which the entire organization and each and every employee can make maximum use of digital technology.

Accelerating Transformation through IT Infrastructure and Human Resource Development

In order to accelerate value creation, we need an environment where each and every employee can take on the challenge of new transformations by making full use of digital technology. To this end, we are focusing on the development of a “DX promotion environment. Specifically, we will realize an environment where employees can both feel secure and take on challenges without being restricted by time or place, based on the two pillars of strengthening IT infrastructure and DX human resource development involving all employees.

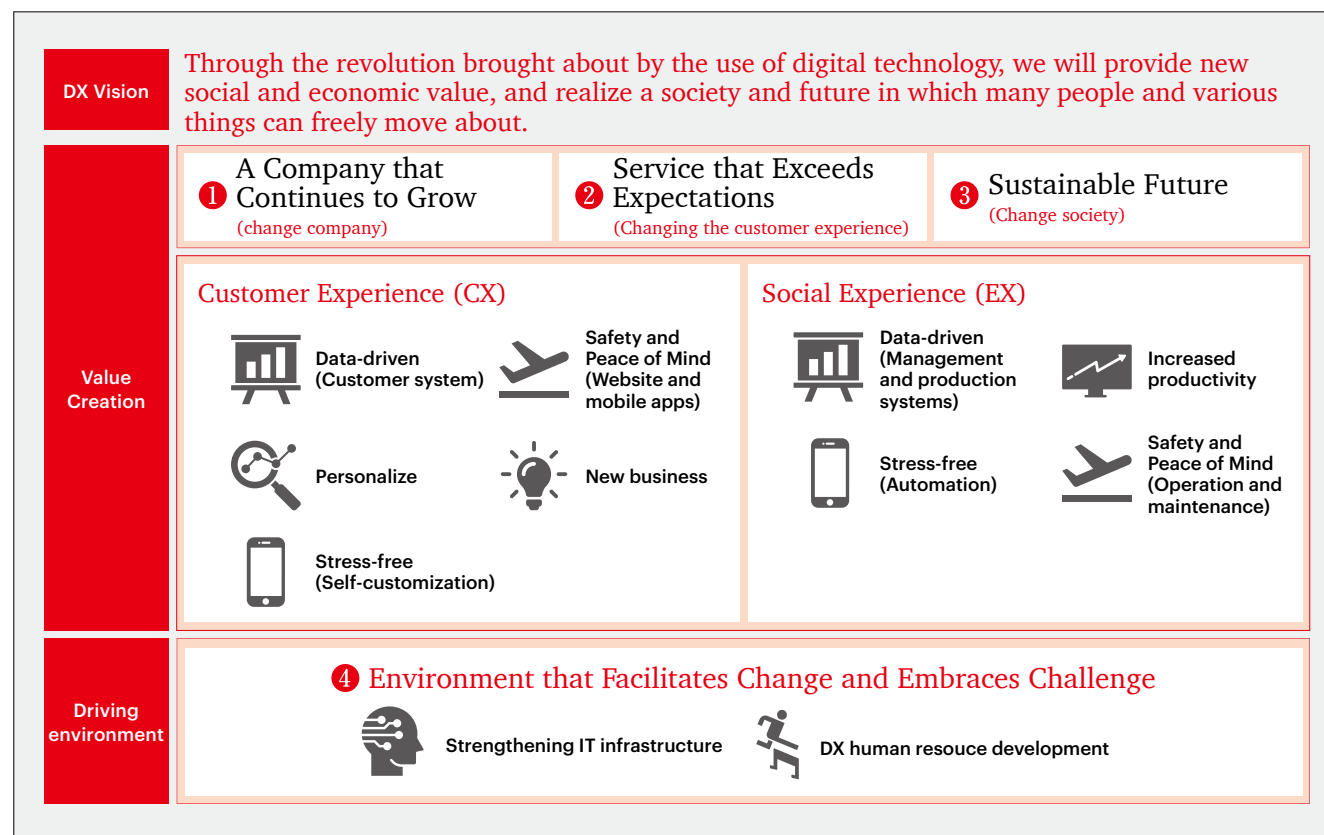
Under IT Infrastructure Enhancement, the JAL Group will enhance security and fault handling to create a flexible and scalable system. By utilizing cloud services and advanced

technologies, the JAL Group will create an environment that can respond quickly to business needs. We will also create an environment in which employees can focus on creative work by improving operational efficiency through AI and promoting information sharing through data collaboration, thereby improving productivity and ensuring stable system operation. Furthermore, by deploying a secure IT environment on a global basis, we will promote flexible workstyle and aim to improve employee work comfort and productivity.

The DX Human Resource Development Program has been

launched for all Group employees in FY2023 to promote a change in awareness DX is a means to achieve transformation, and human resources are the key to this transformation. The program aims to shift from a workstyle that relies on experience and intuition to a logical, data-driven workstyle, and to foster a culture that accelerates the use of digital technology. We aim to improve the digital skills of all employees by providing step-by-step training programs tailored to their respective roles, from digital awareness for all employees, to digital utilization, digital transformation promotion, and even digital strategy planning and management.

Overall DX Strategy



Measure Heretofore

JAL is evolving in the areas of CX/EX, IT infrastructure, and security, aiming to create new experience value for customers and create a rewarding work environment for employees by combining the power of diverse human resources and digital technology. In FY2023, JAL will make significant progress in the areas of data, AI and advanced technologies, and mobile, we have made great strides in creating a stress-free travel experience by digitally and seamlessly connecting all customer touchpoints.

In the CX area, we have expanded the number of airports where JAL SMART AIRPORT is available, enhanced the functions of the JAL mobile app (flight cancellation and delay handling, expanded payment methods), and created an environment that provides a more seamless travel experience for each and every customer, from the airport to inflight through boarding procedures using facial recognition technology. In addition to airline services, we are also striving to provide a more comfortable experience through the JAL brand in everyday life, such as JAL Pay and JAL Mall.

In the EX area, JAL Engineering, which is responsible for the JAL Group's aircraft maintenance, has set a vision of Zero Zero 100 and is promoting predictive maintenance using digital technology. Since 2016, JAL Engineering, which is in charge of aircraft maintenance for the JAL Group, has been collaborating with partner companies possessing cutting-edge digital technology to predict aircraft failures and perform maintenance before they occur, aiming for zero defects for both customers and employees and a 100% on-time departure maintenance service rate. In FY2023, we further deepened the development of (1) failure prediction algorithm development, (2) image diagnostic tool development, and (3) aircraft maintenance plan optimization mobile app development by utilizing AI and quantum computing technologies.

Our IT infrastructure is ready to respond flexibly and quickly to the rapidly changing business environment and diverse business challenges through the use of advanced

technologies. In addition to advanced initiatives such as Generative AI, quick development through the use of cloud computing, and introduction of low-code and no-code development products, we have also developed an IT-BCP that utilizes cloud computing services. Through these initiatives, we are developing new business at an unprecedented speed and enabling user departments to take the initiative in developing applications in a flexible manner. Furthermore, we have established a team dedicated to promoting efficient application development using cloud technology and are vigorously promoting DX from both software and hardware perspectives. As a result, an IT environment that supports diverse workstyles has been realized. The introduction of secure PCs that can be taken outside the office has enabled flexible workstyles from

any location, even for contact center work that was previously difficult to work from home and for work that requires high-specification computers.

On the security front, the company implemented a Secure Access Service Edge (SASE) product throughout the entire company to enhance safety in Internet-based operations. In addition, by converting from traditional e-mail and on-premise file sharing to cloud-based communication tools and storage services, the company has achieved greater operational efficiency and secure information sharing.

This is the second consecutive year that the JAL Group has been selected as a DX Issue 2024 by the Ministry of Economy, Trade and Industry, the Tokyo Stock Exchange, and the Information-technology Promotion Agency, Japan.

Highlight

DX promotion in the maintenance department in pursuit of Zero-Zero-100

(1) Failure prediction algorithm development

To improve failure prediction, which was based on the knowledge and experience of engineers and aircraft maintenance engineers, we have been developing algorithms using big data since 2016; in 2021, we will introduce data-driven analysis technology using AI; in 2023, together with the expansion of external partners, we will search for relevant data from the vast amount of data and begin to validate the usefulness of anomaly detection technology to address known and unknown failures. Along with improving the accuracy of advance line maintenance, the technology contributes to reducing line maintenance disruption and CO₂ emissions.

(2) Diagnostic imaging tool development

In 2019, we will begin a joint research project with Cresco Inc. on image analysis in engine endoscopy. By applying image recognition AI technology and machine learning in the field of ophthalmology to aircraft maintenance, AI can learn engine endoscopy and more reliably detect signs of malfunction, enhancing safety and peace of mind.

(3) Development of a mobile app to optimize aircraft maintenance plans

Aircraft line maintenance plans are developed by taking into account a

vast array of constraints, including aircraft usage, number of maintenance engineers, deadlines for maintenance items, hangar capacity, airports where maintenance is performed, number of maintenance equipment, to name a few. Starting in 2021, A-Star Quantum and Quantity Trial using quantum computing technology was initiated, and over a period of two years, the know-how of veteran employees was converted into data, leading to the development of a practical mobile app that takes into account the constraints of the project. This will enable more efficient maintenance work and advance maintenance and will also contribute to social application of quantum computing technology and resolution of social issues.



Future Vision Focused on AI

The JAL Group is using JAL-AI, AI available in natural language, to improve customer service and promote efficiency and automation of internal operations. The evolution of digital technology, especially the rise of generative AI, is transforming the digital space into a new arena for value creation. Capturing this trend, DX using AI will be accelerated.

Specifically, we aim to realize an AI-Centre, a digitally interconnected world centered on AI. This will serve as a new foundation for the use of systems and data, enabling more accurate demand forecasts and customer analysis through the latest AI capabilities, data integration, and enhanced collaboration with external partners. Furthermore, by developing a flexible digital infrastructure that leverages cloud services, we will maximize the potential of AI and data. This will enable an unprecedented personalized service delivery tailored to the needs of each individual customer.

Through AI-Centre, the JAL Group will contribute to the

long-term enhancement of corporate value by innovating the customer experience, employee experience, and the creation of business value, and by ensuring the stable operation of the system.

