Kansai International Airport,Osaka Itami Airport,Kobe Airport

Environmental Report

2025

Shaping a New Journey

KANSAI AIRPORTS

Kansai Airports, Environmental Promotion Gr., Technical HQ. [Published : September 2025]

Company Profile

Name	Kansai Airports
Date of incorporation	December 1, 2015
Location	1-banchi, Senshu-Kuko Kita, Izumisano-shi, Osaka 549-8501, Japan
Company representatives	Yoshiyuki YAMAYA Representative Director CEO Benoit RULLEAU Representative Director Co-CEO
Business scope	●Operation and management services, etc. of Kansai International Airport and Osaka Itami Airport ●Operation of Kobe Airport by Kansai Airports Kobe
Capital	25 billion yen
Shareholders	ORIX Corporation 40% VINCI Airports 40% Other investors 20%

＊ On April 1, 2018, Kansai Airports Kobe commenced its business as an operator of Kobe Airport (KOBE).

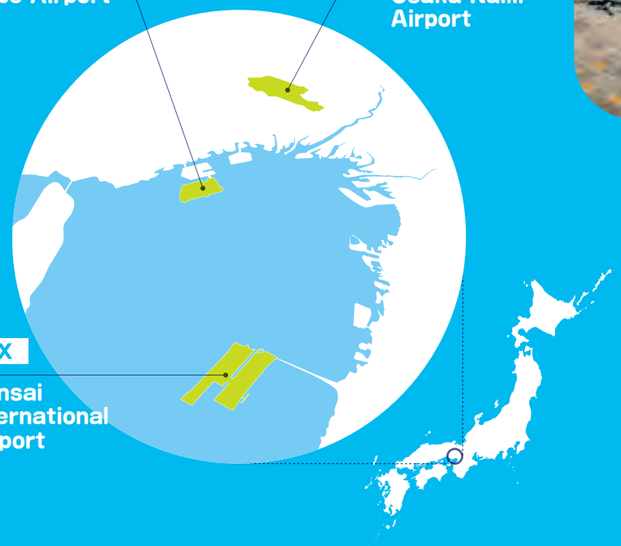
Kansai Airports Website:https://www.kansai-airports.co.jp/

Passenger traffic 3.61 M people | Landings / takeoffs 33,000 times

Passenger traffic 31.80 M people | Landings / takeoffs 199,000 times

KOBE
Kobe Airport

KIX
Kansai International Airport



ITAMI
Osaka Itami Airport

Passenger traffic 15.45 M people | Landings / takeoffs 137,000 times

＊ Figures for passenger traffic and landing/takeoffs are based on FY2023 results.

Group Companies

- Kansai Airports Kobe
  https://www.kansai-airports.co.jp/company-profile/about-us/kobe/
- Kansai Airports Retail & Services
  https://rs.kansai-airports.co.jp/
- Kansai Airports Operation Services
  https://www.ops.kansai-airports.co.jp/
- Kansai Airports Technical Services
  http://www.tech.kansai-airports.co.jp
- CKTS Co., Ltd.
  https://www.ckts.co.jp
- World Air Passenger Service Co., Ltd.
  https://www.waps.co.jp
- KIA Heating & Cooling Supply Co., Ltd.
  https://www.kiahc.co.jp/

Contents

Editorial Policy

■ **Purpose of this report**
This report is published to convey to stakeholders in an easy-to-understand manner initiatives, including data, for reducing environmental impacts being carried out by Kansai International Airport, Osaka Itami Airport and Kobe Airport to help realize sustainable society, which are managed by Kansai Airports.

■ **Reporting boundary**
This report focuses on the activities of Kansai Airports and also covers the activities of certain Group companies and businesses operating at the airports its manages.

■ **Reporting period**
Activities carried out up to the end of September 2025, focusing mainly on FY2024 (April 2024 to March 2025).

Shaping a New Journey

Kansai Airports Group Environmental Policy

Environmental Philosophy

We, Kansai Airports Group, recognize the importance of solving environmental problems on a global scale and contribute to the realization of a sustainable society through the operation of airports, which are public infrastructure.

Basic Environmental Policy

- **Each employee of the group will diligently preserve the global environment in their daily work.**
- **We will clarify the environmental impact of our business activities, set goals to reduce it, and take proactive measures.**
- **We will regularly check on the progress of initiatives and work to improve the content.**
- **We will play a pioneering role in the airport field. Furthermore, we will contribute to reducing the environmental burden by overall airports, including the aviation sector.**
- **We will communicate with all stakeholders involved in airports and communities.**

Based on the “Environmental Philosophy” and the “Basic Environmental Policy”, we have set the targets for FY2030 to realize our long-term vision with three pillars.

Decarbonization

- By FY2050, we will achieve net zero greenhouse gas emissions in business activities of Kansai Airports Group.
- As well as promoting energy conservation including operational optimization, we propel decarbonization by using renewable energy and hydrogen to contribute to a decarbonized society.

Circular economy

- We aim to become a Zero Waste Airport by FY2050. In addition to further reducing, sorting and recycling combustible waste, we will further reduce the amount of single-use plastic and work on conversion of materials and closed-loop recycling to contribute to a circular society.

Environmental symbiosis

- We ensure a healthy living environment around the airports and aim to realize symbiosis with nature.
- We continue to monitor aircraft noise and surrounding environment. We also use water resources efficiently through utilization of grey water and enhanced water conservation operations and conserve biodiversity to contribute to an environmentally symbiotic society that is in harmony with nature and local communities.

Environmental Goals (Target: FY2030)

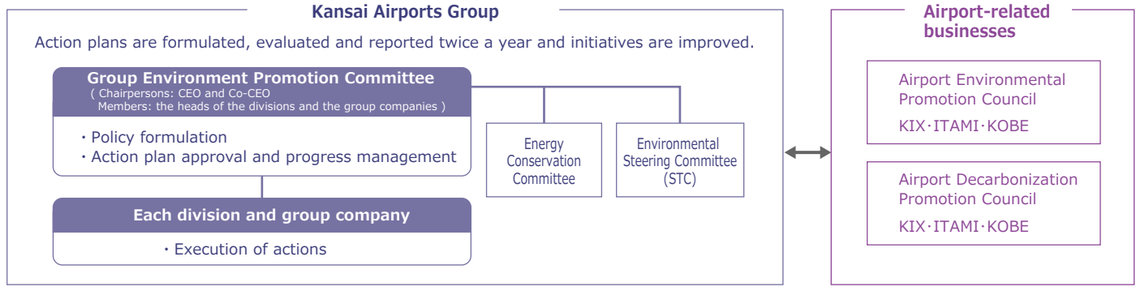
- **Decarbonization**
  - Reduce greenhouse gas emissions by Kansai Airports Group by 50% from the FY2016 level
- **Circular economy**
  - Not to increase the amount of incinerated waste of the entire airports from the FY2016 level
  - Reduce the amount of single-use plastic by Kansai Airports Group by 30% from the FY2016 level
- **Environmental symbiosis**
  - Continue appropriate and steady monitoring of noise and the surrounding environment
  - Not to increase the total water use of the entire airports from the FY2016 level
  - Reduce the clean water use by Kansai Airports Group by 15% from the FY2016 level
  - Conservation of biodiversity

Yoshiyuki YAMAYA
Representative Director CEO

Benoit RULLEAU
Representative Director Co-CEO

Kansai Airports Group’ s Environmental Promotion System

Kansai Airports Group has established an environmental promotion system to promote group-wide environmental activities under the Group Environmental Promotion Committee (chaired by the CEO and Co-CEO), which consists of the heads of divisions and group companies.



Group Environmental Promotion Committee

We have established the Group Environmental Promotion Committees to monitor the progress of action plans formulated and implemented by divisions and group companies. In FY2024, the Committees convened twice, in September 2024 and February 2025, to share updates on the targets set in February 2024 and discuss progress and challenges arising from the action plans. Through these Committees, we implement the PDCA cycle to work toward achieving our Environmental Goals 2030.

Energy Conservation Committee

The Energy Conservation Committee examines measures to optimize energy use and promote decarbonization at the airport. Meeting twice a year, the Committee shares current issues and discusses the approach for upcoming initiatives.

Environmental Steering Committee (STC)

STC addresses cross-divisional themes by reviewing policies and activities to be implemented across divisions and group companies. Held twice a year, the STC reviews progress, shares challenges, and advances initiatives accordingly.

Airport Environmental Promotion Council

At the Airport Environmental Promotion Council, we collaborate with airport-related businesses to share progress on initiatives aimed at reducing environmental impacts, such as waste reduction, recycling, and water conservation.

Airport Decarbonization Promotion Council

The Airport Decarbonization Promotion Council was established by airport provider* to promote decarbonization at airports. Each airport decarbonization promotion plan formulated by the Council has been recognized by the Minister of Land, Infrastructure, Transport and Tourism.

* KIX and ITAMI: New Kansai International Airport Co., Ltd. / KOBE: Kobe City

Utilization of environmental certification systems

Acquired Airport Carbon Accreditation (ACA)

At the Kansai Airports Group, we implement environmental management by leveraging third-party environmental certification systems. Since FY2016, we have obtained Airport Carbon Accreditation (ACA). In November 2021, all three airports achieved Level 4, which has been maintained and updated since then. Going forward, we will continue to rigorously track performance toward the long-term goal of net-zero greenhouse gas emissions by 2050. This includes managing and reducing CO_2 emissions – Scope 3 included – in collaboration with airport-related businesses.

[Outline of each level]

Level 5
Of Scopes 1 and 2, more than 90% is reduced by its own efforts, and the remainder is offset. For Scope 3, a roadmap toward net zero is developed.
Environmental Standards Regulations.

Level 4+ (Transition)
Conforming to the Level 4 requirement to offset CO_2 emitted by airport businesses.

Level 4 (Transformation)
To reduce overall CO_2 emissions, transform airport operations and consolidate the involvement of airport-related businesses.

Level 3+ (Neutrality)
Conforming to the Level 3 requirement to offset CO_2 emitted by airport businesses.

Level 3 (Optimisation)
Reducing CO_2 emissions, some of which come from airport-related businesses.

Level 2 (Reduction)
Implementing carbon management to reduce the CO_2 emitted by airport businesses.

Level 1 (Mapping)
Calculation of CO_2 emitted by airport businesses.

Addressing Environmental Impact at Airports

Causal relations between our operations at airports and environmental impact

The environmental impacts of airport activities are many and varied, and measures must be taken by each activity to reduce their impact.

At Kansai Airports, we have clarified our environmental loads and issues to set various targets and examine our approach.

By regularly confirming and evaluating the progress of activity and striving to improve our initiatives and address new challenges, we are proceeding proactively with our activities to reduce the environmental impact.

CO_2 emissions

・Airport facilities ・Airport vehicles
・Aircrafts

Reduce GHG Emissions

[Efforts]
- Promote energy conservation
- Utilize renewable energy and hydrogen
- Promote zero-emission vehicles (ZEVs)
- Reduce CO_2 emissions around the aircrafts

Waste generation

・General waste ・Industrial waste

Waste reduction

[Efforts]
- Reduce, sort and recycle waste
- Reduce single-use plastics

Impact on living environment

・Aircraft noise ・Air and Water

Environmental monitoring

[Efforts]
- Measure, monitor and take measures for aircraft noise
- Treat general wastewater
- Control exhaust gas from waste incineration

Water use

・Use of clean water and reclaimed water in airports

Reduce clean water consumption

[Efforts]
- Utilize rainwater and reclaimed water
- Water conservation operation

Impact on natural environment

・Marine environment
・Airport greening

Biodiversity conservation

[Efforts]
- Seaweed environment creation
- Rooftop greening

Kansai Airports Group

Working as One Team to Develop a Sustainable Airport

The Kansai Airports Group consists of eight companies engaged in a wide range of airport-related businesses. While each company operates in a different field, we share a common awareness of the pressing environmental issues we face, as well as a shared vision of the future and environmental goals to achieve. United as one group, we are working together to reduce our environmental impact.

This section introduces the initiatives of each company within the Kansai Airports Group aimed at reducing environmental impacts.

Kansai Airports Retail & Services(KRS)

KRS operates retail and service businesses at the three airports, including retail shops, currency exchange, and lounges.

At retail shops, we continue our efforts to reduce the use of vinyl shopping bags. In lounges, KRS promotes reducing plastic containers and using environmentally friendly products, achieving Eco Mark certification – the first case for an airport lounge. The lounges focus on providing services that balance customer comfort and environmental consideration.

Paper shopping bag (p.24)

Eco Mark Certified Lounge

Kansai Airports Operation Services(KOS)

As a core entity ensuring safety and security within the Kansai Airports Group, KOS manages and integrates airport operation information, conducts patrols and responds to emergencies on site, provides information services in terminal buildings, and maintains a safe and comfortable environment through cleaning services.

In its fire prevention operations – essential for preparing for potential accidents and disasters at the airport – KOS has switched the water used in daily firefighting drills to reclaimed water. Even in the airport's uniquely specialized operations, KOS strives to balance customer safety with reducing environmental impact throu gh innovative approaches.

Use of reclaimed water for firefighting (p.30)

Kansai Airports Technical Services(KTS)

KTS is responsible for maintaining and managing civil engineering/building facilities and electrical/mechanical equipment at the airports, as well as providing data processing services.

Leveraging its technological expertise and experience gained through extensive operations – including facility inspections, repairs, and equipment upgrades – KTS not only improves energy efficiency but also enhances operations and renovates systems with attention to water reuse and waste reduction. Recently, KTS has worked to reduce waste management impacts by controlling the spread of weeds and minimizing grass clippings at the airports.

Reduction of waste through drying of grass clippings (p.24)

Kansai Airports Group × Environment

Shaping a New Journey

KANSAI AIRPORTS

Exploring What We Can Do in Each Area and Acting as One Group

CKTS Co., Ltd.(CKTS)

CKTS plays a vital role in supporting the safe and efficient operation of aircraft, providing a wide range of ground-handling services including passenger assistance, baggage and cargo handling, and aircraft marshalling.

To balance reduced CO_2 emissions with operational efficiency, the company has introduced remote-controlled electric pushback vehicles and fuel-cell forklifts (FCFLs) into its fleet. In addition, CKTS is working to reduce industrial waste generated through cargo handling, striving to realize environmentally friendly and innovative ground-handling operations.

Introduction of fuel cell forklifts (p.20)

World Air Passenger Service Co., Ltd.(WAPS)

WAPS provides passenger handling services, dispatches staff to duty-free shops and lounges, and operates the Osaka Airterminal Hotel.

In hotel operations, WAPS works to reduce environmental impacts by upgrading to LED lighting, installing water-saving showers, and introducing amenities made from biomass or easily recyclable materials – all while ensuring a comfortable stay for customers. WAPS also encourages guests to sort waste, working together toward a more sustainable hotel experience.