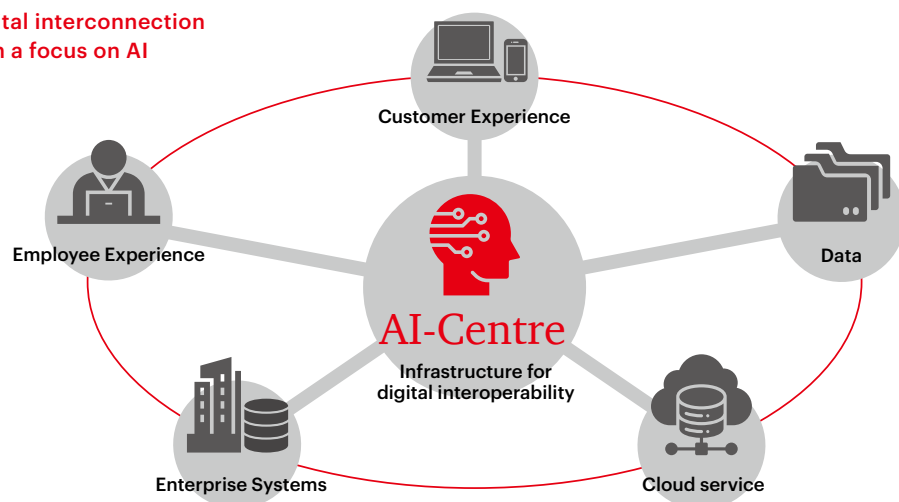
Realizing Purpose with DX

Our purpose is to become "the world's most preferred and valued airline group". To achieve this grand goal, new value creation through DX is indispensable, and we will proactively work to enhance profitability and build competitive advantage through the promotion of DX to realize the Medium-Term Management Plan and create a sustainable and profitable business portfolio for the future.

For the JAL Group, DX is not a temporary initiative, but a permanent effort to transform our corporate culture itself and to encourage each of us makes JAL what it is.

The Group will accelerate DX promotion to achieve our Purpose.

Digital interconnection with a focus on AI



Highlight

JAL-AI

The latest JAL-AI, equipped with GPT-4, is capable of creating and translating documents, as well as taking minutes from voice data. JAL-AI will be a source of new value creation.

In FY2024, we are aiming at a eight percent work efficiency when in use at our head office departments. JAL-AI will become a new value creation source by promoting AI in each business domain.



Trial to identify travel needs in Hokkaido using "confidential cross-statistics technology".

JAL Group and DOCOMO will use confidential cross-statistics technology on the Sapporo Okadama-Nemuro-Nakashibetsu route to enhance transportation and create human flow in the East Hokkaido area based on the findings from the movement data. The analysis will be conducted while protecting personal information and will lead to the revitalization of the local economy.



The Group promotes sustainability to pass on Precious Earth to the next generation.

NODA Yasushi

Executive Officer
Senior Vice President, General Affairs Division
Chair, Sustainability Promotion Committee



Encouraging all employees to think about what they can do for Precious Earth

Since the concept of sustainability covers a wide range of areas, it is necessary to clarify the key issues (materiality) that should be prioritized and addressed. Since FY2019, the JAL Group identified our materiality. After the COVID-19 pandemic, however, while being driven in introducing structural reforms such as diversifying our business, other than providing flight safety and peace of

mind and contributing to the SDGs, we found it indispensable to look more broadly at corporate citizenship activities and proactively address the issues facing society as a whole. Thus in FY2023, the issues were organized into eight topics. (See pages 16 to 18). This is a powerful message that encourages each and every one of our employees to continue to think about what they can do for society.

I feel that Precious Earth is a very beautiful theme, which we set forth in one of our activities. The global environment is not only the source of our business activities, such as the flow of people, commodities, and logistics, but also the common property of human kind. It is the common mission of the current generation to pass on this wealth to the next generation.

Of these, the JAL Group should place particular emphasis on Addressing Climate Change, recognizing that as a business that emits large amounts of CO₂. It is under the intense scrutiny from society that addresses the strong sense of urgency regarding the survival of the business itself. With the risks and opportunities of climate change in mind, JAL Group is strategically working on the disclosure of information in line with the TCFD.

We also recognize that Biodiversity conservation is an element directly related to building a strong social infrastructure, and we intend to comprehensively address this issue by working in tandem with Addressing Climate Change. Our emphasis is on creating positive value for the natural environment through our business activities. For example, as the COVID-19 pandemic restricted the flow of people, making it difficult to maintain and manage satoyama, rare species and vegetation are being lost. For this reason, we planned adventure tours that allow people to experience the great outdoors, which have been well received by both participants and the local community. This is a good example of value creation through ESG strategies, where relationships and societal connections are built through air transportation, leading to solutions to social issues.

Furthermore, to realize a recycling-based society, we are committed to the Effective Use of Limited Resources and have set the reduction of petroleum derived single-use plastics as a management target.

Toward achieving our industry-leading goal of Net Zero CO₂ Emissions by 2050

In 2020, the JAL Group declared its goal of becoming the first Japanese airline to achieve Net Zero CO₂ Emissions by 2050. We consider this to be a challenging goal that cannot be easily achieved but we formulated the GX Strategy in the Medium-Term Management Rolling Plan (MRP) 2023, based on the belief that we must clarify the roadmap to reach this goal. In addition to the conventional measures of Reduction in Daily Operations, Upgrading to Fuel-efficient Aircraft, and Use of Sustainable Aviation Fuel (SAF), the Group has drawn up a reduction scenario through various initiatives, including the utilization of Emissions Trading and Development of New Technologies that will contribute to the reduction of CO₂ emissions.

The most influential of these is Upgrading to Fuel-efficient Aircraft. Our plan is to increase the ratio of new aircraft that can reduce CO₂ emissions by 15 percent to 25 percent compared to conventional aircraft. In 2023, we ordered 42 aircraft and will increase the reduction ratio to 76 percent by 2030. As for the Use of SAF it is essential to strengthen the domestic supply system, including lower prices. The public and private sectors are working together on this issue, as can be seen by the capital expenditure (CAPEX) being promoted by the distributor companies with the support of the government.

Emissions Trading will be assigned an obligatory offset amount based on CORSIA* from FY2024, but currently there are uncertainties, such as the limited number of credits that meet the requirements. We intend to strengthen information gathering from a global perspective while strengthening cooperation among industry, government, and academia, including participation in the GX League, so that we can participate from the rulemaking stage, not only in emissions trading but also in the domestic production of SAF.

Regarding Development of New Technologies, we have focused on negative emission technology that removes CO₂ from the atmosphere. In March 2024, we made contributions to a U.S. startup company with proprietary technology in this field through a corporate venture company (CVC). I would like to continue to

drive the discovery of effective cutting-edge technologies by utilizing the personal connections and knowledge I developed during my time in the Innovation Division.

In order to continue these efforts efficiently, we will actively promote GX-promoting investments while utilizing internal carbon pricing (ICP), which quantifies the benefits of environmental investments. For example, we will use ICP to make investment decisions at all levels of our operations, such as converting shop maintenance lights to LED, in the hope that this will help raise awareness among our employees.

The JAL Group's efforts have been recognized by outside organizations. For the second consecutive years, JAL was selected as a component of the Dow Jones Sustainability Asia Pacific Index (DJSI), a leading ESG investment index (top score in the global airline industry in 2023). In March 2024, the Group was selected in the newly established "SX Brands 2024". Being acknowledged by these organizations is a great encouragement to our employees. We will continue to steadily promote the GX Strategy and firmly communicate its aims, significance, and progress to society.

* CORSIA: A system adopted by the International Civil Aviation Organization (ICAO) that requires airlines operating international flights to purchase SAF and carbon credits for 85 percent of their CO₂ emissions in excess of 2019 emissions.

All employees working in unison on both the proactive and conservative fronts

In the future society, sustainability will be a factor directly related to corporate value. In the past, the JAL Group took a conservative attitude to reduce negative environmental impacts such as CO₂ emissions. Going forward we will also take on a proactive attitude to link the solutions of social issues through business to economic value. By working on both fronts should lead the JAL Group to being sustainable.

Based on this recognition, we place great importance in promoting sustainability by integrating our individual efforts across the entire company. The role of the Sustainability Promotion Committee is to foster this sense of unity. I believe that

my mission as chair is to lead the committee to involve not only departments related to the environment but also all organizations so that the Group will be aligned with the same vector.

Sustainability is not something to be assigned a role, but something that all employees should take on themselves. In order

to foster such a mindset, we believe that the first step toward achieving the Group's vision and goals is to continue to communicate in an easy-to-understand manner how the daily efforts of each employee are linked to the sustainability of the JAL Group and of society.

Issues to be solved for conserving the environment and positioning of GX strategy

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

- Addressing Climate Change (GX Strategy) <https://www.jal.com/en/sustainability/environment/climate-action/>
- Effective Use of Limited Resources <https://www.jal.com/en/sustainability/environment/limited-resources/>
- Precaution of Environmental Pollution <https://www.jal.com/en/sustainability/environment/pollution-prevention/>
- Noise Reduction <https://www.jal.com/en/sustainability/environment/noise-reduction/>
- Biodiversity Conservation <https://www.jal.com/en/sustainability/environment/biodiversity/>

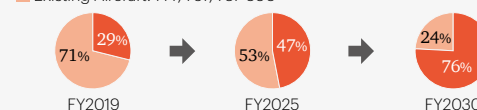
GX Strategy

Upgrade to Fuel-efficient Aircraft

CO₂ Reduction (FY2025 -> FY2030)
370,000 tonnes
➔ 1.2 million tonnes

Ratio of fuel-efficient aircraft

■ New Aircraft: A350, 787, A321neo, 737-8
■ Existing Aircraft: 777, 767, 737-800



Use of SAF

CO₂ Reduction (FY2025 -> FY2030)
80,000 tonnes
➔ 800,000 tonnes and more

- From FY2024 onward, moves toward CORSIA offset obligation and the start of production and mass production of domestically produced SAF will be in full swing
- Deepen partnerships with domestic SAF manufacturers
- Expansion of overseas SAF procurement points

SAF usage (FY2030)
400,000 KL and more
(10% of total weight of loads)

Reduction in Daily Operations

CO₂ Reduction (FY2025 -> FY2030)
80,000 tonnes
➔ 100,000 tonnes

- Further promotion of JAL Green Operations
- Advanced air traffic control systems (shortening flight times with CARATS, operating hours with separate upper and lower control systems, and increasing flexibility in selecting altitude and flight course)

Emissions Trading

Procure the required amount of credits at the appropriate time

New Technology

Partnership with a company with negative emission technology to remove CO₂ from the atmosphere (CVC funding to Captura in March 2024)



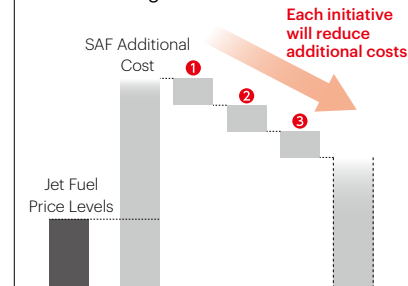
CO₂ emissions (compared to existing models)



SAF Additional Cost Reduction Initiatives

- 1 Lower prices through joint procurement and long-term contracts
- 2 Public and private partnership to promote stable supply and utilization of domestically produced SAF
- 3 Provide offset measures to companies and shippers (sales of CO₂ reduction certificates)

Fuel Price Image



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 CO₂ and single-used plastics is 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 Corporation, which provides inflight meals, obtained ISO 14001:2015, the international standard for Environmental Management System (EMS), in 2021 and has passed the renewal audit in 2024.

From FY2024, we will utilize the knowledge and networks of the entire JAL Group to promote ESG strategies on a Group-wide basis and sublimate them into concrete initiatives. The EMS promotion system is utilized to assign ESG promotion

managers and ESG coordinators to build a system to reduce overall ESG risks and maximize ESG opportunities.

Integrated Response to TCFD and TNFD

The 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. Based on an analysis of the risks and opportunities that various sustainability issues, including environmental challenges, pose to society and businesses, JAL Group began disclosing information in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in 2021, and in 2023, JAL Group began prioritizing information in accordance with the Task Force on Nature-related Financial Disclosures (TNFD).

Governance

The JAL Group's Board of Directors receives regular reports (four times in FY2023) 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 the senior vice president of General Affairs Division, deliberates on individual issues identified through the Environmental Management System (EMS) and issues confirmed through the GX Related Officers Committee (eight meetings in FY2023), whose secretariat is the specialized division for GX 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 CO₂ emission reduction targets as indicators in our officer remuneration.

In addition, we place respect for human rights and biodiversity conservation 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 Meeting Bodies for FY2023

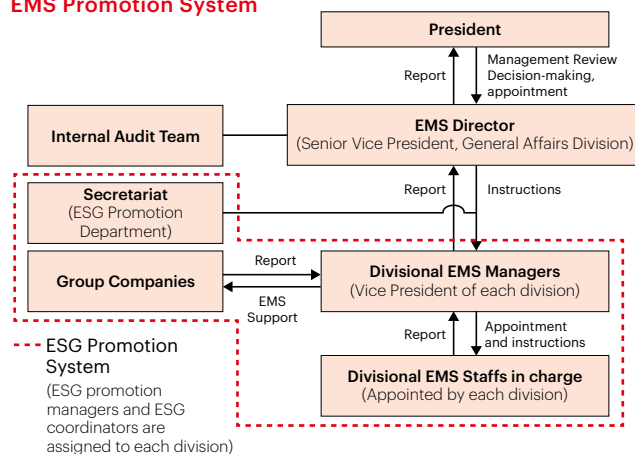
- Development of goals related to addressing climate change (transition plan), and annual results.
- GX Strategy to achieve Net Zero CO₂ Emissions by 2050
- Disclose information on TCFD and TNFD, EMS review
- Monitoring and evaluation of human rights due diligence

*Please refer to p.18 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 Environmental Management System (EMS), while taking into consideration relevant laws, regulations, and policy trends in the international community.

EMS Promotion System



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 CO₂ Emissions by 2050, in order to steadily promote various initiatives, including the reduction of CO₂ emissions in order to fulfill our responsibilities as an air transport operator.

For more information, please refer to our TCFD disclosures.

Corporate website: Addressing Climate Change
<https://www.jal.com/en/sustainability/environment/climate-action/>

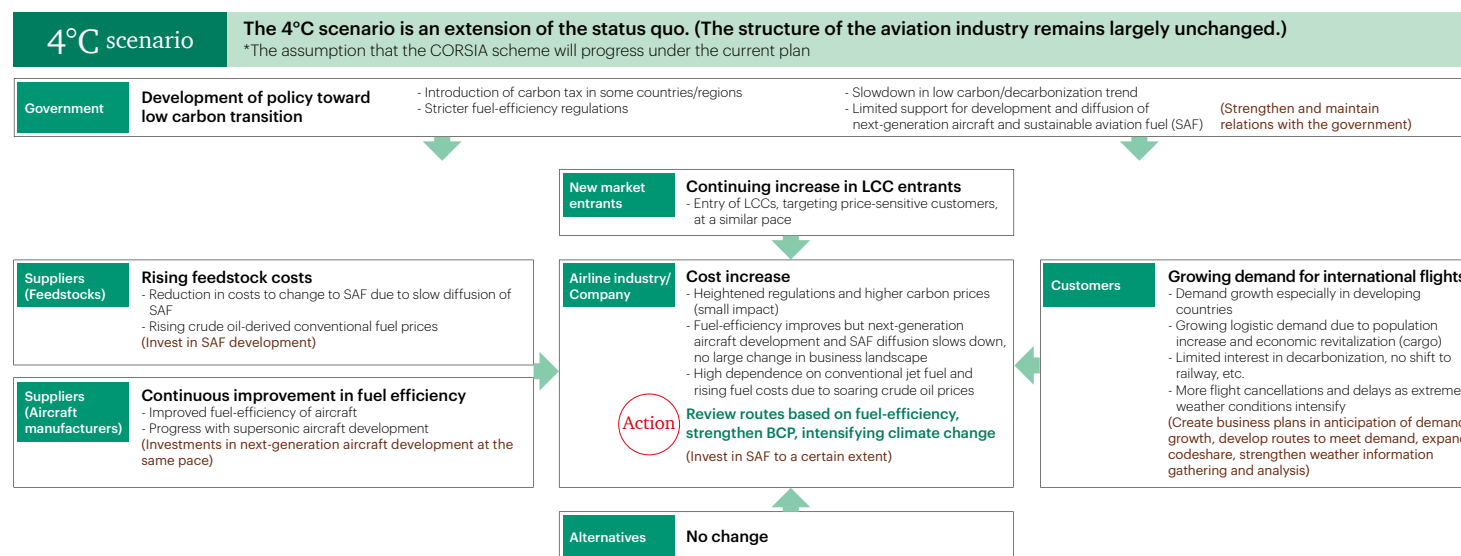
Strategy

Scenario Analysis

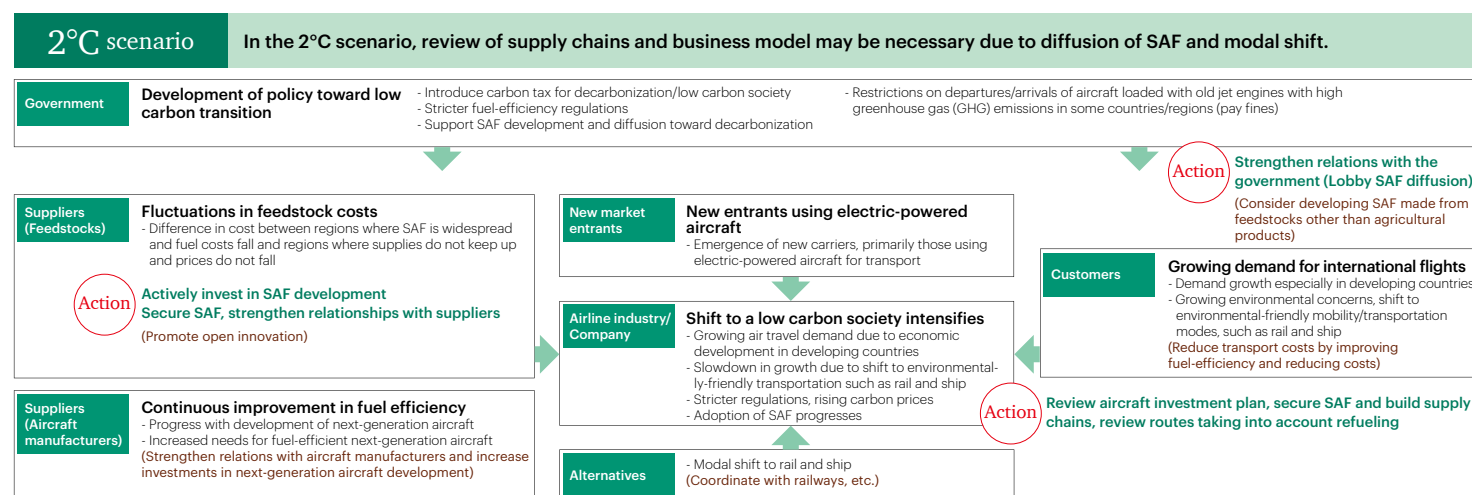
The international community is rapidly moving toward a 1.5°C scenario as the benchmark for addressing climate change, with tighter environmental laws and regulations in Europe, the United States' return to the Paris Agreement, Japan's Carbon Neutral Declaration and a major review of its national reduction targets (NDC), and the de facto 1.5°C target agreement at COP26. 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 maximum greenhouse gas emissions in 2100)

^{*2} RCP2.6 scenario: Low-level stabilization scenario in the IPCC Fifth Assessment Report (lowest emissions scenario developed with the goal of limiting future temperature increase to below 2°C)



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



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

Transition Plan to Achieve Net Zero CO₂ Emissions

Based on the 1.5°C scenario, the JAL Group announced a target of Net Zero CO₂ Emissions by 2050 at its shareholders' meeting in June 2020. Road map on the right was created in consideration of risks and opportunities based on the IEA SDS*³ scenario and other factors, which was reflected in the FY2021-2025 JAL Group Medium Term Management Plan Rolling Plan 2021 and in the same Rolling Plan 2022, and the GX Strategy was formulated in the same Rolling Plan since 2023.

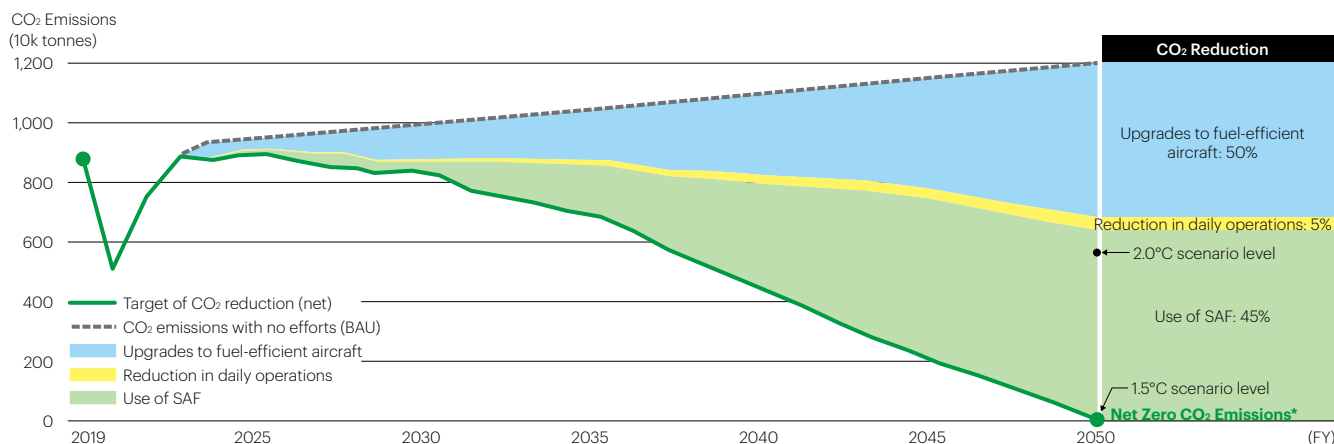
With regard to the reduction of CO₂ emissions from JAL Group aircraft, we are studying CO₂ emissions reduction scenarios targeting by 2050, with reference to the latest study materials at ICAO, IATA and the latest scenarios such as WAYPOINT 2050*⁴ from ATAG*⁵, and discussing future issues and measures. In preparing the scenarios, we calculated the total CO₂ emissions by 2050 by setting the growth of Revenue Tonne-Kilometers (RTK) 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 of the IEA (International Energy Agency).