Guest Room bathroom

Kansai Airports Kobe(KAPK)

KAPK is responsible for the operation and maintenance of KOBE.

The company is advancing initiatives to reduce environmental impact, including converting airport lighting to LEDs in cooperation with tenants in the airport and conducting pilot projects for solar power generation in collaboration with Kobe City, the airport provider. In the terminal building, KAPK has also created green spaces and scenic areas, making the airport an enjoyable destination even for those not flying. In April 2025, a new international terminal building began operation, marking another step forward as an airport that continues to evolve together with the local community.

Development of spaces on the rooftop observation deck (p.34)

KIA Heating & Cooling Supply Co., Ltd.(KHC)

KHC operates a district heating and cooling service that centrally produces and supplies thermal energy – such as air conditioning and hot water – for a variety of buildings at KIX, including passenger terminals, cargo facilities, and hotels.

Through technical innovations, KHC promotes the efficient use of energy, driving energy conservation not only within the Kansai Airports Group but across the entire airport. The company is also working to reduce water use in the thermal energy production process, thereby reducing environmental impacts from both energy and water resource perspectives.

KHC Heat supply plant

Improvement of efficiency in thermal energy equipment (p.17)

Kansai Airports Group

Environmental Vision 2050 and Environmental Goals 2030

Kansai Airports Group has initiated various efforts to reduce the environmental impact at the three airports it operates (KIX, ITAMI, KOBE). As global environmental issues, including decarbonization, have become a common social awareness that urgently needs to be addressed, it is also Kansai Airports Group's responsibility to tackle these issues as we, as the operator of the three airports, the gateways of Asia and Kansai region, connect to the rest of the world while playing an important role in the regional transportation infrastructure.

Given this background, in April 2023, we launched our new environmental plans, "Environmental Vision 2050" and "Environmental Goals 2030." To take over and further develop the One Eco-Airport Plan (2016 to 2022) and previous initiatives, we have set the long-term vision toward 2050 and specific milestone targets for 2030.

Three pillars and the activities

Climate change on a global scale, resource depletion due to economic activities of mass production, mass consumption and mass disposal, destruction of biodiversity caused by large-scale resource extraction, and other issues have become apparent.

These issues are interrelated and complex and need to be addressed through a multifaceted approach to contribute to the integrated environmental, economic and social improvement.

With the three pillars of "Decarbonization," "Circular Economy" and "Environmental Symbiosis" to address these issues, Kansai Airports Group has been promoting all activities of climate change measures (Decarbonization), sustainable resource use (Circular Economy) and harmonious symbiosis between nature and humans (Environmental Symbiosis) in a comprehensive manner.

- Decarbonization
- Circular economy
- Environmental symbiosis

Environmental Goals 2030

Greenhouse gas emissions
50% reduction
Greenhouse gas emissions by Kansai Airports Group from the FY2016 level

Incinerated waste
Not to increase the amount
Incinerated waste of the entire airports not to increase the amount from the FY2016 level

Single-use plastics
30% reduction
The amount of single-use plastic by Kansai Airports Group from the FY2016 level

Monitor the Local Environment
Continue
Continue appropriate and steady monitoring of the surrounding environment

Total water use
Not to increase
Total water use of the entire airports not to increase from the FY2016 level

Clean water use
15% reduction
Clean water use by Kansai Airports Group from the FY2016 level

Biodiversity
Conservation

Environmental Vision 2050

Realization of a sustainable society

Greenhouse gas emissions
Net Zero

- Net zero greenhouse gas emissions in business activities of Kansai Airports Group
- Contribution to the reduction of green house gas emissions for the entire airports, including airport-related businesses

Zero Waste Airport

- Thorough reduction, sorting and recycling
- Recycling rate: 100%

Ensuring a healthy living environment around the airports

- Monitoring aircraft noise and the surrounding environment

Symbiosis with nature

- Efficient use of water resources
- Conservation of water and soil environments
- Contributing to ensuring a healthy ecosystem

Initiatives under the One Eco-Airport Plan and SDGs

Our new environmental plans, the "Environmental Vision 2050" and "Environmental Goals 2030," were formulated to help address environmental issues in collaboration with local communities and society whereby the three airports collectively promote various initiatives. Amid growing efforts to achieve the Sustainable Development Goals (SDGs) for addressing issues in the environmental, economic and social spheres in a global scale, efforts to build a sustainable society are becoming even more important at Kansai Airports Group. Taking these global goals into account, we are deliberating on our policies of various activities.

We, at Kansai Airports Group, will keep striving to help achieve a sound global environment and sustainable society through our business operations.

Roadmap

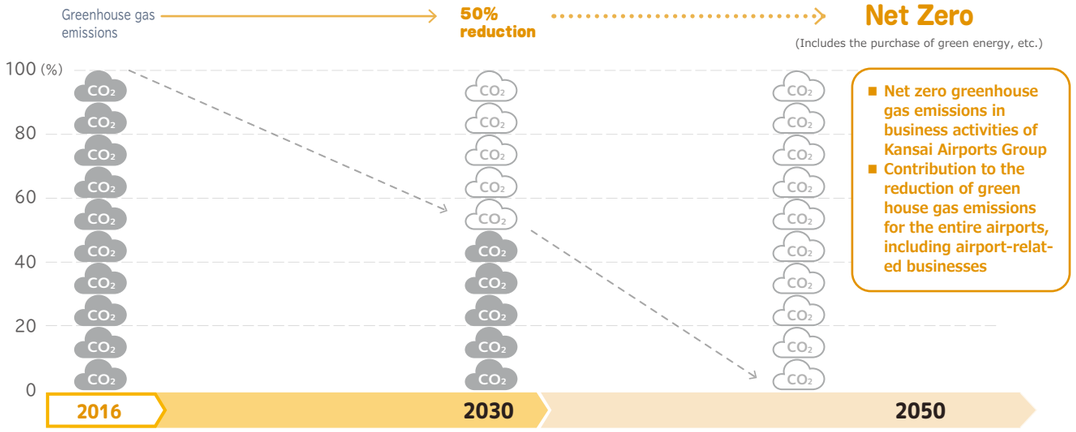
for achieving the Environmental Goals 2030 and Environmental Vision 2050

Decarbonization

Net zero greenhouse gas emissions

We set a long-term goal to achieve net zero greenhouse gas emissions in business activities by FY2050.

At Kansai Airports Group, various steps have been taken to reduce the environmental footprint of the three airports it operates. We will continue to work on a medium- to long-term plan and promote the measures for achieving zero net greenhouse gas emission by further reducing energy consumption and using renewable energy.



Major initiatives		
Promote Energy Conservation	● Optimizing the sir-conditioning system ● Upgrading to energy-efficient LED lighting system ● Optimizing operations	● Further energy saving ● Purchase of green energy ○ Technological innovation
Utilize Renewable Energy and Hydrogen	● Install more solar panels ● Promote the Hydrogen Grid Project	○ Use of hydrogen ○ Use of city gas produced through methanation ○ Carbon capture and methanation to reduce emissions from waste combustion
Promote ZEVs	● Replace existing service vehicles with electric and fuel-cell vehicle	○ Full switch to zero-emission vehicles

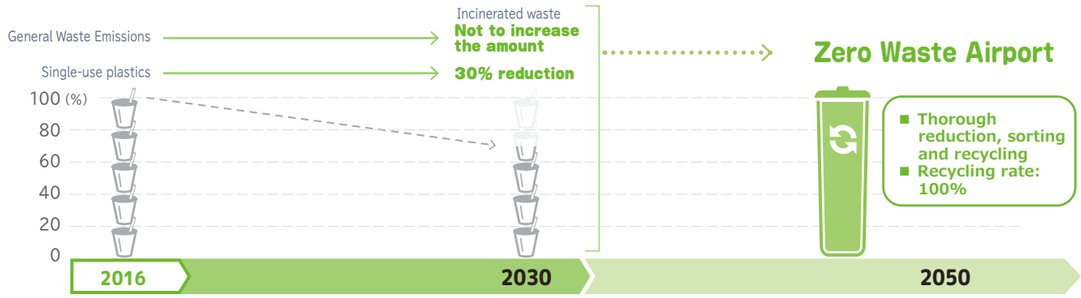
＊ ZEV (Zero Emission Vehicle)

Circular economy

To become Zero Waste Airport

We aim to become a Zero Waste Airport with a 100% recycling rate by 2050 through thorough waste reduction, sorting and recycling.

As well as steadily continuing efforts to achieve the mid-term goal in 2030, new recycling methods will also be considered.



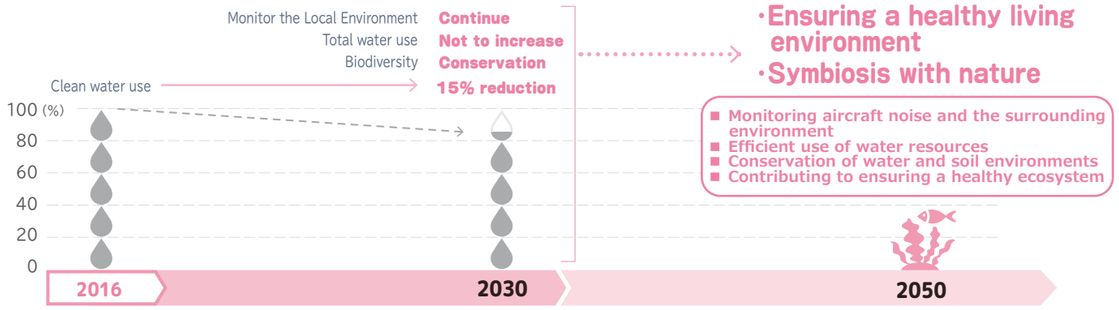
Major initiatives		
Waste reduction	● Reducing waste and recycling ● Introducing the use of a food waste disposer ● Considering and implement new items to recycle	● Promoting kitchen waste/plastics recycling ● Reuse of ashes generated from incineration facilities in the airports ● Considering the upgrading of incineration facility
Reduction of the amount of single-use plastics	● Conversion of single-use plastic materials ● Horizontal recycling of PET bottles ● Recycling cargo packing materials	

Environmental symbiosis

Ensuring a healthy living environment around the airports / symbiosis with nature

We promote our initiatives to realize “harmony with the vicinity” and “symbiosis with nature.”

Quantitative reduction targets have been set for total water use by 2030. In addition, we will sincerely address all aspects of the environment around the airports to continue to monitor the surrounding environment and promote initiatives such as the seaweed bed creation to conserve the ecosystem.



Major initiatives		
Monitor the Local Environment	● Measuring and monitoring aircraft noise ● Measures to reduce emissions from Incineration at KIX ● Advanced treatment of general wastewater at KIX	● Continued monitoring of aircraft noise and surrounding environment ● Promoting the reduction of the clean water use ● Creation of stable seaweed bed environment and new value for seaweed beds
Reduction of Clean Water Consumption	● Utilization of rainwater and gray water ● Water conservation operations	
Preserve Biodiversity	● Creation of the seaweed bed environment and conservation of the marine environment ● Island greening	

Initiatives Highlight

“Sora × Solar®,” the largest solar power generation facility in Japanese airports, begins supplying electricity!

In February 2025, the newly installed solar power facilities “Sora × Solar®” at KIX and ITAMI began generating electricity and supplying power to terminal buildings and other airport facilities.

This project adopts an on-site Power Purchase Agreement (PPA) scheme*, with 39,740 solar panels installed at KIX and 960 panels at ITAMI. The facilities are expected to achieve the largest power generation capacity among Japanese airports and represent a key initiative for the Kansai Airports Group in achieving its greenhouse gas emissions reduction targets.

KIX

ITAMI

* The PPA is a business scheme whereby a power generator installs solar power generation facilities on the premises of a customer (electricity user) at the power producer’s expense, and then supplies electricity generated by the facilities to that customer.

Hydrogen-powered fuel-cell (FC) bus introduced and begins operation!

In February 2025, in collaboration with Kishiwada Kanko Bus Co., Ltd., we introduced a fuel-cell (FC) minibus powered by hydrogen. This bus uses electricity generated from the chemical reaction between hydrogen and oxygen, producing no CO_2 or other environmental pollutants during operation.
The newly introduced bus is the first FC minibus in the Kansai region capable of operating on highways.It is used not only for airport tours but also for sightseeing tours in the local Senshu area and for other regional events.

Domestic SAF (Sustainable Aviation Fuel) supplied to passenger flights at Kansai International Airport for the first time!

In May 2025, supply of domestically produced SAF to aircraft commenced at KIX, using mass production facilities at the Cosmo Oil Sakai Refinery (Sakai City, Osaka Prefecture). The first flight to receive domestic SAF was JAL891 bound for Shanghai (Pudong) aboard the JAL “Myaku-Myaku” Jet, with a commemorative ceremony and send-off by related parties held on the day.

The Kansai Airports Group will continue to work closely with stakeholders to accelerate decarbonization in the aviation industry, raising awareness of SAF, encouraging the provision of used cooking oil as feedstock, and contributing to the expanded use of SAF.

* SAF (Sustainable Aviation Fuel): Sustainable aviation fuel made from used cooking oil and other waste oils from households and restaurants.

Features

Collaboration with Expo 2025 Osaka, Kansai, Japan

The Expo is an event that brings together people and resources from around the world and serves as an opportunity to address global challenges. The Expo 2025, under the theme “Designing Future Society for Our Lives,” showcases the achievement of the SDGs and envisions a sustainable future beyond them. The Kansai Airports Group is also collaborating with the Expo on various initiatives, focusing on environmental efforts that are essential for the airports of the future.

Airport development for the Expo 2025, Osaka, Kansai, Japan

At KIX, a major renovation – the first since the airport’ s opening – has been underway since 2021, culminating in a grand reopening in March 2025. The immigration inspection area and international lounges have been completely upgraded, preparing to welcome many visitors as the “First Pavilion” for the Osaka-Kansai Expo. During the renovation, efforts were also made to reduce environmental impact, including the reuse of existing buildings and energy-conservation measures such as energy-efficient air conditioning. In addition, an environmental PR booth has been set up on the international arrivals floor to provide information in a new and engaging way.

● KIX renovation work

Renovation redesigned to expand capacity, enhance facilities, and improve the passenger experience, with consideration for the environment.

● Environmental PR booth

Introduction to initiatives unique to an offshore airport, as well as SAF and hydrogen, which are essential for the airports of future societies.

Exhibitions and Presentations at the Expo Venue

Hannan City × Kansai Airports: Showcasing marine initiatives

at the Osaka Healthcare Pavilion Reborn Stage

On April 28 and May 10, 2025, at the Hannan Hitotsunagi EXPO held at the Osaka Healthcare Pavilion Reborn Stage, we jointly exhibited and presented the Osaka Bay Sea Forest (Seaweed Bed) Conservation and Restoration Project, undertaken in collaboration with Hannan City. At the venue, visitors were able to experience the richness and importance of Osaka Bay’ s marine environment through VR underwater footage and aquarium displays recreating the seas around Hannan City and Kansai Airport.

Participation in “Nature-Positive and Nationally Certified Sustainably Managed Natural Sies in Osaka Bay”

at BLUE OCEAN DOME

On April 28, 2025, we participated in “Nature-Positive and Nationally Certified Sustainably Managed Natural Sies in Osaka Bay,” held at BLUE OCEAN DOME and jointly organized by ZERI JAPAN and the Kinki Regional Environmental Office of the Ministry of the Environment.
This provided an excellent opportunity to share the Kansai Airports Group’ s initiatives for conserving marine environment with a wide audience, learn from other organizations’ case studies, and collaboratively consider the future of Osaka Bay.

Decarbonization

Reduction of greenhouse gas emissions

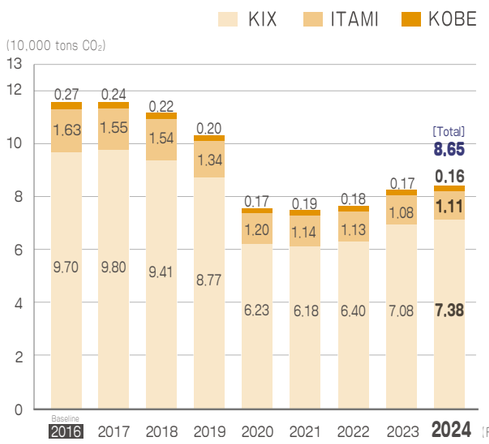
CO_2 emissions from airports

We at the Kansai Airports Group are steadily reducing CO_2 emissions through energy conservation, the use of renewable energy, and other decarbonization initiatives.

Due to the COVID-19 crisis that began in FY2019, CO_2 emissions were significantly reduced along with the decline in flights and passenger numbers. Since FY2022, passenger traffic has gradually recovered, and in FY2024 the three airports together recorded an all-time high of 50.86 million passengers. In this context, we have continued our efforts to reduce CO_2 emissions while building on the experience gained in energy management during the pandemic, and achieved a 25% reduction in FY2024 from FY2016 levels.

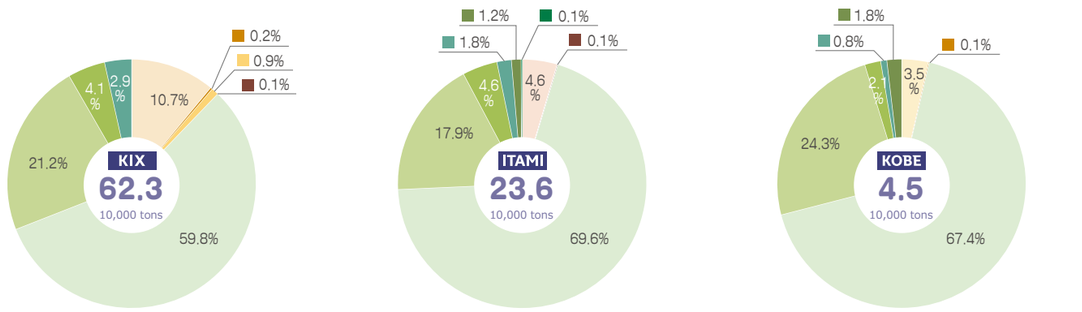
The overall CO_2 emissions of the airports are approximately 623,000 t-CO_2 at KIX, 236,000 t-CO_2 at ITAMI and 45,000 t-CO_2 at KOBE, with the majority of CO_2 emitted from aircraft. In addition to addressing our own emissions, the Kansai Airports Group is also focusing on the decarbonization of the entire airport, advancing initiatives in collaboration with airport businesses and the respective airport providers.

CO_2 emissions of the Kansai Airports Group



Note: ・The CO_2 emission factor for electricity is based on the data from FY2023.
・Calculated based on the Airport Carbon Accreditation (ACA) Level 4 emission calculation conditions.
・CO_2 emissions are calculated by categorizing them into Scopes 1 to 3 in line with the GHG protocol (universal standards for calculating and reporting on GHG emissions) concept.
・Since the figures are rounded to the second decimal place, the sum of the values for each airport does not necessarily equal the total.

CO_2 emissions from all the three airports (in FY2024)



Note1: Since component percentages are rounded to two decimal places, their sum does not necessarily add up to 100%.

Note2: Calculation Conditions

・Vehicles refer to passenger vehicles and ground support equipment (GSE) vehicles.
・Incineration of grass clippings, food residue, sludge and other biological waste is calculated based on carbon neutrality.
・Emissions from accessing the airport and aircraft are based on estimates.
・Emissions from aircraft are based on the LTO (Landings and Takeoffs: aircraft activity at altitude of 3,000ft and under) cycle stipulated by ICAO.

・**Scope1** : CO_2 directly emitted by incinerating fuels used in vehicles, emergency generators and other machinery.
・**Scope2** : CO_2 indirectly emitted when electricity is purchased and used.

Facilities managed by Kansai Airports
Vehicles managed by Kansai Airports
Waste/wastewater
Others

・**Scope3** : CO_2 emitted by other businesses involved in airport business activities.

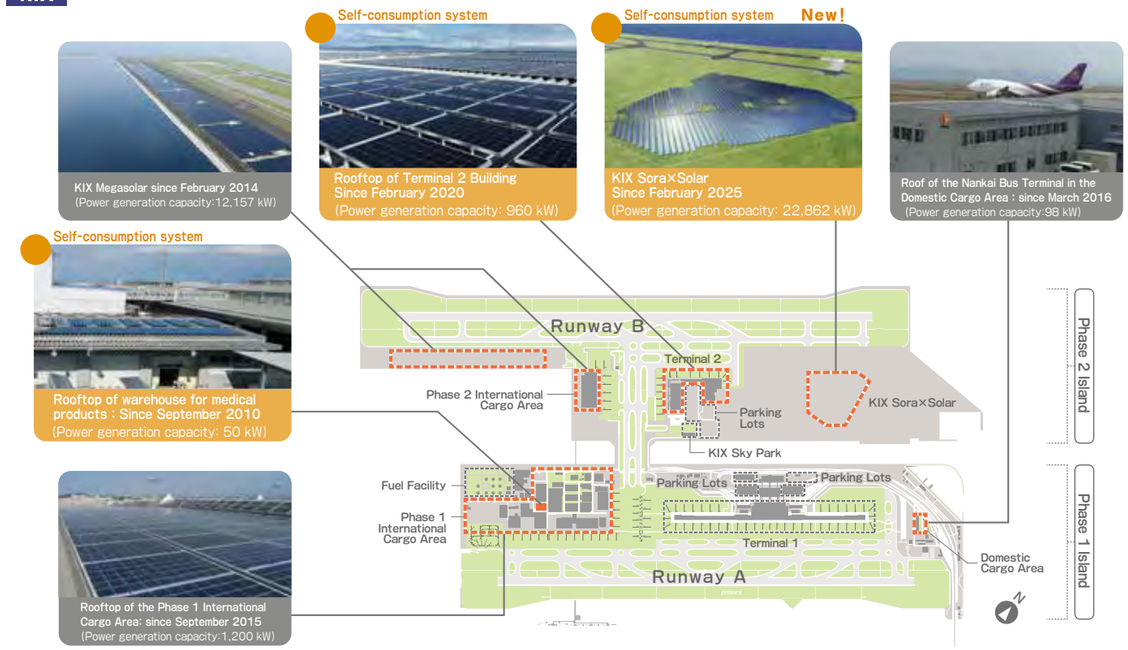
Aircraft
Accessing the airport, etc.
Business facilities
Vehicles managed by businesses
Waste/wastewater
Others

Utilize Solar Power Generation

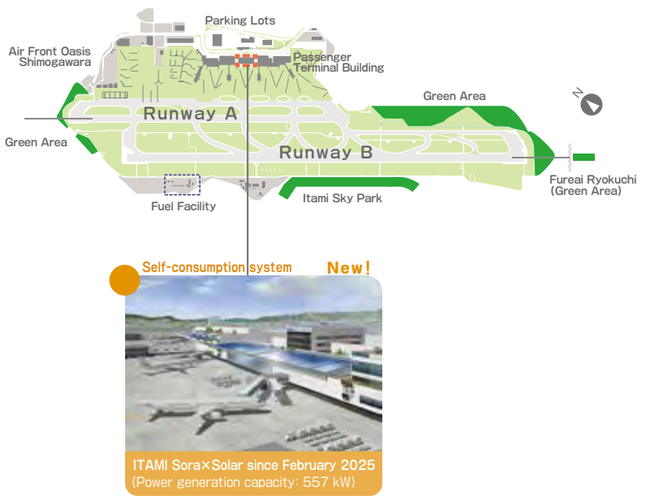
As large amounts of electricity are used in terminal buildings, warehouses, and other airport facilities, the utilization of renewable energy is key to reducing greenhouse gas emissions. The Kansai Airports Group utilizes unused land and the rooftops of airport buildings for the installation of solar power generation systems. By introducing a self-consumption solar power generation system, we are working towards on-site energy management.

Installation of self-consumption solar power generation systems

KIX



ITAMI



New!

Start operating a new self-consumption solar power generation system

KIX **ITAMI**

A new solar power generation project started in KIX and ITAMI, in which a new solar power generation facility "KIX-ITAMI Sora × Solar" generates power and supplies electricity to terminal buildings and other facilities. The project employs an on-site PPA scheme, making its annual power generation the largest in domestic airports*1. This will reduce CO_2 emissions of the Kansai Airports Group to approximately 15%*2.

*1 : As of February 2025.
*2 : Calculated based on the estimation of power generation in FY2025 and the total CO_2 emissions in FY2023.


KIX Sora×Solar


ITAMI Sora×Solar

Promote energy conservation

To achieve our target of reducing greenhouse gas emissions, efficient energy use and energy conservation efforts to minimize energy consumption are key. At the airport, energy consumption is highest in building facilities such as terminal buildings, mainly due to air conditioning and lighting. The Kansai Airports Group promotes energy conservation by introducing and optimizing energy-efficient equipment. In addition to physical facility upgrades, we also place importance on optimizing daily operations. While exploring advanced solutions, we strive to achieve efficient operations.

Air-conditioning system

[Major initiatives]
- Energy-efficient air-conditioning system
- Optimizing ventilation system
- Window insulation and anti-sunlight measures
- Optimizing air-conditioning control

KIX

A community heating and cooling system* is employed to supply heating and cooling required in the airport. We promote the reduction of greenhouse gases by taking advantage of economies of scale and using efficient large heat-source systems.

* Community heating and cooling system: A system that centrally produces cold water, steam and other heat sources at the heat supply plant and supplies them to multiple buildings via local pipelines.

Heat supply plant

Inverter-controlled turbo chiller

Upgrading to low-GWP refrigeration unit

Kansai International Airport Heating & Cooling Supply Co., Ltd. (KHC) is upgrading and introducing energy-efficient heat source equipment supplying heating and cooling. An energy-efficient chiller using a new refrigerant (HFO-1234yf) with low global warming potential is partly introduced to achieve heat supply with less environmental impact.

ITAMI

At Itami, we are introducing energy-efficient inverter-controlled electric turbo chillers, centralizing cold- and hot-water pumps for air-conditioning, and introducing inverter-controlled equipment. At the terminal building, we strive to reduce the air-conditioning load by introducing double low-e glazing and light-blocking panels to control heat transfer and solar radiation.

Inverter-controlled turbo chiller

Light-blocking panels on the exterior wall of the terminal building

KOBE

We installed automatic curtains and applied heat-shielding paint to the waiting room of the terminal building.

KOBE Terminal Building

照明設備

[Major initiatives]
- 100% LED conversion of lighting
- Expansion of sensor and brightness control

KIX ITAMI KOBE

In line with the renovation of the terminal building at ITAMI and the ceiling renovation at KOBE, we have been progressively converting lighting to LED at each airport. Most recently, LED lighting has been introduced as part of the ongoing renovation of KIX Terminal 1.

Going forward, we are working toward achieving 100% LED conversion of facility lighting and airfield lighting by FY2030.

KIX Terminal Building 1

ITAMI Terminal Building

KIX aviation lighting

KIX

When upgrading and newly installing electrical equipment, we introduced a new high-efficiency transformer, which reduces power loss by the transformer.

Energy-efficient transformer

Optimizing operations

[Major initiatives]
- Visualizing and analyzing energy use with BEMS
- Optimizing operations with AI

To optimize operations to conserve energy, it is important to visualize energy achievements, clarify challenges, and take appropriate measures. Therefore, we implement operations by utilizing the Building Energy Management System (BEMS) which allows data collection, management, and analysis in a central manner. Going forward, we strive to optimize automatic operations combining BEMS and AI.

KIX ITAMI KOBE

Through daily management and monitoring activities, we control optimum air-conditioning temperatures and unnecessary lighting. We also work to improve air-conditioning management by closely monitoring on-site temperature and humidity, while taking customer feedback into account. In addition, we regularly conduct energy-conservation patrols in the terminal buildings to check unnecessary lighting and air-conditioning operations.

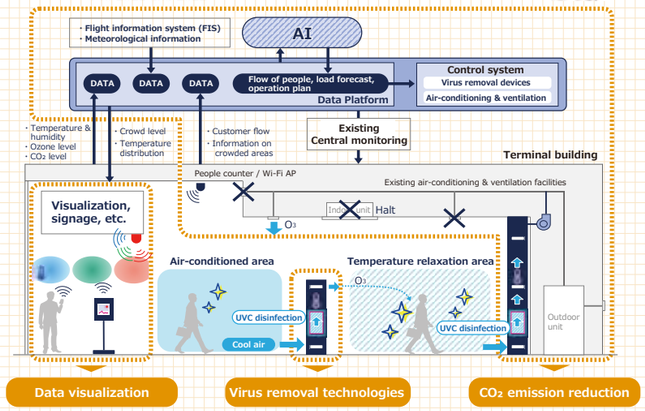
Introduction of advanced technologies in cooperation with universities

Optimizing air conditioning

＊ A joint demonstration experiment with Kobe University

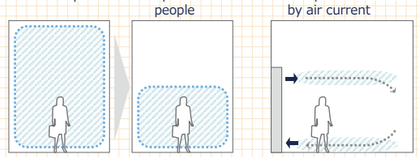
KIX T2 Smart Air Conditioning Demonstration Experiment

＊ A project commissioned by the Ministry of the Environment between FYs 2021 and 2022



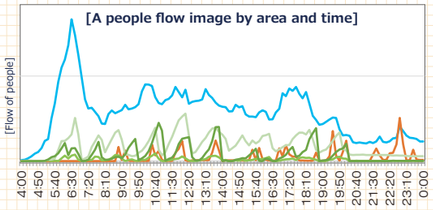
Save energy by optimizing air conditioning

✓ Whole space　✓ Space with people　✓ Temperature control by air current



[Air-conditioning/ ventilation control depending on a flow of people]

[A people flow image by area and time]

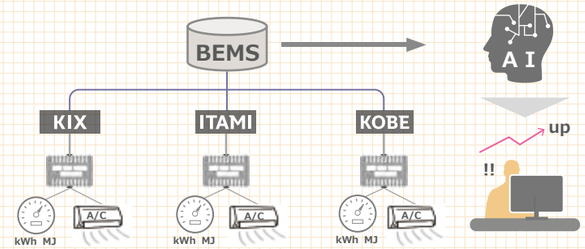


Optimizing energy consumption

＊ A joint research with the University of Tokyo

Energy efficiency with BEMS×AI

A huge amount of data → Auto-detection of wasteful energy use



Optimizing renewable energy use

Expanding the use of renewable energy and optimiz ing the use by minimizing costs and other energy management methods.