*⁴ Reference: WAYPOINT 2050
<https://aviationbenefits.org/environmental-efficiency/climate-action/waypoint-2050/>

*⁵ Air Transport Action Group (ATAG): A globalization coalition that promotes sustainability in the airline industry.

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



- Upgrades to fuel-efficient aircraft** Utilizing the latest fuel-efficient aircraft today and aim to introduce aircraft using new technologies in the near future, such as hydrogen and electric powered aircraft
- Reduction in daily operations** In addition to "JAL Green Operations" to reduce CO₂ emissions in daily operations, promoting collaboration across the entire industry, including air traffic control agency, airlines, and airport operators
- Use of SAF** Collaboration with stakeholders to aim for a decarbonized society to secure SAF supply and reduce costs

* Achieve a balance between actual CO₂ emissions from business activities and reductions through measures = Net Zero Emissions (including emissions trading and CCS (CO₂ absorption technology) by using of emissions trading from 2024 and by using of CCS in the future, residual emissions (10%) will be reduced as of 2050))

Highlight

Formulated a plan to promote decarbonization of the air transport services

In January 2024, we formulated, applied for and received approval by the Ministry of Land, Infrastructure, Transport and Tourism for a decarbonization promotion plan for the air transport service that includes quantitative targets and process charts for FY2030 and FY2050 with respect to the use of SAF, improvement of flight operations, and introduction of new aircraft environmental technology, among others.

Participation in the GX League

From April 2024, we are participating in the GX League, a cross-industry domestic framework for decarbonization. We will contribute to the promotion of decarbonization in Japan by working together with the national government and companies from other industries in cooperation with the public and private sectors towards the creation of a legitimate evaluation mechanism for the setting of emission reduction targets and implementation of decarbonization in companies and the creation of a GX market for emissions trading.

Utilization of Internal Carbon Pricing (ICP)

In April 2023, we incorporated ICP as one of our investment decision criteria setting a base price of 15,000 yen per tonne of CO₂ emissions. We will promote the implementation of our decarbonization measures by ICP and accelerate decarbonization efforts. (Case studies: four cases)

Utilization of emissions trading and negative emissions technologies

Although SAF can reduce CO₂ emissions through its life cycle, there are residual emissions because of emissions in the process of the manufacturing and transportation. To offset residual emissions that is difficult to reduce within our business domain, we will continue to utilize such as emissions trading and CCS.

Risks and Opportunities

Climate change will have a negative impact on the air transport services, 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.

In addition, addressing climate change, including the reduction of CO₂ 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 our business in accordance with the TCFD classification of risks and opportunities related to climate change and lists them in the table below. The categories of timing and impact of occurrence are as specified on the right list.

The table of risks and opportunities are reviewed annually. The following list was reviewed at the Board of Directors meeting on July 17, 2024.

Classification	Time of Impact
Short-term	FY2024 - FY2025 (the period covered by the current Medium-Term Management Plan)
Medium-term	FY2026 - FY2030 (the period up to JAL Vision 2030)
Long-term	FY2031 - FY2050 (the period to achieve Net Zero CO ₂ Emissions)

Classification	Revenue or Cost at the Time of Event (Annual)
Small	Less than 3 billion yen
Medium	3 billion yen to less than 30 billion yen
Large	30 billion yen and more

Risks

Classification	Risk Overview		Period of Event	Impact of Risks	Our Response to Risk Reduction
<div>Transition Risks</div> <div><div>- Policies and Regulations</div><div>- Technology</div><div>- Market</div><div>- Reputation</div></div>	Emissions Trading	Increase in credit cost by stronger national CO ₂ emission regulations	Short- to Long-term	Small to Medium	<div>- Procurement of credits at stable and reasonable prices</div> <div>- Public-private partnership through the Scheduled Airlines Association of Japan for analysis of supply-demand balance and cost projections for CORSIA Eligible Emission Units, etc.</div> <div>- Lobbying for fostering a market for CORSIA Eligible Emission Units (ICAO, IATA)</div> <div>- Participation in the GX League to formulate a domestic emission trade market</div>
	SAF	Shortage in supply due to delays in the development, manufacture and dissemination of SAF and bias in supply areas	Short- to Long-term	Medium to Large	<div>- Long-term and price-competitive SAF procurement from suppliers individually or with alliance members</div> <div>- Active involvement in domestic SAF production and expansion of SAF procurement sites</div> <div>- Request for assistance regarding the supply and production and use of SAF to the government and various related parties in cooperation with the aviation industry, energy industry, etc.</div> <div>- Lobbying to extend distribution of CORSIA Eligible Fuel (CEF) (ICAO, IATA)</div>
		Impact on balance of payments due to high prices of SAF, hydrogen fuel, etc.			
	Ground Vehicles	Increased costs to introduce electrical vehicles in airports to comply new laws and regulations	Short- to Medium-term	Small	<div>- Requests for support to the government and other related agencies for upgrading to electric vehicles and improving airport infrastructure, among others</div>
		Delays in upgrading to electric vehicles and associated infrastructure improvements at airport facilities			
		Shortage of alternative diesel fuels supply and unbalancing situation in regions for supply areas	Short- to Medium-term	Small	<div>- Expanding suppliers of alternative fuel to diesel oil and promoting local production for local consumption</div>
	Aircraft	Delay in the development of aircraft using new technologies such as hydrogen and electrical power and in the development of airport infrastructure	Long-term	Medium	<div>- Collaboration with the next-generation aircraft startups</div> <div>- Coordination and consultation with airframe and engine manufacturers</div> <div>- Participate in the Public-Private Council on New Technologies for Decarbonization of Aircraft with the government and other relevant parties to formulate a New Technology Roadmap for Decarbonizing of Aircraft</div> <div>- Establish a new department dedicated to the utilization and promotion of next-generation aircraft and new technologies (April 2024)</div>
Demand	Declining in customer preference due to delayed response to climate change and slowdown in air transport demand in Japan due to modal shift	Medium- to Long-term	Small to Medium	<div>- Advocating the value of aircraft mobility after thorough efforts to reduce CO₂</div> <div>- Building momentum by strengthening communication of environmentally conscious measures, such as the Sustainable Challenge Flight project, communication of SAF's planned procurement progress, and participation in symposiums</div>	
<div>Physical Risks</div> <div><div>- Acute Risk</div><div>- Chronic Risk</div></div>	Operations	Impacts of the decrease in the number of passengers and the increase in flight cancellations caused by climate disasters due to the intensification of extreme weather events and changes in precipitation and climate patterns	Medium-term	Medium	<div>- Strengthen crisis management capabilities and enhance BCP in response to disasters</div> <div>- Public-private partnerships, including participation in the Study Committee on Natural Disaster Countermeasures at Airports</div>
	Demand	Impact of the outbreak of a pandemic of infectious diseases caused by ecosystem changes due to the increase in average temperature on air transport services	Medium- to Long-term	Large	<div>- Provide a safe and secure air transportation environment through measures to prevent infectious diseases</div> <div>- Develop flight plans based on passenger demand</div>

Opportunities

Classification	Opportunity Overview		Period of Event	Impact of Opportunities	Our Response to Expand Opportunities
Opportunities - Resource Efficiency - Energy Source - Resilience - Market - Products and Services	Operation Aircraft	Reduction of fuel consumption and CO ₂ emissions (reduction of credit purchase costs) by improving fuel efficiency through operational innovations, aircraft technology improvements, and infrastructure improvements such as more sophisticated air traffic control	Short- to Long-term	Medium	<ul style="list-style-type: none"> - Reduction of CO₂ emissions by innovations in daily aircraft operations and aircraft modifications - Collaboration with manufacturers, the government, and related organizations for the introduction of aircraft with advanced air traffic control and new technologies - Diversified financing (issuance of transition bonds) - Steady introduction of fuel-efficient aircraft (Domestic: Boeing 737MAX8, Airbus A350, Airbus A321neo) (International: Airbus A350, Boeing 787)
	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	<ul style="list-style-type: none"> - Procurement of SAF consisting of multiple manufacturing methods - SAF promotion activities together with Japanese various industries through such as ACT FOR SKY - To build a domestic SAF supply chain, established and began a system with local governments and companies to collect used cooking oil at local base stores from households for use as feedstock of SAF - Collaboration between the public and private sectors, including public-private councils, to resolve 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 ideal form of incentive support - Launched JAL Corporate SAF Program which requires companies that use JAL flights to pay a portion of SAF purchase costs, reduces SAF purchase costs and decarbonizes the entire supply chain
	New Technologies	Diversify CO ₂ reduction methods by utilizing CO ₂ removal technologies such as Direct Air Capture, which captures CO ₂ from the atmosphere	Long-term	Medium	<ul style="list-style-type: none"> - Invested in Captura, a U.S. startup with negative emissions technologies that remove CO₂ from the atmosphere, through a CVC
	Ground Vehicles	Reduction of CO ₂ through the use of alternative fuels to diesel oil and the use of special airport vehicles that combine various power sources	Short- to Long-term	Small	<ul style="list-style-type: none"> - Procurement of biodiesel fuel and use of electric special vehicles - Promoting decarbonization at airports through public-private partnerships
	Demand	Enhancing preferences and expanding aviation demand through appropriate responses to diversifying customer needs	Short- to Long-term	Medium	<ul style="list-style-type: none"> - Providing low-carbon and environmentally friendly products and services (JAL Corporate SAF Program, JAL Carbon Offset) - Expansion of information disclosure on measures to address climate change including reduction of CO₂ emissions - Build momentum by strengthening communication of environmentally conscious measures, such as the Sustainable Challenge Flight project, communication of SAF's planned procurement progress, and participation in symposiums
		Securing new sources of revenue through the creation of new businesses based on low carbon	Short- to Long-term	Large	<ul style="list-style-type: none"> - Creation of new businesses utilizing JAL Group assets (e.g., LCC business) - Promote investments that contribute to CO₂ reduction through internal carbon pricing (ICP) (ICP is used as one of the evaluation items in the selection of new medium-sized aircraft) - Fostering human resources to lead a decarbonized society

Metrics and Targets

Direct emissions from aircraft account for approximately 99 percent of the JAL Group CO₂ emissions, and we are addressing the reduction of CO₂ emissions from aircraft as a top priority issue. In addition, we have set high targets for the reduction of CO₂ emissions from non-aircraft sources, such as ground facilities and ground vehicles, which account for approximately 1 percent of total emissions, and we 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 CO₂ reduction and consistent with the Clean Energy Strategy of the Japanese government.