Toward Zero Emissions

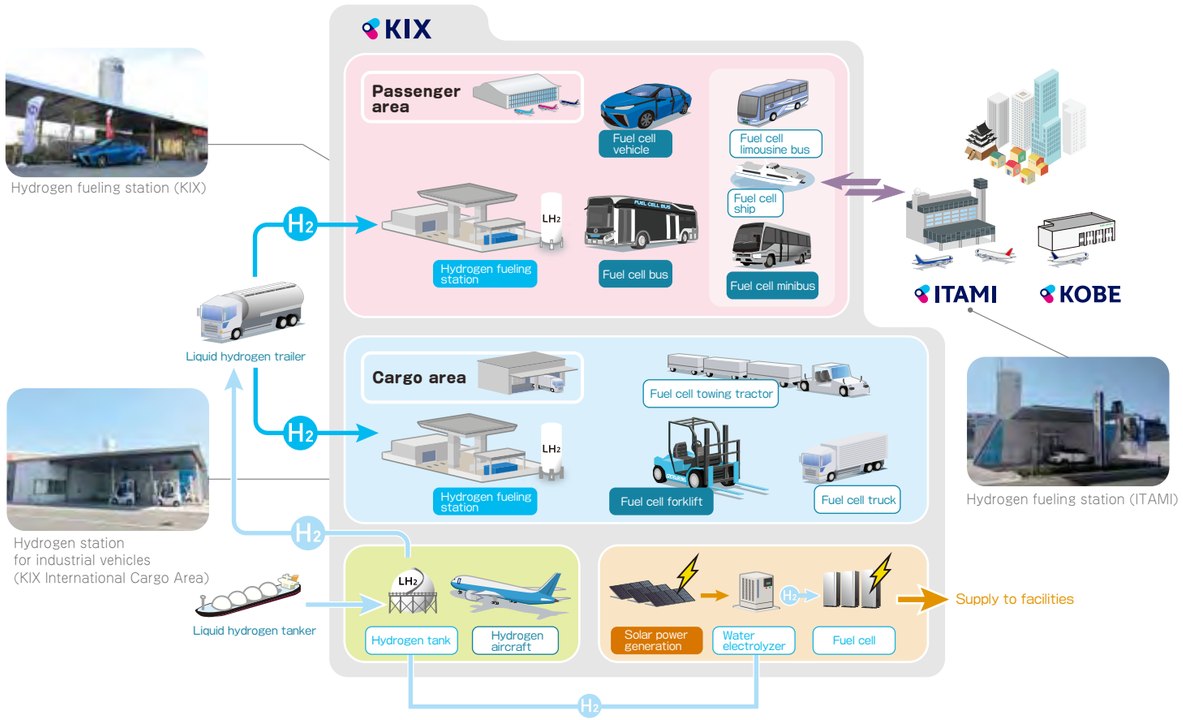
Utilize Hydrogen

Hydrogen is the ultimate form of clean energy; generating only water after combustion. Its excellent storability and portability allows using it whenever and wherever needed. To make carbon-free operation a reality in an airport covering a large area and operating around the clock, expanding the use of hydrogen energy will become important. In anticipation of the hydrogen society on the horizon, the Kansai Airports Group is promoting the use of hydrogen in collaboration with airport businesses and working towards the full-scale introduction of hydrogen energy in airport facilities and vehicles.

Hydrogen Grid Project

KIX ITAMI

Hydrogen Grid (Image) Introduced Unintroduced ＊As of 2025



Hydrogen fueling station (KIX)

Hydrogen station for industrial vehicles (KIX International Cargo Area)

Hydrogen fueling station (ITAMI)

The airport marked the full-scale launch of the Hydrogen Grid Project in May 2014 and actively engaged in testing fuel-cell forklifts for practical applications; establishing a model case involving the use of hydrogen at airports and other activities.

Currently, commercial hydrogen stations for fuel-cell vehicles (FCVs) and fuel-cell buses (FC buses) have been installed at both KIX and ITAMI, while a hydrogen-charging facility for fuel-cell industrial vehicles were also installed at KIX.

The Kansai Airports Group currently uses two FCVs as operational vehicles within KIX and ITAMI. In KIX, 21 fuel-cell forklifts (FCFLs) were introduced in the CKTS import cargo building and currently operate in the KIX International Cargo Area. Most forklifts, except the large type, were replaced with FCFLs at the CTKS import cargo building.

In March 2022, we cooperated with Nankai Bus Co., Ltd. to introduce fuel-cell buses operating within KIX. This marked a first for Osaka Prefecture to introduce fuel-cell buses as airport shuttle bus on a full scale. Moreover, in February 2025, we introduced fuel-cell minibus in cooperation with Kishiwada Kanko Bus Co., Ltd. for the first time in the Kansai region.

Fuel-cell Forklifts

KIX

In April 2017, the airport completed work on Japan's first hydrogen station for industrial vehicles at the International Cargo Area that includes liquid hydrogen tanks and high-pressure hydrogen supply lines. The largest trial operation in Japan using hydrogen station and FCFLs is now taking place.

Introducing FCFLs can help reduce CO_2 emissions compared to forklifts powered by fossil fuel or electricity. In addition, fuel-cell forklifts can be refueled in around three minutes, meaning they can be operated continuously without the hassle of charging or replacing battery packs. As a result, they can offer significant improvements in both work efficiency and work environment.

Fuel-cell Forklifts

February 2015: Begins trial operation of fuel-cell forklifts at the International Cargo Area as part of the Fuel-cell Forklift Practical Application and Development / Testing of Optimal Hydrogen Infrastructure Improvements Project, selected by the Ministry of the Environment, becoming the first airport in Asia to do so
November 2016: Introduces first mass produced fuel-cell forklift
April 2017: Commences operations of hydrogen station for industrial vehicles
By 2025: 21 FCFLs in operations

Fuel-cell Buses

KIX ITAMI

Infrastructure has been established at KIX and ITAMI airports to enable hydrogen filling for FC vehicles as well as FC buses. We also introduced FC buses at KIX as airport shuttle bus. Aided by a subsidy program from the Ministry of the Environment of Japan and Osaka Prefecture as well as contributions from five Mitsubishi UFJ Financial Group companies＊, Nankai Bus Co., Ltd. introduced and operated the bus service in KIX.

In February 2025, we introduced a FC minibus in cooperation with Kishiwada Kanko Bus Co., Ltd. for the first time in the Kansai region. This bus can operate on expressways and is used not only within the airport but also for regional events. The introduction of FC minibuses as sightseeing buses is the first of its kind in Japan and supported by subsidies from the Ministry of the Environment and Osaka Prefecture.

＊ MURC Bank. Ltd., Mitsubishi UFJ Trust and Banking Corporation, Mitsubishi UFJ Securities Holdings Co., Ltd., Mitsubishi UFJ NICOS Co., Ltd. and ACOM CO., LTD.

May 2007: Opens hydrogen station in KIX
2October 2012 to March 2014:
Conducts real-life testing using an FC bus (as a shuttle bus from the Aeroplaza to KIX Terminal 2)
January 2016: Iwatani Hydrogen Station KIX, the first commercial hydrogen station to be introduced in a Japanese airport, commences operations in the phase 2 KIX airport island
April 2019: The ITAMI Iwatani Hydrogen Station is installed and goes into operation
March 2022: FC buses are introduced in KIX, marking a first for Osaka Prefecture
February 2025: FC minibuses are introduced in KIX, marking a first for the Kansai region

Fuel-cell Buses

Fuel-cell Minibuses

To capitalize on hydrogen in the aviation industry

KIX ITAMI KOBE

In October 2024, Airbus, Kansai Airports, and Kawasaki Heavy Industries signed a Memorandum of Understanding (MoU) to study the feasibility of hydrogen infrastructure at three airports operated in the Kansai region. Through a study on infrastructural development for the introduction of hydrogen aircraft, the partnership will contribute to the decarbonization in the aviation industry including the airport sector.

With this MoU, the three parties will conduct an initial feasibility study, strengthen collaboration to materialize the supply of hydrogen to aircraft at the three airports, and pave the way for infrastructural development for the use of hydrogen in the aviation industry.

Conceptual image of hydrogen aircraft (source: Airbus)

Promote Zero-Emission Vehicle (ZEV)

Since many vehicles are operating within the airport, the introduction of ZEV is an important initiative to achieve airport decarbonization. As well as introducing ZEV in our fleet, the Kansai Airports Group also advances initiatives to encourage customers to use eco-friendly vehicles.

Introducing ZEV in our fleet

KIX ITAMI

Within the Kansai Airports Group, we are promoting the introduction of eco-friendly vehicles including EV, FCV and other types of zero-emission vehicle (ZEV) in our fleet as well as establishing a vehicle sharing system that streamlines our vehicle operation.

ZEVs in the Kansai Airports Group's fleet

Ratio of ZEVs in our fleet **23** %

Introducing remote-controlled electric aircraft tug

KIX

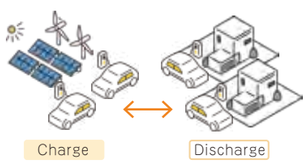
In March 2025, CKTS Co., Ltd. introduced remote-controlled electric aircraft tugs. Since these vehicles run on electricity and do not require a special license to operate, they help reduce staffing needs and streamline operations.

Installation of EV Charging Stations in customer parking lots

KIX ITAMI KOBE

Our three airports have a full complement of EV charging stations to encourage the use of eco-friendly vehicles. In ITAMI, we have installed 184 EV charging stations in total in the customer parking lot.

In March 2025, 14 EV charging stations were installed in parking lot of the head office. These stations can be used to charge local customers' EVs by making them available to the public in the event of an emergency.



Charging third-party EVs by making it available to the public

Reducing CO_2 emissions from aircraft

In aircraft operation, significant CO_2 emissions result from fuel consumption and from the electricity supplied to parked aircraft. We actively cooperate with stakeholders to reduce these emissions.

Promoting the use of GPUs

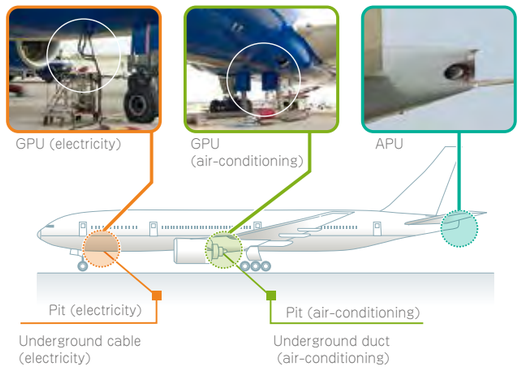
KIX ITAMI

CO_2 emissions can be controlled by increasing the use of GPUs (Ground Power Units) instead of APUs (Auxiliary Power Units) to supply electricity to parked aircraft.

The Kansai Airports Group encourages airlines using its airports to use GPU. In addition, we specify the time allowed for APU use in the Aeronautical Information Publication (AIP) to promote the use of GPUs.

※For the GPU utilization rate, see the reference data on the end of the report.

Outline of GPU



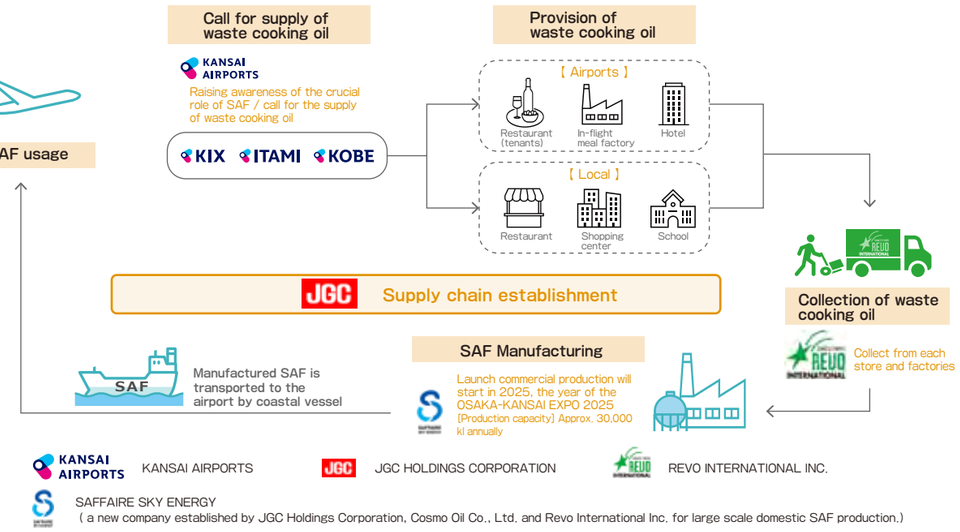
Promoting the use of Sustainable Aviation Fuel (SAF)

Since aircraft generates the majority of CO_2 emissions associated with airports, reducing CO_2 emissions from aircraft has become an urgent global issue. As demand for Sustainable Aviation Fuel (SAF)* is particularly climbing ever higher, it is important to stably produce and supply it in Japan. Since the Kansai Airports Group concluded a basic agreement in June 2022 with JGC Holdings Corporation and Revo International Inc. on a large-scale production of domestic SAF products, we have strived to start their production and supply using waste cooking oil from restaurants in the three airports.

In May 2025, domestic SAF was supplied to passenger flights for the first time, and the first flight took off from KIX.

* SAF(Sustainable Aviation Fuel:An aviation fuel produced from used cooking oil, plant/animal fat, woody biomass and other feedstock, which substantially reduces CO_2 emissions compared to other conventional fuels derived from crude oil.

Domestic SAF production flow using waste cooking oil



Approach toward domestic SAF production

KIX ITAMI KOBE

The Kansai Airports Group has helped disseminate and expand the use by raising awareness of its importance and calling for supply of waste cooking oil. As of March 2025, waste cooking oil has been collected from 35 airport-related facilities and five surrounding facilities. We have also worked with Kobe City and Blue Earth Project (NPO) to collect domestic waste cooking oil.

The waste cooking oil collected is being recycled as biodiesel by REVO International Inc., which is also used in part of grass cutter and other maintenance vehicles at KIX.

An example of collection box

＊ Scan the code to show the waste cooking oil providers:

[Location of the domestic waste cooking oil collection box]

- AEON MALL Rinku Sennan
- AEON MALL Hineno
- AEON MALL Sakai Kitahanada
- AEON MALL Sakai Teppoucho
- AEON Fujiidera Shopping Center

Circular economy

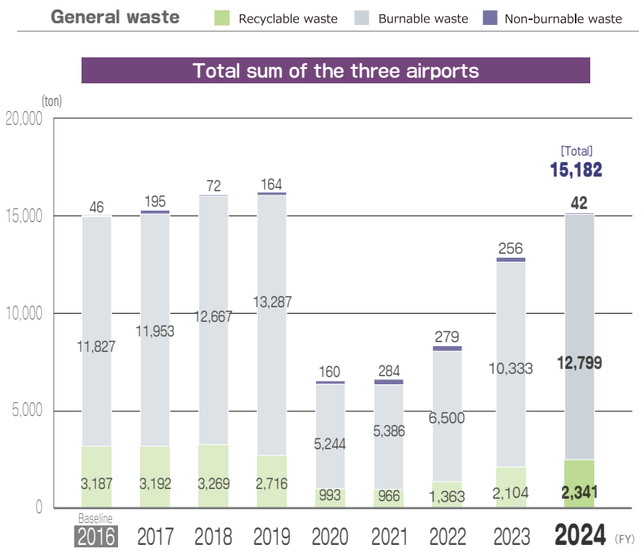
Waste reduction, sorting and recycling

Waste from the airports

In the airport, various types of waste are generated every day such as food waste from restaurants, paper waste, plastic waste, and empty boxes disposed of by customers. The amount of waste is related to the passenger traffic.

After FY2020, the amount of waste substantially decreased associated with the decrease in passenger traffic due to the impact of COVID-19. Subsequently, however, the waste generation is increasing with the recovering passenger traffic. The Kansai Airports Group strives to reduce and recycle waste to avoid increasing the amount of incinerated waste from FY2016 levels.

Under a working group to consider waste reduction, we will continue to consider how to recycle food waste, waste plastics, and glass clippings to reduce waste generation and increase recycling rates.

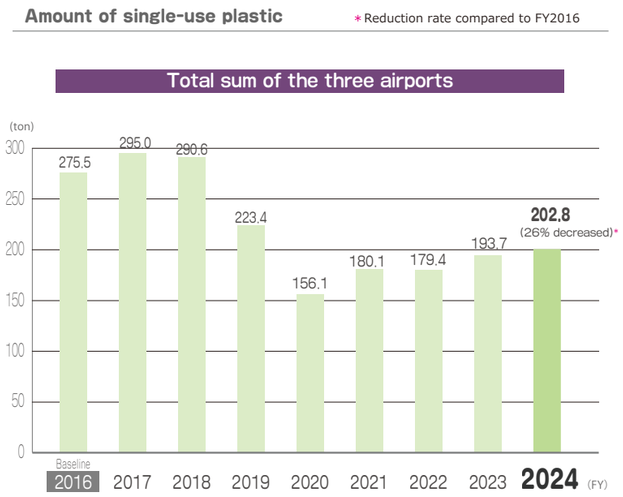


Note) Since the figures are rounded to the second decimal place, the sum of the values for each airport does not necessarily equal the total.

The amount of single-use plastic by Kansai Airports Group

The Kansai Airports Group works on conversion of materials and recycling of waste to reduce the amount of single-use plastic. Although the amount of use rises and falls by the flight and passenger numbers, we have steadily reduced the amount since FY2016 to date. In FY2024, we promoted the reduction by approximately 26% from FY2016 levels.

As the number of flights increases in the future, the amount of single-use plastics is expected to increase. We will strive to further reduce the amount by replacing it with biomass and optimizing its use. At the same time, we will work with airport-related businesses to promote the reduction of single-use plastic at all airports.



Promotion of reducing and recycling waste

To promote waste reduction and recycling in the airport where various types of waste are generated, we are working on thorough waste separation and their appropriate disposal by type. While introducing new methods and technologies, we have promoted initiatives to become a zero-waste airport with a 100% recycling rate.

Introducing food waste disposers

KIX

In the airport, a lot of food waste (kitchen waste) is generated every day from restaurants and lounges, employee cafeteria, in-flight meal factory and other facilities. Although they are usually incinerated, we introduced a food waste disposer in KIX's restaurant, processing daily food waste.

This disposer biodegrades food waste using microbes, which, once decomposed, is discharged into the sewage system. Eliminating transport, burning and other processing on site allows us to reduce the volume of waste to be incinerated and CO_2 emissions from incinerating garbage bags as well as reducing disposing costs and transport demands and improving hygiene in the kitchen. We will strive to roll out the disposer to as many tenants in the terminal building as possible to reduce the amount of food waste incinerated airport-wide.


Food waste disposer

Dyring of grass clippings

KIX

To support safe airport operation, green zones are installed in the runway areas. We cut grass on a regular basis to ensure safety. The cut grass is incinerated but also dried to reduce the amount of waste. Since the reduction of disposal amount by around 20% was confirmed by the demonstration experiment carried out in FY2023, the drying process started on a full scale in FY2024.

We will consider extending this effort to other airports, expanding the drying yard, and utilizing it as a recycling source.


Dyring of grass clippings

Consideration and introduction of new recycling items

KIX ITAMI KOBE

To reduce the amount of incinerated waste, we are considering recyclable combustible waste while comparing it to the legal system.

We have recycled cans, glass bottles, plastic bottles, newspapers, magazines, and cardboard. In 2024, we started recycling shredded paper in January and miscellaneous paper (paper box, paper bag, wrapping paper, etc.) in August. These wastes have been reused as raw materials of recycled paper. Furthermore, in March 2025, we started recycling food waste from the in-flight meal factory which used to be incinerated.

With these initiatives, we strive to further reduce the amount of waste disposed of.


Shredded papers to be recycled

Reduce the amount of single-use plastic

KIX ITAMI KOBE

To reduce the amount of single-use plastics, we have also promoted initiatives in offices, terminal buildings and hotels, as listed below.

- ✓ Using paper shopping bags (FSC certified)
- ✓ Using paper straws, paper cups and wooden cocktail stirrers at the lounge
- ✓ Introducing biomass amenities in hotel guestrooms
- ✓ Using wooden cup holders
- ✓ Raising environmental awareness via original eco-bags and badges
- ✓ Reusing suitcases
- ✓ Filling up the personal bottles with free water supply machines
- ✓ Closed-loop recycling of plastic


Wooden cup holders


Biomass in-room amenities

Recycling of cargo packing materials and reducing the use

Used cargo packing film, Styrofoam and wood waste are generated in the air cargo unloading operations. CKTS Co., Ltd. has worked on the reduction of industrial waste by recycling those wastes as well as striving to reduce the use of single-use plastic by utilizing thinned vinyl and recycled raw materials for wrapping materials of international export cargo.


Cargo packing material

Environmental symbiosis

Monitor the local environment

Monitoring aircraft noise

At the three airports, we implement various environmental measures, including monitoring and measuring aircraft noise, to ensure a healthy living environment around the airports. At the 14th Kansai Airports Round Table Meeting held in July 2024, the introduction of a new flight path plan for KIX and KOBE was agreed upon, and operations commenced in March 2025. Following this, we have strengthened our environmental monitoring system by increasing the number of noise measurement points, introducing and publishing a new flight information system, and establishing stakeholder meetings for each prefecture.

KIX

● 12 continuous monitoring stations

KIX was built approximately 5 km offshore in Senshu Bay as an airport that is pollution free and co-exists with local communities. To reduce noise impacts on surrounding areas, KIX has conducted continuous and periodic noise monitoring and implements various noise reduction measures.

In preparation for the anticipated increase in air travel demand driven by the 2025 Osaka–Kansai Expo, we are not only renovating Terminal 1 and reviewing flight paths but also strengthening our noise monitoring system.It has been confirmed that noise levels exceeding environmental standards (Lden 57 dB) remain limited to the sea area.

ITAMI

● 10 continuous monitoring stations

Located in a major metropolitan area with convenient access, ITAMI is an urban airport surrounded by residential, commercial, and industrial areas. To reduce noise impacts and improve the living environment, various environmental measures are implemented in accordance with the Act on Prevention of Damage caused by Aircraft Noise in Areas around Public Airports.

These measures include noise source reduction, structural improvements of the airport, and various subsidy programs for surrounding facilities.

KOBE

● 5 continuous monitoring stations

KOBE is an airport built approximately 1 km offshore from Kobe Port and is also an urban airport serving the major city of Kobe. International charter flights commenced in April 2025, and a new Terminal 2 has opened.

With the introduction of new flight paths, the number of daily takeoff and landing slots has expanded. In April 2025, Terminal 2 opened and international charter flights began operating, resulting in increased flight frequencies and passenger numbers. In introducing the new paths, we held briefing sessions with local municipalities for residents and are reviewing and strengthening our noise monitoring system.

Reducing aircraft noise

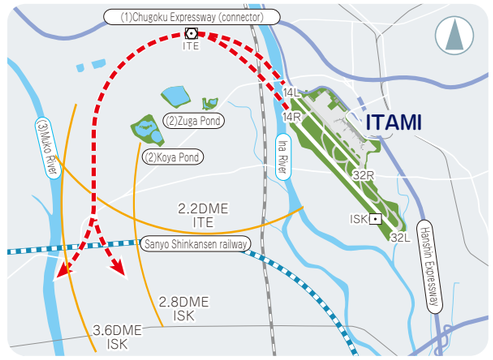
Kansai Airports promotes the replacement of older aircraft with minimal noise and monitors adherence to designated flight altitudes. Airlines are requested to comply with flight paths and consider noise reduction measures.

Setting and restriction of flight path

KIX ITAMI KOBE

For KIX and KOBE, which are offshore airports, flight paths over the sea are designated to minimize noise over land. Aircraft departing from KIX are required to fly over land only after gaining sufficient altitude over Osaka Bay after takeoff from the runway.

At ITAMI, a land-based airport, aircraft follow designated routes as shown in the map below to minimize noise impacts while ensuring flight safety.



Note: The figure above is a conceptual flight path diagram and does not suggest that all aircraft will fly on the red dotted lines.

Restricting flight movements and hours of operation

ITAMI

At ITAMI, restrictions are placed on the total number of scheduled flights and operational hours to reduce noise impacts on surrounding areas.

At the 12th Kansai Airports Round Table Meeting, it was agreed to secure an annual capacity of 500,000 flight movements across the three airports, prompting a review of flight frequencies at KIX and KOBE.

	KIX	ITAMI	KOBE
Aircraft landings/ takeoffs	60 times/hour	370 times/day	120 times/day
Operating Hours	(24 hours)	7:00 to 21:00 (14 hours)	7-23 hours (16 hours)

Encouraging the use of quieter aircraft

ITAMI

ITAMI also encourages the use of quieter, minimal-noise aircraft and has introduced a landing fee system that applies discounts or surcharges based on measured noise levels around the airport.

Adoption of noise abatement flight procedures

KIX ITAMI KOBE

Each airport employs various noise abatement flight procedures to reduce the impacts of noise from aircraft approaching the airport.

- **Delayed-flap approach (KIX, ITAMI, and KOBE)**

By delaying flap operation, aircraft drag and engine thrust are reduced, lowering landing noise. Landing gear deployment (gear-down) is also performed closer to the airport to reduce noise.

- **Low-flap angle landing (ITAMI)**

Landing with a shallower flap angle reduces drag and engine thrust, thereby reducing noise.

- **Curtailing the use of reverse thrust (ITAMI)**

To reduce nighttime noise, jet aircraft landing on Runway B between 7:00 pm and 9:00 pm are requested to minimize the use of reverse thrust as long as safety is not compromised.

- **Rapid ascent (take-offs/departures) (ITAMI)**

To reduce aircraft noise on communities next to the airport, the airport has established flight procedures that require departing aircraft to rapidly ascend to 3,000 feet (about 1,000 meters).

- **Continuous descent operation (KIX)**

A method of aircraft descent that maintains minimum engine thrust for an optimal, continuous descent without level flight until the aircraft reaches the initial approach fix for instrument landing. KIX employs this procedure during certain hours and for aircraft approaching the airport via designated paths.

Noise reduction measures at airport facilities

ITAMI

At ITAMI, noise barriers, noise protection embankments, and noise protection forests have been installed around the airport to reduce noise during takeoff, landing, and taxiing. The airport has also erected a large noise barrier at the engine testing site in order to reduce noise during aircraft engine testing.


Noise barrier


Noise protection embankments


Noise reduction measures during aircraft engine testing

Measures in the vicinity of the airport

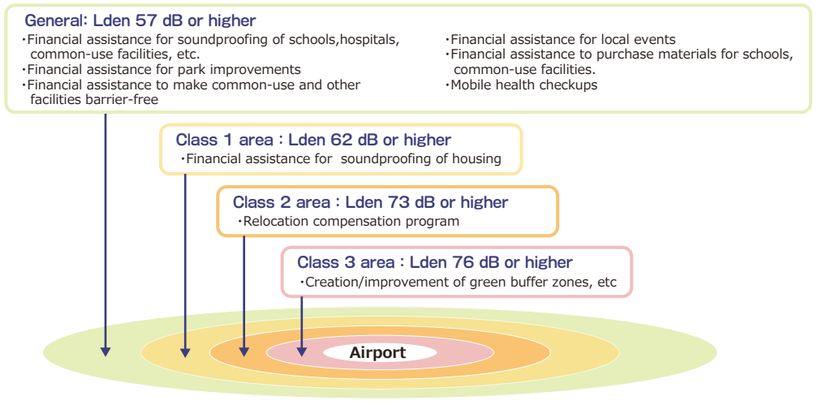
ITAMI

Around ITAMI, various initiatives are implemented to improve the living environment. In accordance with the impact level of aircraft noise under relevant laws and regulations, Kansai Airports continues to properly implement long-standing measures initiated under government operation, such as green space development (Category 3 areas), relocation compensation (Category 2 areas), subsidies for soundproofing work on houses and schools, support for park development and local events, and mobile health check-ups conducted in the community (Category 1 areas and surrounding areas).

In addition, Kansai Airports values communication with the local community through regular meetings with community representatives and participation in local events. At these events, activities using “Sorayan,” the official character of the three airports, are held to help residents feel closer to the airport. Direct feedback is also gathered on perceptions of aircraft noise to better understand the situation in surrounding areas.

In addition, since April 2025, we have introduced a “Night-time noise control charge” to delayed flights that are unavoidably taking off or landing after 9:00 pm, beyond normal operating hours. The collected charge is used to fund projects that help improve the living environment of surrounding communities.