Key initiatives and issues to work on towards sustainability (metrics and targets)
<https://www.jal.com/en/sustainability/initiatives/>

Targets and Initiatives to Reduce CO₂ by 2030

As a milestone toward achieving Net Zero CO₂ Emissions by 2050, in May 2021, the JAL Group became the first Japanese airline to set a specific target for FY2030 (10 percent reduction in total emissions compared to FY2019), and has taken the lead in promoting the decarbonization of the global airline industry through joint procurement of SAF with alliance members and the use of ESG finance when renewing aircraft. We will continue to accelerate our existing efforts, including the steady renewal of fuel-efficient aircraft based on a stable financial base, the steady implementation of daily operational innovations (JAL Green Operations), and the strategic procurement of SAF with specific onboard targets, as well as consider the use of negative emission technologies such as removing and collecting CO₂ to achieve our goals.

In Japan and other regions, the government's Basic





CO₂ Reduction Targets and Results

		Base Year	Year 2023	Year 2025	Year 2030	Year 2050
Direct Emission	Aircraft	FY2019 Results 9.09 million tonnes	FY2023 Results 9.07 million tonnes	FY2025 CO ₂ Reduction Target Total emissions: less than 9.09 million tonnes *Less than FY2019	FY2030 CO ₂ Reduction Target Total emissions: less than 8.18 million tonnes *90% compared to FY2019	Net Zero
	Non-aircraft	FY2019 Results 96,000 tonnes	FY2023 Results 84,000 tonnes		Total emissions: less than 62,000 tonnes *65% compared to FY2019	Net Zero
Indirect Emission	Aircraft	FY2019 Results 80,000 tonnes	FY2023 Results 53,000 tonnes		Total emissions: less than 54,000 tonnes *67% compared to FY2019	
	Non-aircraft				Total emissions: less than 40,000 tonnes *50% compared to FY2019	Net Zero

Policies for Economic and Fiscal Management and Reform 2024, Grand Design and Action Plan for New Capitalism, Clean Energy Strategy, and Basic Policy for the Realization of GX clearly state that it will promote the production and distribution of SAF. In order to realize the ambitious goal of replacing more than 10 percent of all onboard fuel with SAF by FY2030, the JAL Group is actively working toward the commercialization of SAF through public-private partnerships and collaboration with domestic and international stakeholders.

In addition, we have set targets for indirect emissions, which we have steadily reduced, and we have now set a target for direct emissions on the ground (vehicles and ground facilities), which will result in a 35 percent reduction in non-aircraft emissions in FY2030, compared to FY2019. This will accelerate our efforts to reduce non-aircraft emissions furthermore.

Accelerate initiatives to reduce CO₂ emissions*1 from the projected emissions*2 of 11 million tonnes in FY2030

Upgrade to Fuel-efficient Aircraft	CO ₂ Emissions (Compared to existing models)
CO ₂ Reduction (FY2025 to FY2030) 370,000 tonnes → 1.2 million tonnes	 Large aircraft: A350  Mid-size aircraft: A321neo  Small aircraft: A320neo  Small aircraft: A320neo -15% to -25% -15%
Sustainable Aviation Fuel (SAF)	SAF Usage FY2030 400,000 kL or more (10% of total weight of loads)
CO ₂ Reduction (FY2025 to FY2030) 80,000 tonnes → 0.8 million tonnes	- From FY2024 onward, moves toward CORSIA offset obligation and the start of production and mass production of domestically produced SAF will be in full swings - Deepen partnerships with domestic SAF manufacturers - Expansion of overseas SAF procurement points
Reduction in Daily Operations	
CO ₂ Reduction (FY2025 to FY2030) 80,000 tonnes → 0.1 million tonnes	- Further promotion of JAL Green Operations - Advanced air traffic control systems (shortening flight times with CARATS, operating hours with separate upper and lower control systems, and increasing flexibility in selecting altitude and flight course)
Emissions Trading	Procure the required amount of credits at the appropriate time
New Technologies	Partnership with a company with negative emission technology to remove CO ₂ from the atmosphere (CVC funding to Captura in March 2024)

*1 10% less vs. FY2019 *2 Projected emissions without measures

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 CO₂ emissions compared to previous.

Since 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 787-9s, to our 50+ aircraft already in operation within the JAL Group. On domestic routes, in addition to the introduction of 21 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.

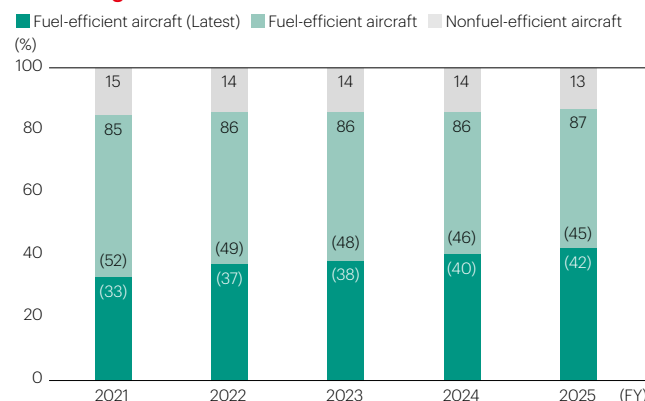
Issuance of Transition Bonds to Procure Fuel-efficient Aircraft

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 (FOB) 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 procurement target of replacing 1 percent of all FOB with SAF by FY2025, we are working to reduce costs by promoting procurement from countries and regions that have subsidies or incentives for SAF production and

Comment

First Japanese Airline to Collaborate with a Hydrogen Aircraft Startup Company

A basic agreement has been signed with a company that develops hydrogen-fueled propulsion systems in order to study the safety, economic efficiency, and maintainability of hydrogen-fueled next-generation aircraft, which can reduce CO₂ emissions in flight to net zero, with the aim of introducing them into Japan's skies.

In April 2024, the newly established Advanced Technology Utilization & Promotion Group in the Engineering Department of JAL Engineering is advancing the technical review of hydrogen aircraft. We will continue to collaborate extensively with various companies to contribute to the design and development of hydrogen aircraft that meet the strict safety standards required for flight safety in Japan, utilizing our expertise in flight safety and line maintenance as a Japanese airline company. We will also work firmly to create momentum for the introduction of hydrogen aircraft, thereby promoting activities to create a safe, secure, and sustainable future sky, and to lead the introduction of hydrogen aircraft into Japan's skies through the united efforts of our new group.



(From Left)
HIRAI Shingo, HOSODA Mitsuru,
KIMURA Luna
TSUKAMOTO Haruka, AMANO Yusuke
 Advanced Technology Utilization &
 Promotion Group,
 JAL Engineering Co.,Ltd.

use, and by implementing procurement strategies such as joint procurement and long-term contracts.

On the other hand, as global demand for SAF increases, in order to achieve the ambitious target of more than 10 percent by 2030, it is essential to create an environment for a stable supply of domestically produced SAF at internationally competitive prices by collaborating with stakeholders in Japan, transcending industry boundaries, while expanding overseas procurement points. The JAL Group is actively communicating its commitment as an end-user of SAF through participation in the SAF Public-Private Council, forming the Air Transport

Industry Decarbonization Promotion Plan, and participation in the GX League. The industry worked together to request support and contributed to the realization of support for the production side that contributes to lower SAF prices, such as production equipment subsidies funded by GX Transition Bonds in 2023 and a tax on the production infrastructure for strategic goods. We will continue to support the production and mass production of domestically produced SAF in order to contribute to the establishment of a supply chain of domestically produced SAF for local production for local consumption that has a high reduction rate and meets CORSIA eligibility criteria. (For details of the JAL Group's domestic SAF initiatives, please refer to "Special Feature 3: Working to Promoting Domestic SAF" on page 91.)

To promote the use of SAF, focus on the value of decarbonization through SAF based on corporate customer feedback, 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 supply chain.

Reduction in Daily Operations

JAL Green Operations is the name given to our various efforts to reduce CO₂ 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 FOB. 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, O-Well Corporation and Nikon Corporation, we are conducting the world's first flight demonstration test using an aircraft with a riblet applied to the exterior

surface coating (illustration below). When this technology is put into practical use, it is expected to improve fuel consumption by up to 2 percent and contribute significantly to CO₂ reduction.

Going forward, we are planning to expand this technology to our aircraft on international flights in the future.



In November 2023, riblets were applied to a total area of approximately 25m² on the lower fuselage of a Boeing 737-800 aircraft.

Highlight

Launched JAL Corporate SAF Program

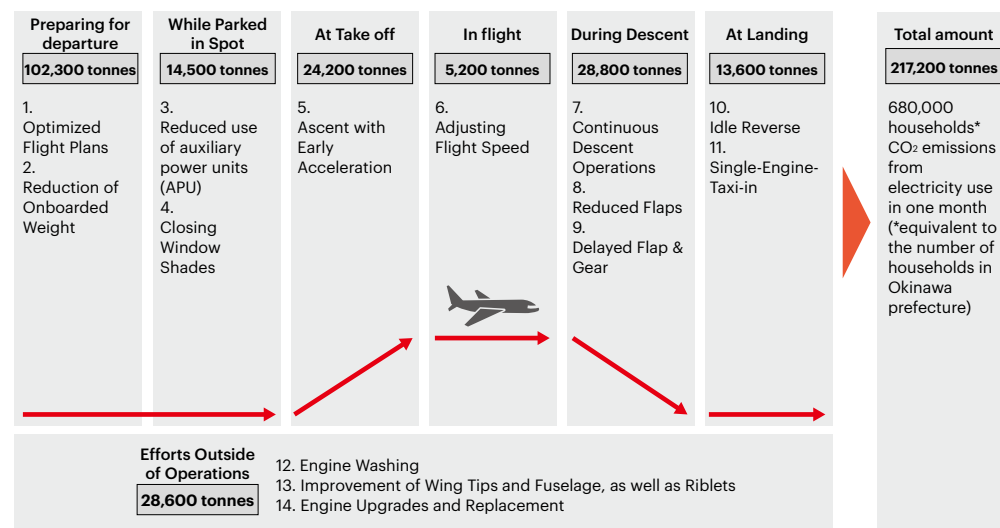
In April 2024, JAL launched the JAL Corporate SAF Program, a new project to contribute to the reduction of CO₂ in the supply chain together with corporate customers who use JAL flights. Under this program, JAL visualizes the amount of CO₂ emissions based on our customers' traffic data and employees' business trips, calculates the amount of CO₂ reduced by SAF, and at the same time, certifies and sells the environmental value of the reductions.

This certificate is transparent and socially credible, having been validated by a third-party organization. Together with our corporate customers, we will promote and expand SAF to decarbonize the airline industry and contribute to sustainable air travel.