Measures implemented based on aircraft noise levels



● Itami Sky Park and Fureai Ryokuchi

Green spaces developed around the airport include observation decks with views of aircraft landings and takeoffs and playground complexes (Itami Sky Park), as well as a youth baseball field, heated swimming pool, and grass lawn (Fureai Ryokuchi), all of which are cherished as places of relaxation for the local community.


Itami Sky Park

● Participation in local events

Kansai Airports sets up booths at local events, offering activities such as creating original Sorayan pinback button. On these occasions, questionnaire surveys and other tools are used to collect feedback on daily perceptions of aircraft noise and community relations.


Sorayan pinback button

Dialogue with local residents

KIX KOBE

● Establishment of stakeholder meetings

Based on proposals from the Environmental Review Committee and requests from local communities, Kansai Airports has established a new environmental monitoring system following the introduction of new flight paths, and sets up stakeholder meetings in each prefecture with participation from the national government.

While prioritizing safety, Kansai Airports aims to reduce the burden on residents’ living environment through operational considerations and improvements to new flight paths.

At these meetings, flight and noise data are used to identify issues, and improvement measures are considered when necessary. Working-level meetings are held monthly, and the main council meets once a year.

ITAMI

● Cooperation with the Council of Municipalities Surrounding Osaka Itami Airport

The Council of Municipalities Surrounding Osaka Itami Airport, consisting of ten municipalities around ITAMI (Toyonaka, Itami, Kawanishi, Ikeda, Takarazuka, Amagasaki, Nishinomiya, Ashiya, Suita, and Minoh), promotes noise and safety measures at ITAMI and works to harmonize the airport with surrounding communities.

Every year, Kansai Airports receives requests from the Council on various aspects such as environmental measures including noise control, safety measures, and improved convenience for users, and engages in discussions on these topics.

Monitoring of air and water quality and reducing environmental impact

To monitor the environmental impacts caused by aircraft operations and airport management, Kansai Airports sets conservation targets and publishes monitoring results not only for aircraft noise but also for air quality, water quality, and sediment. KIX has installed waste treatment and wastewater treatment facilities, where management values stricter than legal standards are proactively applied to prevent environmental impacts from spreading outside the airport facilities.

Measurement, monitoring, and disclosure

KIX

At KIX, air quality, water quality, and sediment are each measured and surveyed. Air quality is continuously monitored on the opposite shore from the airport island, while water and sediment are surveyed twice a year in the sea area surrounding the airport island.

When issues are identified against conservation targets, causes are investigated, and appropriate measures are implemented.

ITAMI

At ITAMI, an automatic monitoring survey of air pollution is conducted at two locations around the airport every three years. The survey continuously measures air quality 24 hours a day over a seven-day period to confirm whether the environmental standards set for each parameter are being met.

Emission control at airport incineration facilities

KIX

General waste generated on the island is collected separately into combustible waste and recyclable waste. Combustible waste is incinerated at the Waste Disposal Center.

The exhaust gas generated during incineration is properly treated by filter-type precipitator and other equipment, ensuring that air pollutants such as nitrogen oxides sufficiently meet emission standards. Dioxin emissions also remain well below regulated standards. Furthermore, waste heat from incineration is being used as a source of heat for the incinerator, and for hot water and air-conditioning at the Waste Disposal Center.


Waste Disposal Center


Central control room

Advanced wastewater treatment within the airport

KIX

Wastewater discharged from passenger terminal buildings and other airport facilities is treated as domestic wastewater, and wastewater from industrial sources first undergo es on-site preprocessing to remove hazardous substances, and then undergoes advanced treatment at the Sewage Treatment Center.

The treated water is strictly managed to meet voluntary quality standards stricter than legal requirements before being discharged.

Some of the treated water is reused as reclaimed water for toilet flushing and other purposes, effectively utilizing water resources.


Sewage Treatment Center


Sand filtration

Efficient use of water resources

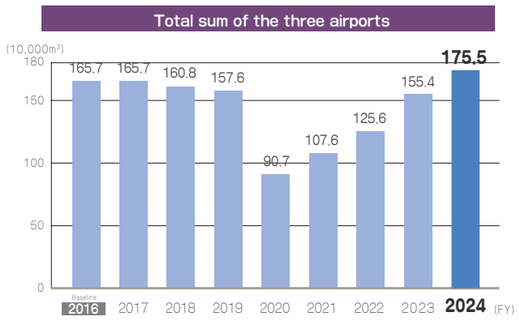
Water use at the airport

Water is used in a wide range of facilities and operations at the airport, including restaurants (tenants) inside terminal buildings, hotels, in-flight meal factories, restrooms, and air conditioning systems. Since FY2020, water consumption dropped significantly due to the impact of COVID-19 but has been rising again in line with the recovery in passenger numbers.

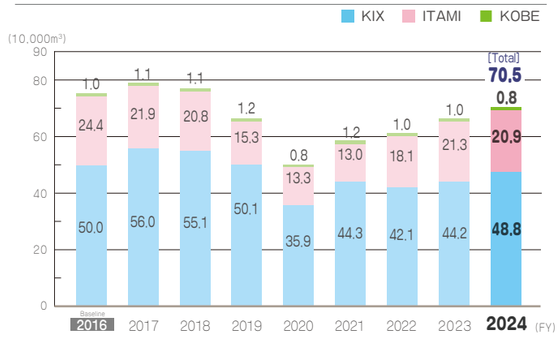
To minimize the environmental impact of wastewater and make efficient use of water resources, we strive to reduce water consumption and promote the use of reclaimed (recycled) water and rainwater.

The Kansai Airports Group manages the actual consumption of both total airport water use and the clean water used by the Group itself, sets targets for each, and will continue to advance the upgrading of energy-efficient equipment and the horizontal deployment of water-conservation practices to achieve those targets.

Total amount of water used at the entire airports



Clean water usage by Kansai Airports Group



Note) Since the figures are rounded to the second decimal place, the sum of the values for each airport does not necessarily equal the total.

Reducing water usage

Reducing total water consumption at airports requires the efficient and waste-free use of clean water.

The Kansai Airports Group is systematically introducing water-conservation equipment and improving the efficiency of equipment, while also optimizing water use through operational improvements.

Introduction of water-conservation equipment

KIX ITAMI KOBE

At the facilities managed by the Kansai Airports Group, we are progressively upgrading to water-conservation models. Water-saving toilets were installed during the terminal building renovations, and water-saving showers were introduced during the hotel facility upgrades.



Terminal building's renovation


Osaka Airport Hotel shower

Efforts to save water

KIX ITAMI KOBE

In terminal building restrooms, the flow of automatic faucets is optimized. We start by establishing management criteria for water flow to ensure there is no inconvenience to passengers, then confirm actual flow rates on site and adjust them when they exceed the standards.


Energy-efficiency by upgrading systems

KIX ITAMI KOBE

The Heat Supply Center at KIX produces chilled water for air conditioning using large chiller – critical equipment supporting comfort and operational efficiency at the airport. Maintaining stable cooling capacity requires efficient heat rejection, which consumes significant volumes of cooling water. To conserve water resources and reduce environmental impact, energy-efficient electric turbo chillers with reduced cooling water consumption and air-cooled heat pump chillers utilizing air for heat exchange have been introduced. This allows the required cooling capacity to be maintained while reducing water use.


Turbo chiller in the Central Plant


Air-cooled heat pump chillers

＊Learn more about the Heat Supply Center and other initiatives by KHC:
https://www.kiahc.co.jp/environment.php

Utilizing the aircraft onboard water

KIX

Aircraft carry clean water on board for use in dishwashing, toilet flushing, and other in-flight needs. Any water that reaches its expiration date without being used is normally discarded. The Kansai Airports Group is working with multiple related businesses to repurpose such water originally slated for disposal as firefighting water, thereby promoting the effective use of water resources.

Utilizing reclaimed water and rainwater

We promote the efficient use of water resources through the utilization of reclaimed (recycled) water and rainwater. At KIX in particular, water treated at the Sewage Treatment Center is reused as reclaimed water. At ITAMI and KOBE as well, water resources are circulated through the use of reclaimed water and rainwater, contributing to a reduction in clean water consumption. Currently, following consultations with relevant local governments, approximately 30–50% of total water use at KIX and KOBE is supplied by reclaimed water and rainwater.

KIX

Reclaimed water is used for toilet flushing and watering and construction activities within the airport. A new initiative began in FY2023 to also use reclaimed water for firefighting drills.

Toilet flushing

Firefighting drills

ITAMI

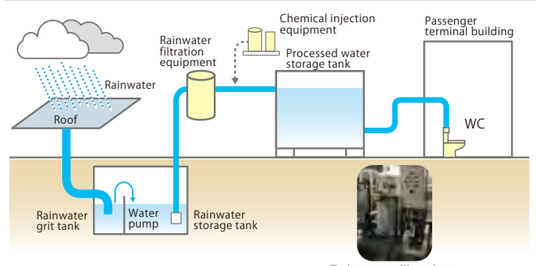
In March 2024, a rainwater harvesting tank was installed on the terminal building roof for watering of rooftop plants.

Rainwater storage tank

KOBE

By storing and filtering rainwater or using treated water from sewage treatment plants for toilet flushing and watering of plants, we make effective use of water resources.Since FY2025, we have also started using reclaimed water during firefighting drills.

Rainwater utilization



Rainwater filtration equipment

Biodiversity conservation

Creation of a rich seaweed bed environment

KIX

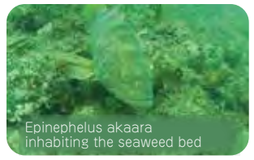
KIX is the world's first full-scale offshore airport. To prevent the impact of aircraft noise on the surrounding area, the airport was built on reclaimed land in an area approximately 5 km off coast of Senshu in Osaka Bay, with an average water depth of 18 to 20 m. From the planning stage, the airport was constructed considering the harmony with the marine environment.

To contribute to the creation of a habitat for marine life in Osaka Bay, we are actively engaged in the creation of a rich seaweed bed environment around the airport island.


Undaria pinnatifida


Ecklonia cava

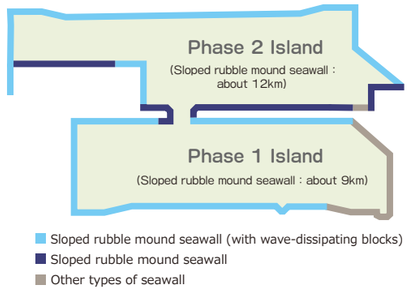

Sargassum muticum

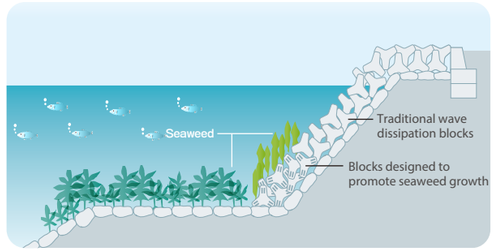

Epinephelus akaara inhabiting the seaweed bed

Origins of Seaweed Bed Creation

● Use of sloped rubble mound seawall

During the initial land reclamation, most of the airport island revetment adopted a sloped rubble mound seawall design. This allows sunlight to reach a broad area, creating conditions for a wide variety of seaweed species to flourish. Various innovations such as supplying seedlings and installing blocks conducive to seaweed growth were also actively implemented from the outset.



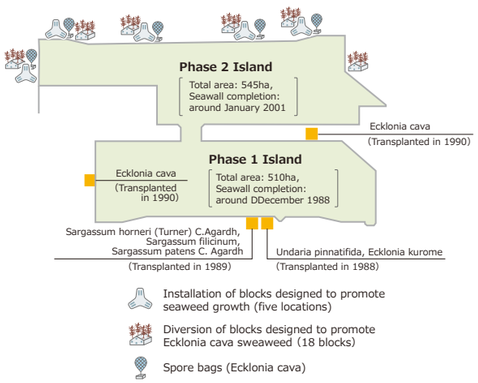


Sloped rubble mound seawall

● Seaweed bed creation during the island construction

After the first-phase airport island revetment was built, large seaweed seedlings were actively supplied, and roof-shaped seaweed reef blocks were devised and installed to prevent silt accumulation. As a result, perennial species such as Ecklonia cava as well as Undaria pinnatifida and Sargassum gradually spread, forming stable seaweed beds across the revetment.

In the second-phase revetment works, we developed and installed wave-dissipation blocks designed to improve seaweed growth, reused seaweed reef blocks from Phase 1, and applied spore-bag seeding with mature seaweed. Consequently, while it took about seven years to form seaweed beds around the first-phase island, the second-phase island achieved this in approximately three years.




Seaweed block


Blocks designed to promote seaweed growth

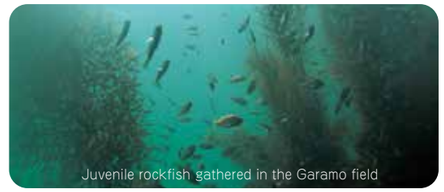
Conservation and expansion of rich seaweed bed environments

Since starting seedling supply in 1989, KIX has conducted continuous monitoring of seaweed distribution for over 35 years. Based on survey results showing changes in distribution and physical conditions such as revetment works, we carry out transplanting and seedling supply to maintain and expand rich seaweed bed environments.

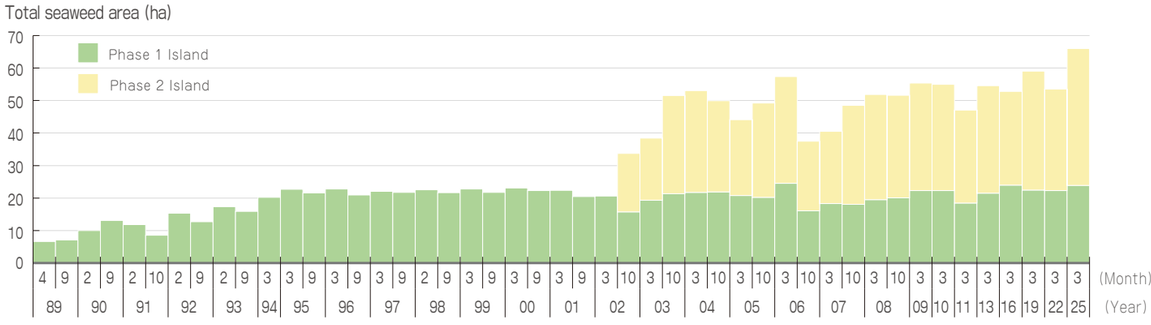
● Latest survey results

Monitoring in March 2025 confirmed a total seaweed-growth area (seaweed bed area) of 66 ha – the largest on record – representing about 14% of all seaweed beds in Osaka Bay.* Around 60 species of seaweed, including large varieties, currently grow along the revetment, supporting a rich ecosystem surrounding seaweed communities.

* Based on the 2022-2023 survey of seaweed and tidal flat distribution in the Seto Inland Sea.


Juvenile rockfish gathered in the Garamo field

Extent of seaweed bed



J Blue Credit Certification and issuance

In December 2022, we quantified the CO_2 absorption of seaweed growing on KIX revetments and received certification and issuance of 103.2 t of J Blue Credits*.

* J Blue Credit: a credit certified, issued and managed by Japan Blue Economy Association (JBE). The certification and issuance are made after examination and verification by a third-party committee independent of JBE.


J Blue Credit Certification

Certified as a natural symbiosis site

In October 2023, the seaweed beds at the airport island seawalls were recognized and certified as a natural symbiosis site since the seaweed beds play a vital role in the conservation of biodiversity in Osaka Bay.

Creating a richer marine environment in collaboration with the community

The Kansai Airports Group also actively engages in marine environment conservation in collaboration with local communities. Working with other stakeholders who share Osaka Bay, we provide seaweed from the airport revetments, share our expertise, and support environmental education for future generations. In August 2023, construction blocks capable of being transplanted with their substrate were installed as new substrates and used to transplant seaweed to other waters.

● Cooperation for blue carbon creation in Osaka Bay

In May 2024, in partnership with Osaka Prefecture's Blue Carbon Ecosystem Creation Support Project, seaweed collected at KIX, including Undaria pinnatifida and juvenile Ecklonia cava, was transplanted to the sea of Sakai City.

● Cooperation with Hannan City

Under the Osaka Bay Sea Forest (Seaweed Bed) Conservation and Restoration Project, we are working with Hannan City to enrich the marine environment. Following the April 2023 seaweed transplantation, in April 2025 we conducted a second round, transplanting Sargassum horneri (Turner) C.Agardh and juvenile Ecklonia cava attached to substrates collected at KIX into the sea of Hannan City.

Conservation of marine environment

Fish and shellfish survey on the seawall around the airport island

KIX

We have surveyed and released fish and shellfish every year in order to understand the habitat conditions of fish and] shellfish in the waters around the Kansai Airport island and improve the environment of fisheries resources in Osaka Bay. Since this area is designated as a no-fishing zone* for aquatic flora and fauna, we conduct surveys after completing the necessary procedures. The useful fisheries species caught (Sebastes inermis, Sebastiscus marmoratus, red seabream, Stephanolepis cirrhifernd and octopus sinensis) are released into the coastal seawall area of Osaka Prefecture opposite the airport island to increase the stock. As for Epinephelus akaara, which Osaka Prefecture aims to brand as "Naniwa Aco", individuals smaller than 30 cm are offered to related organizations in Osaka Prefecture as spawning parents to increase their stocks in Osaka Bay.

* A area designated by Osaka Prefecture to prohibit fishing/catching of all aquatic animals and plants.

Taking up the cage

Sorting and measuring catch

Release of catches

Activities to conserve the rich ocean

KIX

By partnering with the Osaka Prefectural government, Osaka Prefectural Federation of Fishermen's Cooperatives and other major maritime businesses, we strive daily to keep the coastal area of Osaka Prefecture beautiful and safe via the Osaka Prefecture Sea Area Beautification and Safety Association.

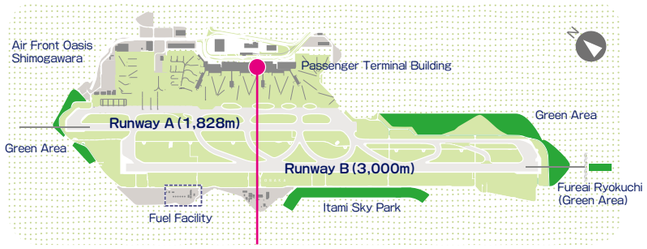
These activities include cleaning and collecting waste accumulating and floating within Osaka Bay and drifting to the coast. We also collaborate with relevant fishery industry parties to collect waste during daily fishery operations, which generated an annual total of around 1,300 m3 in gathered waste.

Recently, given the challenge of increasing marine plastic waste, we help conserve the ecosystem in Osaka Bay via this activity.

Island greening and scenic improvement

To improve landscapes and create spaces for rest and relaxation on the airport island, we have installed plantings on terminal rooftops, inside terminal buildings, and at various locations on airport premises. These efforts are designed so that visitors can enjoy not only air travel but also the scenery and facilities of the airport.

ITAMI



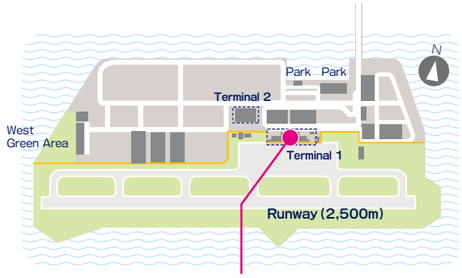
[Terminal building rooftop]

Rooftop observation deck

Rooftop greenery

The rooftop observation deck is a spatial wooden structure, 400 meters long with total floor space of 8,200 square meters, which allows visitors to watch aircraft up close in an open space. We are committed to improving landscaping and creating a comfortable environment by installing planters within the passenger terminal building.

KOBE



[Terminal building rooftop]

Rooftop deck

From the rooftop deck, visitors can enjoy urban panoramas on the north side as well as aircraft operating up close. A visual feast for visitors, with views and greening alike. Art and sculpture exhibitions are also held here.

KIX

[KIX Sky Park]

The airport has also created a large-scale green space called KIX Sky Park that allows visitors to enjoy watching aircraft taxiing, takeoff and landing.

[Planters and dry mist device]

Planter

Dry mist device

We have installed planters for trees to form fresh areas of shade and a dry mist device at a shuttle bus station connecting Terminals 1 and 2. This project was subsidized by the Osaka Prefecture Intense Heat Countermeasure Project Utilizing Urban Greening.

Communications & Collaborations

In-house communications

Efforts to raise environmental awareness

The Kansai Airports Group provides education to raise environmental awareness, enabling each employee to proactively promote environmental initiatives. In addition to disseminating e-learning programs to all employees, we offer a support system to assist them in taking environmental certification tests, thereby encouraging voluntary learning. Voluntary study groups have also been organized within departments and group companies, steadily enhancing employees' environmental awareness.

● Environmental workshop

We conduct Climate Fresk, an educational workshop on climate transition developed in France. In FY2024, approximately 200 officers and managers of the Kansai Airports Group participated in the workshop, where they gained insight into climate change and discussed the challenges and future directions facing us as an airport operator.

● Recommendation to obtain the ECO Test

To promote voluntary learning among employees, we encourage them to obtain the Certification Test for Environmental Specialists (Eco Test)®*. By deepening their understanding of environmental issues, employees have strengthened their commitment to the environment. At Kansai Airports Technical Services (KTS), many employees voluntarily took the test, and KTS ranked first for two consecutive years (2023 and 2024) in the Tokyo Chamber of Commerce and Industry's "ECO People" certification rankings in the category of companies with fewer than 300 employees. We will continue to foster environmental awareness across the entire Group.

* Certification Test for Environmental Specialists (Eco Test) is a registered trademark of the Tokyo Chamber of Commerce and Industry.

Communication with stakeholders

Participation in the Airports Council International (ACI)

Kansai Airports is a member of Airports Council International, an organization representing 830 organizations that manage 2,181 airports in 170 countries and regions worldwide (as of September 2025). In September 2024, we participated in the 19th ACI Asia-Pacific & Middle East Regional Committee held in Bangkok, Thailand, and discussed on how to reduce environmental impact at airport from various perspectives.

Moreover, at ACI Green Airports Recognition 2025* held by ACI, our project for building a supply chain for locally produced and consumed Sustainable Aviation Fuel (SAF) was awarded the top Platinum Award. We have been highly recognized for our collaborative efforts with numerous stakeholders to promote the use of SAF.

The 19th ACI Asia-Pacific & Middle East Regional Committee

Trophy

* ACI Green Airports Recognition 2025 : An open call for projects related to the sustainability in the environmental field for airports in the Asia-Pacific and Middle East region, and awards are given to airports that have achieved outstanding results.

Collaborations with airport-related businesses

● Environmental Standards Regulations

To reduce environmental impacts and fulfill our social responsibilities across the airports, we have established Environmental Standards Regulations. These Regulations clearly specify the environmental requirements that airport-related businesses must comply with, while also encouraging greater environmental awareness and the promotion of initiatives. We have also renewed contracts with tenants to include clauses on environmental standards and have encouraged their cooperation in reducing environmental impacts.

● Airport tour for stakeholders

We hold a tour of environmental facilities at the airport for our stakeholders to share the Kansai Airports Group's environmental initiatives and collaborate on them.

In FY2024, 17 tenants from KIX and ITAMI visited the Waste Disposal Center, the Sewage Treatment Center, and the Solar Power Generation System.

Communication with Airport Users and Local Communities

Dissemination of environmental information

● Environmental information space in the airport

We disseminate information to make our environmental initiatives widely known to airport users. In the Sky View Observation Hall on KIX Island, displays showcase various environmental initiatives carried out on the island. During the Expo2025 Osaka, Kansai, Japan, we will set up an exhibition space in the KIX Terminal 1 building to present our initiatives at KIX—an offshore airport—highlighting harmony.

Exhibition panel at the Sky View Observation Hall

● Disclosure of environmental information on the website

We are updating the environmental information on our website to make it easier to understand Kansai Airports Group's environmental initiatives. We focus on providing important information of airport operations to the local community, such as decarbonization efforts and real-time noise levels.

Exhibition space in the KIX Terminal 1 building

Environmental learning events

● Special Event for Summer Vacation - Parent-child Environmental Tour

In August 2025, we organized an environmental tour for elementary school students and their parents living near KIX to visit our environment-related facilities. Participants learned about KIX's wide-ranging environmental initiatives by visiting the Sewage Treatment Center, riding a fuel-cell bus, touring the charging demonstration at the Hydrogen Station, and observing airlines' environmental measures.

Parent-child Environmental Tour

● A tour to learn about KIX from the sea

n September 2025, we organized a tour for elementary school students and their parents to learn about KIX from the sea. This event, jointly hosted by Kansai Airports and the Osaka Prefecture Federation of Fishing Cooperative Associations, commemorated the 30th anniversary of KIX's opening in 2024. Through a boat tour around KIX and a hands-on release of Epinephelus akaara, participants deepened their understanding of Osaka Bay's biodiversity, the fishing industry, and environmental conservation activities at KIX.

A hands-on release of Epinephelus akaara

Outreach classes for local elementary schools

Kansai Airports and Hannan City have been working together to create a rich marine environment. As part of educating the next generations to improve the marine environment, which is one of the Osaka Bay Forest (Seaweed Beds) Conservation and Restoration Project, we conduct outreach classes at local elementary schools. Through this project, we promote the importance of biodiversity by introducing our efforts to conserve seaweed beds in KIX and to create habitats for marine organisms in Osaka Bay.

In FY2024, outreach classes were held at two elementary schools for a total of approximately 70 students. We will continue our local environmental education activities in collaboration with Hannan City.

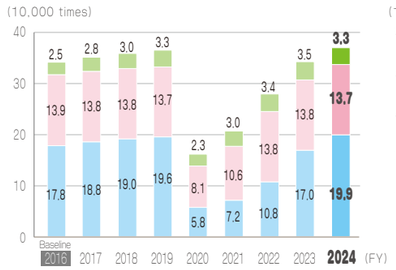
An outreach class

Reference Data

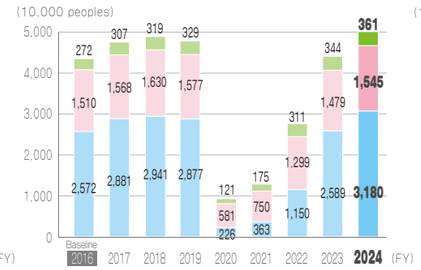
Number of passengers and flights

KIX ITAMI KOBE Note: On April 1, 2018, Kansai Airports Kobe commenced its business as an operator of Kobe Airport (KOBE).

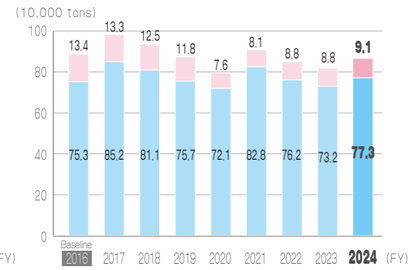
Aircraft landings / takeoffs



Passenger Traffic



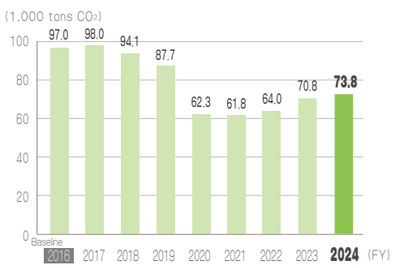
Cargo Volume



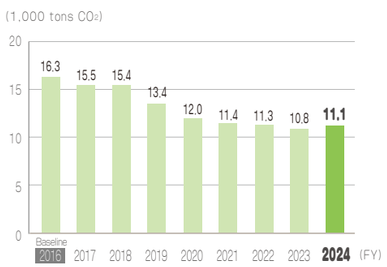
CO_2 emissions of the Kansai Airports Group

Note: ・CO_2 emission factor for electricity is based on the data for the previous fiscal year.
・Calculated based on the Airport Carbon Accreditation (ACA) Level 4 emission calculation scope.