Reference site: JAL Corporate SAF Program *Japanese Only
<https://www.jal.com/ja/sustainability/jcsp/>

JAL Green Operations

CO₂ reduction



*Actual reduction amount for FY2023.

In FY2023, 2.4% 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/>

Efforts to Reduce CO₂ in Ground Facilities and Vehicles

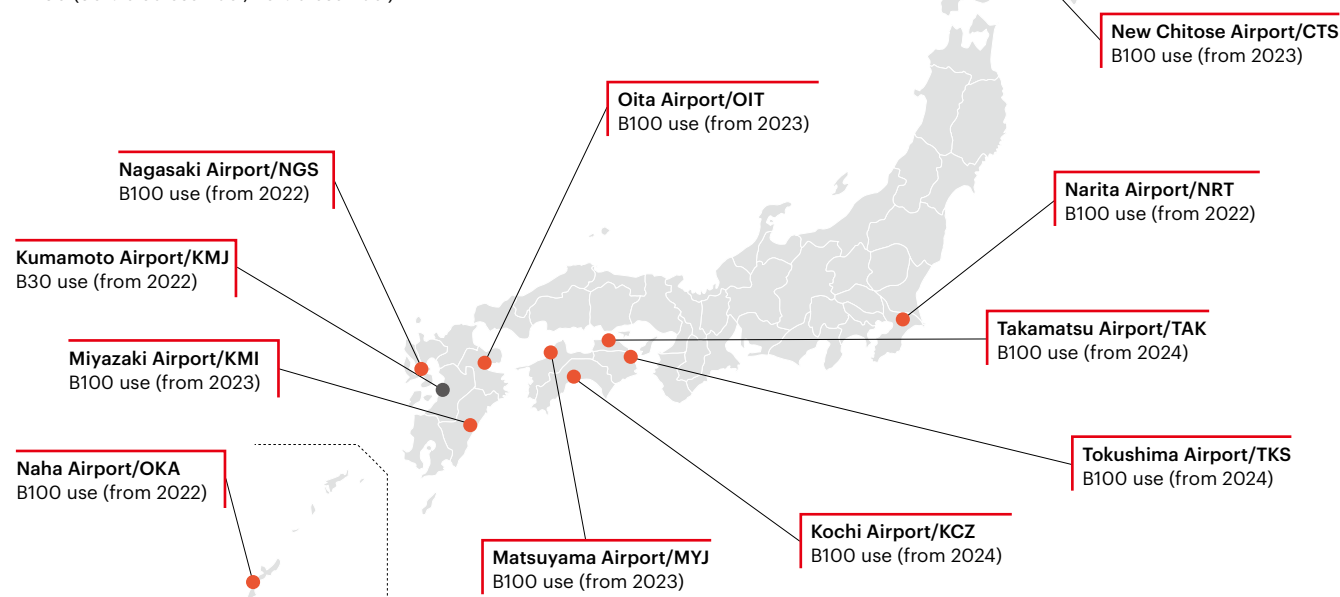
The JAL Group has set a target of reducing unit energy consumption in the ground facility field on average by one percent or more. Under the Operator Classification Evaluation System of Act on the Rational Use of Energy (Energy Conservation Act) implemented by the Ministry of Economy, Trade and Industry, the JAL Group has been certified as an excellent operator classification (S Class) for nine consecutive years since 2015. We are promoting initiatives to achieve the 2030 carbon half (indirect emissions) target, including further promotion of LED in facilities, introduction of air conditioning control systems, and purchase of non-fossil certificates (JAL SKY MUSEUM's exclusive areas are operated at practically net zero emissions).

In addition, to reduce CO₂ emitted by special vehicles at airports, we are promoting the deployment of electrically powered special vehicles and the increased use of biodiesel fuel. Starting with the trial at Kumamoto Airport, the JAL Group, in cooperation and collaboration with local communities and society, is successively using the biodiesel fuel, a locally produced, locally consumed, recycling-based energy, in airport vehicles (Kumamoto Airport: concentration 30 percent, other 10 airports: 100 percent concentration) at 11 airports across Japan. (As of June 2024)

In order to use special vehicles 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, locally consumed, recyclable energy at airports throughout Japan.

Expand Use of Biodiesel Fuel (As of June 2024)

- B100 (100% biodiesel fuel)
- B30 (30% biodiesel fuel, 70% diesel fuel)



Special Vehicles at Airports (powered by electrically or biodiesel fuel)



Lithium-ion-battery-powered Ground Power Unit (eGPU)



The first operated electric towing car in Japan at Naha Airport



High-purity biodiesel fuel, a locally produced, locally consumed, recyclable energy source, is used in airport vehicles.

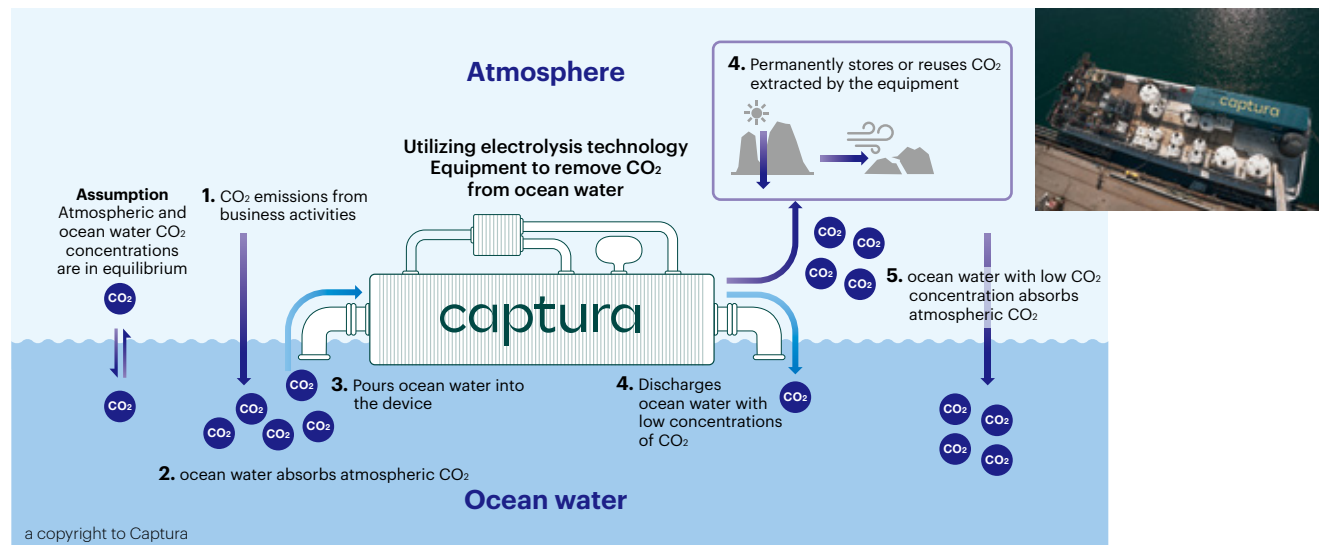
Utilization of Negative Emissions Technologies

The JAL Group is diversifying and accelerating future decarbonization methods by using negative emissions technologies beyond its own supply chain framework to achieve Net Zero CO₂ Emissions in 2050.

In March 2024, JAL invested in Captura, a U.S. venture company with negative emissions technologies that removes CO₂ through the Japan Airlines Innovation Fund, a corporate venture capital fund (CVC) that invests in promising start-up companies.

Captura is seeking to commercialize Direct Ocean Capture (DOC) technology, which efficiently captures CO₂ from the atmosphere by extracting CO₂ directly from ocean water.

Captura's DOC Technology



Highlight

JAL Carbon Offset

In cooperation with CHOOOSE, JAL offers JAL Carbon Offset, a program for individuals and corporations that allows customers to offset their own CO₂ emissions from flights they take. The corporate program allows companies to provide visual reports of their CO₂ emissions, select a credit program, implement carbon offsets, and issue certificates. We will continue to work with our customers to promote CO₂ reductions.

Reference site: JAL Carbon Offset
<https://www.jal.co.jp/es/en/info/news/220127/index.html>
For individual customers: <https://jal.chooose.today/en/>
For corporate customers: <https://jal.chooose.today/en/corporate/>

CONTRAIL Project

In order to accurately predict climate change, it is essential to observe CO₂ concentrations at multiple locations, including in the sky, and to understand their cycles. In 2005, five organizations, namely the National Institute for Environmental Studies, Meteorological Research Institute JAMCO Corporation, JAL Foundation, and Japan Airlines, launched the CONTRAIL* Project as a public-private partnership to expand observations.

This project, the first in the world to continuously observe greenhouse gases (CO₂ and etc.) on a global scale, uses commercial aircraft to carry observation equipment for high-frequency, long-term observations in the sky, and the data is used by researchers around the world.

* Abbreviation for Comprehensive Observation Network for Trace gases by Airliner



CO₂ concentration observation points in 2022
<https://cger.nies.go.jp/contrail/cme/fstatis.html>

Special Feature 3

Working to Promote Domestic SAF

Sustainable Aviation Fuel is anticipated to be a key solution for decarbonization in the airline industry, and the development of a domestic supply chain for SAF will contribute to Japan's energy security and the sustainability of its domestic aviation infrastructure.

This is crucial for the overall society and economy in terms of Japan's characteristics as an island nation.

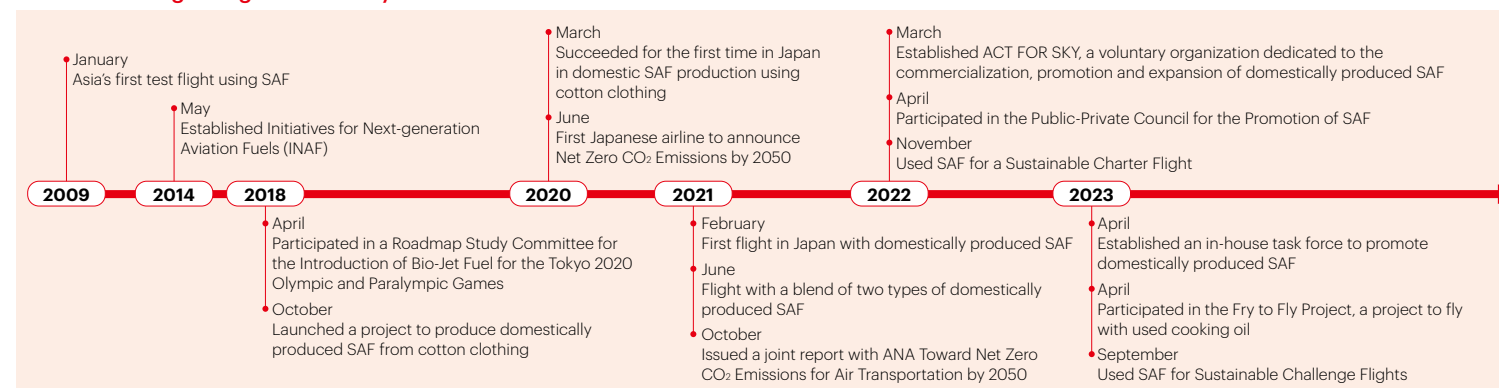
The JAL Group aims to foster awareness and concrete actions toward the realization of a decarbonized and recycling-based society through initiatives for SAF.

We will also work with all stakeholders to achieve a sustainable society and to pass on a beautiful planet to the next generation.

JAL Group Efforts **to Date** to Promote Domestic SAF

The JAL Group has been engaged in initiatives related to SAF for over a decade. As a pioneering company in the utilization of SAF, we promote commercialization of domestically produced SAF.

JAL's Efforts Regarding Domestically Produced SAF



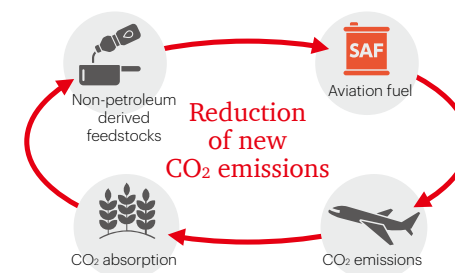
Initiatives to Foster Innovation and Commercialization of SAF Production

In 2009, the JAL Group succeeded in the world's first test flight using SAF primarily derived from camelina plants. In October 2018, we launched the project Let's Fly with 100,000 Clothes! JAL Biojet Fuel Flight, aimed to produce domestic SAF from approximately 250,000 pieces of cotton clothing collected from customers and individuals across Japan. The SAF was successfully produced in March 2020, and in February 2021, we carried out its first flight. In June 2021, as a first step toward the commercialization of domestically produced SAF, a flight was operated using two types of domestically produced SAF made from woodchips and microalgae, both produced at a demonstration plant. In FY2023, we established a department specializing in domestically produced SAF to leverage the knowledge and experience gained from our previous efforts to further accelerate the production of domestically produced SAF.

Why SAF?

SAF is made from non-petroleum derived feedstocks such as used cooking oil and thinned wood. It is a fuel that can reduce CO₂ emissions by approximately 80 percent over its life cycle from raw material collection to production and combustion. SAF can be blended with conventional fossil fuels and has the advantage of being compatible with existing infrastructure without requiring modification.

While the commercialization of large next-generation electric and hydrogen aircraft that do not emit CO₂ is anticipated to take more than a decade, the expansion of SAF production and utilization is an urgent priority for promoting decarbonization in the aviation industry.



JAL Group's **Future** Efforts to Promote Domestic SAF

For the time being, used cooking oil is considered to be the primary feedstocks for the production of domestic SAF. Approximately 100,000 tonnes of cooking oil are discarded annually by households across Japan. To fulfill our responsibility as an airline utilizing SAF, the JAL Group will endeavor to secure used cooking oil to realize a world where used cooking oil is used to fly. We will work together with everyone in society to build a recycling-based society.

2024

February

Signed a partnership agreement with the City of Yokohama to collect used cooking oil from households for utilization as feedstocks for SAF

March

Established a system for collecting used cooking oil at cooperating stores in Yokohama City.

Collaboration and Aligning with the Public and Private Sectors

In March 2022, the JAL Group co-founded ACT FOR SKY, a nationwide voluntary organization dedicated to promoting the commercialization and diffusion of domestically produced SAF. Since its establishment, we have served as its secretariat. As of June 2024, the organization comprises 43 companies and organizations from both the private and public sectors, working together to enhance recognition and establish a production system for SAF. In FY2022, the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism jointly launched the Public-Private Council for the Promotion of SAF. We are continuously participating in discussions as a member of the study committee and are actively involved in both SAF production and distribution working groups from the standpoint of a SAF user. The public and private sectors collaboratively address technical and economic issues regarding domestic SAF throughout the supply chain. The JAL Group will continue its efforts to promote domestically produced SAF, aiming to play a pivotal role in its dissemination.



Comment

We aim to build a system to utilize underused resources to achieve sustainable air travel and local communities.

Having worked in the Engineering and Maintenance Division for 20 years, I have felt the impact on the global environment through the daily use of large quantities of aviation fuel and its smell. I voluntarily applied to the current position through the company's internal recruitment system. What strongly motivated me to the current position was the fact that SAF can be a solution not only for the sustainability of aviation but also for the social and environmental issues currently facing Japan, such as waste management and regional development.

What we are most focused on now is to realize locally produced and consumed SAF. This

involves not only promoting resource recycling by producing fuel from locally available waste materials but also establishing the process itself as an industry. This approach can generate new economic cycles in Japan and contribute to solving regional issues, which aligns with our company's goals.

Recognizing this issue, we have launched an initiative to collect used cooking oil from households, most of which remains unused, just before the completion of a plant to produce SAF from used cooking oil. This initiative is based on the concept that by working together with citizens, we hope to provoke actions for resource

recycling take root naturally in their daily lives. City of Yokohama and the AEON Group, who share this concept have been working together to implement the system of collecting used cooking oil since March 2024. Now that, we are expanding this initiative beyond Yokohama City.

Numerous efforts are underway in Japan to produce SAF from resources that were previously discarded. We will continue to take on challenges of realizing a recycling-based society by securing feedstocks for domestically produced SAF and establishing a supply chain by leveraging the knowledge we have gained through the experience and partnerships to date.

How we collect and recycle used cooking oil



*1 Abbreviation for Used Cooking Oil

*2 Until the completion of the domestic SAF production plant, it will be utilized for biodiesel.



KITA Atsushi
Domestic SAF Promotion
Task Force
Vice President



Planes Flying with Used Cooking Oil
https://youtu.be/bvYYFvYfMjw?si=0w64O-ecx1LAqR_k

* Please watch the movie about JAL Group's efforts to promote domestic SAF (English subtitles available)

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, we will create relationships and connections through mobility, and by working to become Nature Positive, we 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 TNFD, identifying nature dependencies and impacts as well as priority areas, to systematically assess nature-related risks and opportunities on a scientific basis.

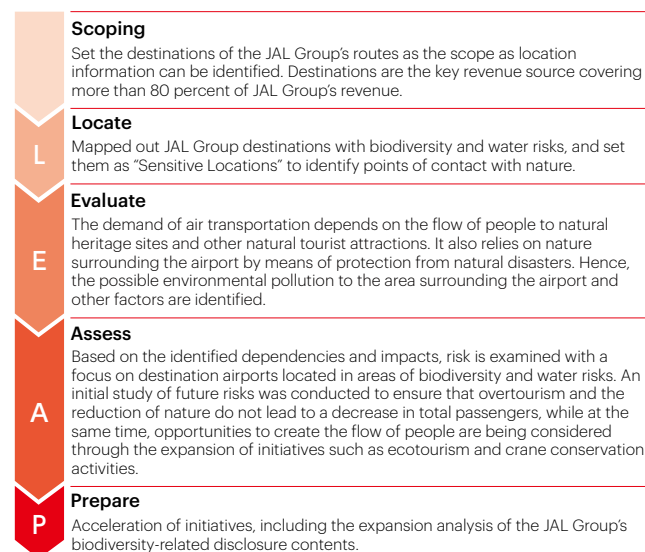
Nature-related Dependencies and Impacts

Nature, consisting of freshwater, ocean, land, and atmosphere, provides various benefits (ecosystem services) to the JAL Group's business. For example, a stable climate maintains a suitable operating environment for aircraft (regulating services), and provides places and opportunities for tourism (cultural services), leading to the creation of human flows. In addition, blessings such as food (supply services) lead to the creation of commercial and logistics flows.

In March 2023, an internal workshop was held with a lecturer from the World Wildlife Fund Japan (WWF Japan) to explore the connection with nature as part of the analysis of dependencies and impacts on nature. Also, ENCORE* was used to analyze the dependencies and impacts of the airline industry has on nature, which covers over 80 percent of the scale of the JAL Group's revenues. The results showed that the dependencies were on flights to natural heritage sites, beach resorts, and other nature-rich destinations, sales of local food products, flood and storm protection, and water use, while the impacts were on potential environmental pollution around airports, GHG emissions, and concern over the impact of the SAF production

process on ecosystems. For SAFs and credits, which are essential for reducing CO₂, we will strive to reduce biodiversity risks in the value chain by procuring those that meet strict sustainability standards based on certification systems established by public institutions.

LEAP Approach Image



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 use.

JAL's water intake areas are mainly in Japan, where water stress levels are considered low based on analysis using Aqueduct* and we recognize that the risk is low. However, we have identified the Tokyo metropolitan area (Haneda and Narita), which accounts for 80 percent of our total water intake, as a priority area. We will continuously strive to conserve water resources by means of recycling water used for washing aircraft parts, etc. We also conducted an analysis on overseas areas.

Although no priority areas were identified due to low water intake, we will expand our efforts in these areas in the future.

Water Intake Data ➡ ESG Data p.130-133

Initiatives ➡ Conservation of Water Resources
<https://www.jal.com/en/sustainability/environment/limited-resources/#anc08>

Identifying Priority Areas – Biodiversity Risk

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

Priority Areas in Domestic Destinations

As a result of checking against the areas with significant biodiversity in the biodiversity risk filter provided by WWF, we recognized that many of the JAL Group's domestic destinations are in areas of high biodiversity risk. These areas identified as particularly high-risk were designated as Sensitive Locations. In addition, areas with high demand for nature tourism were designated as areas where our business depends on nature and Tokyo, where our major airport locates in, was identified as Material Locations as an area where our business has an impact on nature. Considering these multiple factors as a whole, we identified Hokkaido, Kagoshima, Okinawa, and Tokyo as priority areas for biodiversity conservation.

Priority Areas in International Destinations

Using the four tools recommended by TNFD* (Aqueduct x IBAT x GFW x ENCORE) as well as the illegal wildlife trade (IWT) hotspots, we have identified areas with significant biodiversity and water risks as Sensitive Locations. In the future, we will also identify Material Locations related to JAL Group's destinations, and based on this analysis, we will identify areas that are dependent on and impacted by nature as well as having a significant passenger demand at the same time as priority areas for biodiversity conservation.

* Aqueduct: A tool to map water risks
 IBAT: A biodiversity assessment tool GFW: A biodiversity assessment tool
 ENCORE: A tool to assess the opportunities and risks that businesses pose to their natural capital.

Risks and Opportunities

Loss of biodiversity can be a significant risk to the sustainability of our air transportation business, and managing it can also lead to opportunities. The workshop also assessed nature-related

risks and opportunities based on the identified dependencies and impacts, which are summarized in the table below. In the future, we will deepen the assessment of risks and opportunities by analyzing financial impacts as well.

Risks and Opportunities

	Classification	Risk Overview	Our Response to Risk Reduction
Risks	Transition Risks - Policies and Regulations - Market - Technology - Reputation	Restrictions on foodstuffs and commercial products used due to more strict regulations on the use of wildlife to protect rare species	- Compliance with internal guidelines with reference to the IUCN Red List, etc. - Use of sustainable foodstuffs and commercial products
		Risk of difficulty in securing SAF due to concerns about the ecological impact of the SAF production process	Use of SAFs (such as ICAO CORSIA-eligible fuels) that are aware of the raw materials, land use and ecosystem conservation in the production areas, etc.
		Over tourism in nature-rich tourism destinations	Realization of tourism based on sufficient management of human flows
		Being part of illegal wildlife trade	Education to employees and collaboration with airport authorities to prevent illegal wildlife trade
	Physical Risks - Acute Risk - Chronic Risk	Environmental contamination to the airport surroundings	Thorough prevention procedures and post-occurrence response procedures
		Impact on air transportation business by pandemic outbreaks of infectious diseases caused by the change of ecosystems	- Provide a safe and secure air transportation environment through measures to prevent infectious diseases - Develop flight plans based on passenger demand
		Loss of natural tourism resources and reduced passenger volume due to changes in the ecosystem	Promote efforts to restore natural tourism resources in cooperation with local communities
Opportunities	Opportunities based on Business Performance - Resource Efficiency - Products and Services - Market - Capital Flows and Financing - Reputation	Risk of airports unable to be used due to natural disasters caused by environmental changes in the surrounding area	Preservation of the surrounding environment in cooperation with local airports
		Creation of demand for nature tourism	- Balancing tourism and nature conservation by encouraging appropriate tourism through the training of tourism guides, etc. - Creating relationships and societal connections through the Group airlines network
		Creation of commercial distribution and logistics through the transportation of foodstuffs and commercial products that are products of a rich ecosystem	Contribution to regional economic revitalization through high-speed fresh transportation of foodstuffs and commercial products
	Sustainability Performance Opportunities - Protection, Restoration and Rehabilitation of Ecosystems - Sustainable Use of Natural Resources	Securing tourism resources through protection, restoration, and rehabilitation of ecosystems	Implementation of measures such as coral sexual reproduction project, red-crowned cranes, etc.
		Securing a stable supply of commercial materials	Use of sustainable commercial products (e.g., certified commercial products) in collaboration with suppliers
		Contributing to biodiversity through the use of technology unique to an airline company	Consideration of new initiatives through industry-academia collaboration

Metrics and Targets

The JAL Group recognizes that biodiversity is affected by various environmental issues, including climate change, resources, and environmental pollution, and commits to comprehensive solutions. In addition to targets related to biodiversity conservation, we disclose environmental data such as CO₂ emissions, waste and water consumption.

Metrics and Targets

Main Items	Efforts	Metrics	FY2025 Targets
Biodiversity Conservation	Preservation and expansion of tourism resources	[Okinawa] Number of sexually reproduced corals grown	1,000 seedlings by 2026
		[Okinawa] Expansion of tours related to sexually reproducing coral	Tour expansion
		[Hokkaido] Expansion of red-crowned cranes conservation activities	Expansion of initiatives
		[Amami (Uken village)]: Mangrove planting under the cooperation of industry, government, and academia	To be determined
	Use of certified commercial products	Percentage of inflight items using certified paper	100%
	Prevention of illegal wildlife trade	Number of illegal wildlife transports	0 times
	Consideration for biodiversity in the foodstuffs and commercial products we handle	Number of violations of internal guidelines for ESG risk foodstuffs and commercial products	0 times
	Reducing the impact on the ecosystem around the airport	[Tokyo] Number of incidents of improper management of water containing hazardous substances	0 times

Core Global Disclosure Metrics

The JAL Group is expanding the disclosing of the indicators based on the Core Global Disclosure Metrics as required by TNFD v1.0 in the ESG data.

➡ ESG Data p.130-133

Priority Measures

Sexual Reproduction and Coral Rehabilitation Project

One of the fascinations of Okinawa is its coral reefs. Coral reefs are not only beautiful, but also serve many roles, such as providing a place for living creatures to coexist. However, in recent years, coral reefs have continued to decline due to rising sea temperatures and other factors.

Since 2020, Japan Transocean Air (JTA), a member of the JAL Group, formed a council with local companies to support coral reef restoration efforts using the sexual reproduction method in the Yaeyama and Kumejima areas. In May 2024, for the first time since the start of support, spawning of corals by reproductive strains was confirmed. This was the first time in Japan to succeed in complete aquaculture farming, in which coral seedlings are produced again from corals bred through sexual reproduction. And this was an important step in preserving the genetic diversity of corals and passing them on to the next generation.

In order to pass on the rich natural environment to the next generation, the JAL Group, together with other sponsors, will continue to support sexual reproduction and coral rehabilitation.



Collection equipment installation work



Spawning

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 2023, we held several discussions with WWF Japan on the transportation of animals and plants. In the

Amami and Okinawa regions, which are home to many rare wildlife species, we participate in measures to prevent poaching and smuggling. In June 2024, JAL Group employees spoke at a seminar hosted by WWF Japan. We explained the details of border restrictions 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. The speaker also raised the difficulty of responding to the situation in a short period of time before passengers board their flights, 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

Comment

Amami Mangrove Planting

Based on the Industry-Academia-Government Collaboration Agreement on Environmental Conservation and Regional Development in Uken Village signed in September 2023 by Uken Village on Amami Oshima Island, Sophia University, ITOCHU Corporation, and Japan Airlines, the Industry-Academia Co-creation Department pushes forward enabling Uken Village to achieve its goals of being Zero Carbon City by 2050 and conserving and restoring biodiversity. At the same time, we are building a symbiotic relationship between nature and humans and creating new flows of people.

The focus of this initiative is planting project of mangrove, which builds a rich ecosystem and is attracting attention as a blue carbon ecosystem*, a measure against climate change. Uken Village has been working with ITOCHU Corporation to plant mangroves on a part of Edateku Island in the village. In a joint research project with Sophia University, the soil, water quality, flora and fauna of the plantation site were evaluated from an academic perspective to confirm its suitability. In March 2024, as the first step of an initiative based on the industry-academia-government agreement, an



issues alone, we are deepening our 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 Foodstuffs and Commercial Products

In July 2022, the JAL Group established internal guidelines for the foodstuffs 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 foodstuffs and commercial products we handle. These guidelines are reviewed as necessary through discussions with internal working groups in light of regulatory and social trends.

eco-study tour was held for Sophia University students and ITOCHU Corporation employees to experience the nature and culture of Uken Village and mangrove planting. During the tour, we reached Edateku Island by boat and planted 100 trees after cultivating the land. It was a very meaningful experience that allowed me to come in contact with nature and realize my contribution to environmental conservation.

To further expand our efforts, we will continue to conduct the joint research and plan mangrove planting tours to contribute to environmental conservation and regional development in Uken Village.

*Blue carbon refers to carbon that is taken up by coastal and marine ecosystems and stored in their biomass and the underlying soil. It was defined in a United Nations Environment Programme (UNEP) report published in 2009 and is attracting attention as a new option for combating climate change. The major sinks for blue carbon are algal beds, salt marshes, and mangrove forests, which are referred to as blue carbon ecosystems.

KOJIMA Masayuki
Industry-Academia Co-creation
Planning and Research Group



Basic Concept

To fulfill our responsibility to pass on our precious Earth to the next generation, the JAL Group aims to realize a Circular Economy that makes effective use of limited resources.

To promote effective use of limited resources, we are committed to the 4Rs (refuse/reduce/reuse/recycle) and to reduce food waste and the use of new petroleum-based single-use plastics products in all aspects of our business. In addition, we aim to reduce greenhouse gas emissions through these actions.

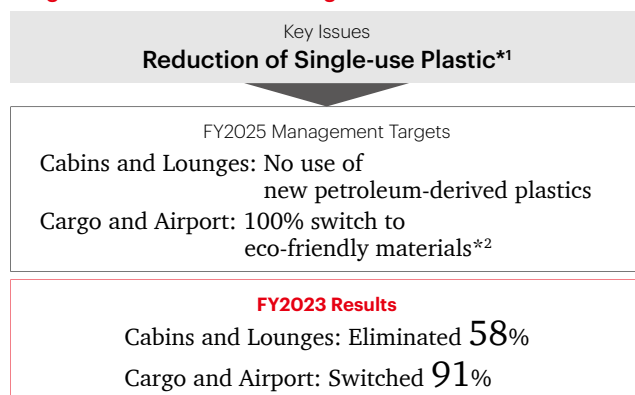
To this end, we will work together with our customers to reduce food waste and the use of plastic products at all touch points, including the time spent inflight. We will also work with our suppliers to reduce waste in the supply chain.

🔥 Food Initiatives p.118

Metrics and Targets

The following targets have been set for the reduction of single-use plastics, one of the JAL Group's key issues in the Medium-Term Management Plan.

Progress Towards FY2025 Targets



*1: Single-use plastic products provided to our customers

*2: Items that do not use new or reduced petroleum-derived raw materials, such as biomass, recycled plastic, and certified paper

Priority Measures

In May 2021, the JAL Group established a target to reduce single-use plastics provided to our customers by FY2025 as single-use plastics contribute to global warming and ocean pollution problems. By promoting the 3Rs (reduce, reuse, and recycle,) +1R (redesign,) and with the cooperation of our

customers, we are eliminating all new petroleum-derived plastics provided to customers in cabins and lounges, as well as switching 100 percent to environmentally friendly materials in our cargo operations and at the airport.

Examples of Reducing Single-use Plastics

Cabins and Lounges

No use of new petroleum-derived plastics
FY2023 Result: Eliminated 58%

Reuse/Recycle

- Washable and reusable
- Lid made of 100% recycled plastic

Redesign

Internationally certified paper containers and tray mats

Reduce/Redesign

Containers made from recycled PET bottles

Recycle/Redesign

- Changed to internationally certified paper lids.
- Began recycling paper cups on some routes.

Cargo and Airport

Switch 100% to eco-friendly materials
FY2023 Result: Switched 91%

Redesign

Changed the luggage cover plastic bags for hands-free service to 50% biomass

Recycle

- Plastic sheets for cargo packing made from recycled materials
- Recycled from 40 years ago

Highlight

Horizontal Recycling of Paper Cups

In cooperation with the Nippon Paper Group, the JAL Group has been collecting and recycling paper cups on domestic flights since December 2022. Until now, collected paper cups were only recycled into cardboard etc., however, through a three-way collaboration with paper cup manufacturer Tokan Kogyo Co., Ltd., a horizontal recycling scheme of paper cups into paper cups was established. In June 2024, drinks were served in recycled paper cups on JAL domestic flights departing from Haneda for a limited time. This initiative was made possible by the cooperation of our customers in sorting paper cups. We will continue to accelerate our efforts to promote resource recycling in cooperation with our stakeholders.



*Wearing gloves is optional for cabin attendants.