KIX



ITAMI

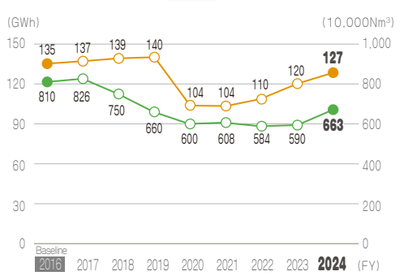


KOBE

Energy consumption of the Kansai Airports Group

Electricity (GWh) Gas (Nm³)

KIX



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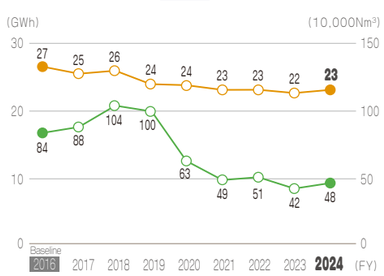
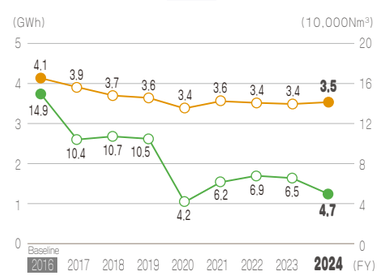


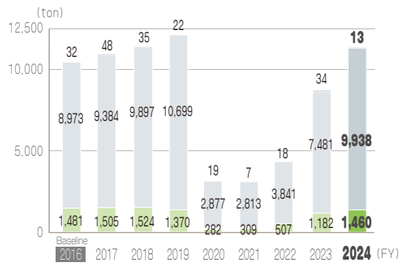
KOBE



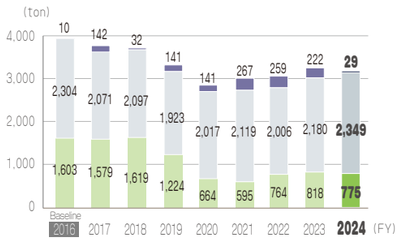
General waste from the three airports

Recyclable waste (ton) Burnable waste (ton) Non-burnable waste (ton)

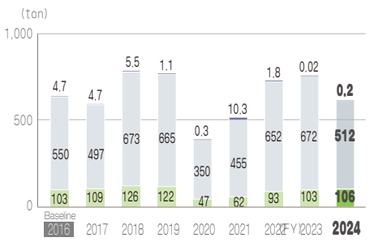
KIX



ITAMI

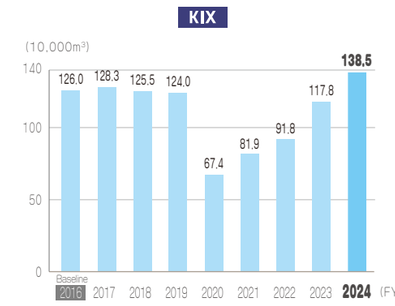


KOBE

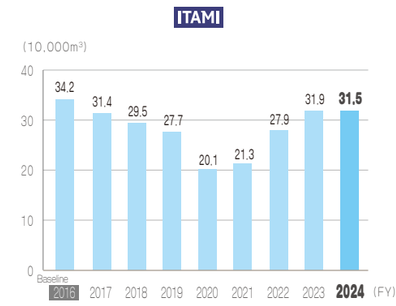


Total water usage of the three airports

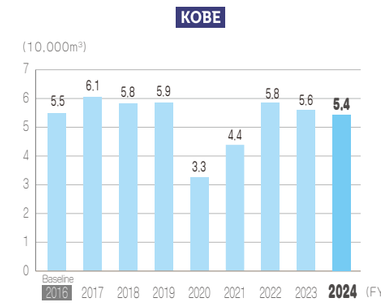
KIX



ITAMI



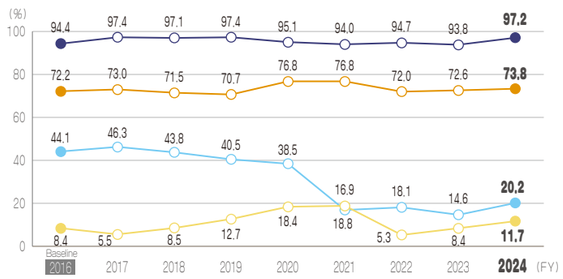
KOBE



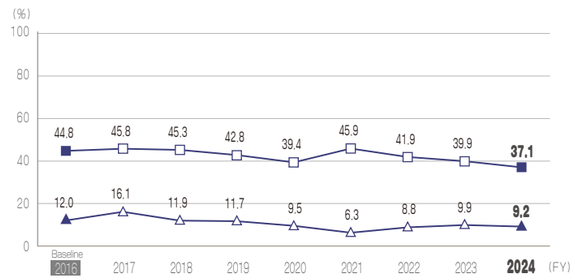
GPU utilization rate

Note: ・Indicates the ratio of flights supplied to the number of flights with an opportunity to be supplied.
・Portable GPU utilization rate included.
＊FSC : Full Service Carrier LCC : Low Cost Carrier

KIX



ITAMI KOBE



These 37 airlines below(in alphabetical order), have a GPU utilization rate of over 95% in 2024.

- Air Canada
- Air China
- Air China Cargo
- Air France
- Air Hong Kong
- Amakusa Airlines
- China Southern Airlines
- Earo Logic
- Emirates
- Etihad Airways
- Eva Airways
- FedEx Express
- Finnair
- Hawaiian Airlines
- Hebel Airlines
- HK Express
- Japan Airlines
- JAPAN AIR COMMUTER
- Japan Transocean Air
- KLM Royal Dutch Airlines
- Lufthansa Cargo AG
- Lufthansa German Airlines
- Malaysia Airlines
- Philippine Airlines
- Qatar Airways
- Qatar Airways Cargo
- Qingdao Airlines
- Shanghai Airlines
- Shenzhen Airlines
- Sichuan Airlines
- Silk Way West Airlines
- Thai Airways International
- Turkish Airlines
- United Airlines
- United Parcel Service
- Vietnam Airlines
- Xiamen Airlines

Airport Summary

KIX Kansai International Airport

Runways
2

Annual aircraft landings/takeoffs
Approx. 199,000 times
[FY2024 track record]

Operating Hours
24 hours

Aircraft Parking Stands
104

Annual passenger traffic
Approx. 3,180 10,000 people
[FY2024 track record]

Size
Approx. 510 ha [Phase 1 Island]
Approx. 545 ha [Phase 2 Island]

1 KIX Sora×Solar

A new solar power facility will be installed in 2025. The solar power generated will be used in the airport terminals, train stations, and parking lots.

2 Hydrogen stations

Hydrogen stations have been installed at two locations for fuel-cell vehicles and industrial vehicles such as forklift.

3 EV charging stations

EV charging stations are available to meet the growing demand of eco-friendly vehicles.

4 Heat supply plant

The plant serves as a community heating and cooling system that centrally supplies cold water and steam.

5 Sewage Treatment Center

Wastewater from each facility is treated onsite and reused as reclaimed water.

7 Waste Disposal Center

General waste from the airport is sorted and either incinerated or recycled.

8 LED aviation lighting

The conversion of aviation lighting to LEDs is underway to a full upgrade by FY2030.

10 Rooftop of Terminal 2 Building Solar panels

The electricity generated on the roof of the Terminal 2 building is consumed on site.

11 Environmental Center

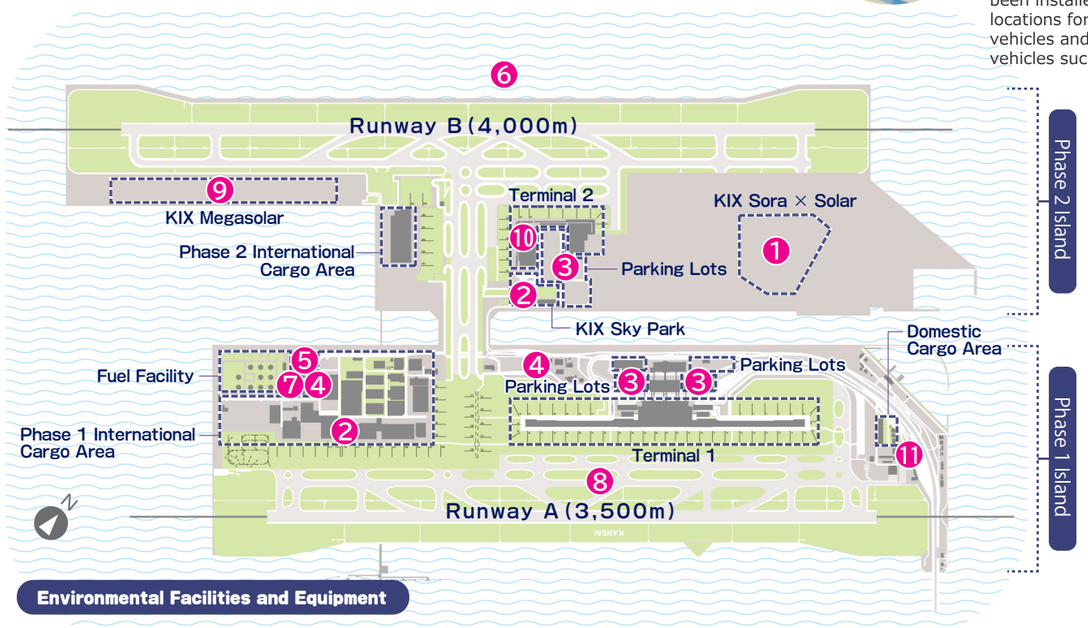
Introduces environmental information and initiatives at the Sky View Observation Hall.

6 Seaweed bed

The gently sloping rubble mound seawall surrounding the airport island fosters the growth of seaweed, providing a habitat for sea life.

9 KIX Megasolar

A mega solar power plant capable of generating 11.6 MW of power.



Environmental Facilities and Equipment

Website : www.kansai-airport.or.jp

Airport Summary ITAMI Osaka Itami Airport

Runways
2

Annual aircraft landings/takeoffs
Approx. 137,000 times
[FY2024 track record]

Operating Hours
7-21 hours

Aircraft Parking Stands
52

Annual passenger traffic
Approx. 1,545 10,000 people
[FY2024 track record]

Size
Approx. 311 ha

1 Light blocking panels

Light blocking panels are installed on the windows of the passenger terminal buildings as part of the airport's energy conservation efforts.

2 ITAMI Sora×Solar

A new solar power facility will be installed in 2025.

3 LED aviation lighting

The conversion of aviation lighting to LEDs is underway to a full upgrade by FY2030.

4 EV charging stations

EV charging stations are available to meet the growing demand of eco-friendly vehicles. We have installed 184 electric vehicle charging stations in the North and South Parking Structures.

5 Hydrogen station

A station serves fuel-cell vehicles.

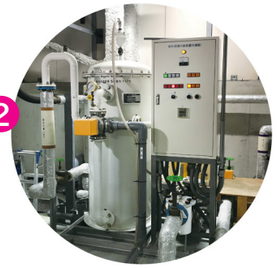
6 Rainwater harvesting tank (rooftop)

Rainwater is collected and used to water the rooftop plants.

Airport Summary KOBE Kobe Airport

1 EV charging stations

EV charging stations are available to meet the growing demand of eco-friendly vehicles.



2 Rainwater filtration system

Rainwater is filtered and reused as recycled water.

3 Co-generation facility

The facility uses heat from the generation of electricity to heat and cool the passenger terminal building.

Runways
1

Annual aircraft landings/takeoffs
Approx. 33,000 times
[FY2024 track record]

Operating Hours
7-23 hours

Aircraft Parking Stands
10

Annual passenger traffic
Approx. 361 10,000 people
[FY2024 track record]

Size
Approx. 156 ha

Environmental Chronology

KIX : Kansai International Airport (1/3)

Year	Mo.	Event
1968	4	Ministry of Transport (MOT) launches basic study for airport siting
1971	10	Minister of Transport asks Council for Civil Aviation for advice on scale/siting for Kansai International Airport
	11	MOT conducts trial flights to study noise levels at 3 candidate sites (Senshu, Kobe, Akashi)
1972	8	Council for Civil Aviation (Kansai International Airport committee) conducts hearings with local communities
1973	8	MOT surveys 3 candidate sites commercial aircraft air pollution
1974	8	Council for Civil Aviation reports initial findings to Minister of Transport: Optimal airport location is off coast of Senshu
1975	9	MOT convenes series of briefings in communities
1976	9	MOT announces Survey Implementation Guidelines
1977	10	Marine observation facilities completed
1978	2	MOT announces plans for noise, vibration, and air pollution studies, starts site studies
	3	MOT begins bore studies near candidate sites
1979	5	MOT conducts flight studies with aircraft
1981	5	MOT presents three reports: Airport Proposal, Environmental Impact Assessment, and Approaches to Regional Infrastructure
1983	12	MOT begins ground improvement testing off the coast of Senshu
1984	10	Kansai International Airport Co. (KIAC) established
1986	2	Kansai Int'l Airport Env. Monitoring Org. established (Osaka Pref. Governor, mayors of 9 cities, 4 towns currently)
	6	Environmental Impact Assessment submitted to governor of Osaka Prefecture
	12	Environmental Monitoring Plan adopted environmental monitoring begins
1987	1	Permit obtained for land reclamation on public waters for Phase 1 construction. Phase 1 construction begins
	6	Construction begins on bridge linking mainland to airport begins, KIX Environmental General Center opens
1989	6	Phase 1 airport island seawall construction completed
1994	1	Phase 1 airport island construction areas completed
	3	Plan for Environmental Monitoring of KIX Construction/Operation adopted
	7	Kansai International Airport Environmental Center opens
	9	Kansai International Airport (KIX) opens for service (Sep 4). Monitoring begins: Aircraft noise, low-freq. air vibration
1995	8	Council for Civil Aviation releases Basic Approach to 7th Airport Preparatory 5-Year Plan (mid-term report)
1996	6	Kansai International Airport Land Development Co. (KALD) est., designated by Min. Transport as official land developer
1997	6	MOT releases "Comprehensive Initiatives relating to Flight Path Issues at KIX" paper
1998	10	Environmental Impact Assessment on Phase 2 Construction submitted
	12	New flight paths introduced. Environmental Monitoring Plan for aircraft noise, etc., reviewed, monitoring enhanced
1999	6	Environmental Monitoring Plan for Phase 2 Construction Project adopted
	7	Permit obtained for land reclamation on public waters, Phase 2 construction (start Jul 14. Silt protection sheets deployed
	11	KIX International Symposium marks the fifth anniversary of opening
	12	KALD acquires ISO 14001 certification for environmental management system
2001	1	KIAC establishes Environmental Management Committee
	4	KIX receives "Monument of the Millennium" award from American Society of Civil Engineers, as offshore airport
	6	KIAC adopts Environmental Management Plan (Eco-Island Plan)
	9	Placement begins for wave-dissipating blocks to support seaweed bed growth along Phase 2 seawall
	11	International Airport Symposium 2001 hosted, Phase 2 airport island seawall completed
2002	10	KIAC adopts Regulations Governing the Use of Waste Processing Facilities
	12	• KIAC establishes Energy Conservation Committee • KIAC releases first Eco-Island Report (2002 edition)
2003	12	KIAC establishes KIX Customer Satisfaction Council
2004	9	International Airport Symposium 2004 hosted
	12	KIAC, KALD mount their first exhibit at "Eco-Products 2004" exhibition
2005	7	Kansai International Airport Environmental Center relocated to Kanku Observation Hall
2006	8	Kansai International Airport & Rinku Town designated by government as CNG vehicle model project areas
2007	1	KIAC awarded MITI Award at FY2006 Nat'l Energy-Efficiency Best Practices Conf., for IT-based air con system in passenger terminal
	5	JHFC hydrogen charging station for vehicles opens at KIX
2008	3	• KIX Eco-Island Promotion Council launched • KIX Environmental Plan adopted
	4	Windbreak fence completed for KIX rail system access bridge, use of pro-beam low-location lights begins
	5	Kanku Environmental Exhibition features KIX Environmental Plan
	6	First idling-prevention awareness campaign launched

KIX : Kansai International Airport (2/3)

Year	Mo.	Event
2008	7	First conference held to report on KIX Eco-Island Promotion Council environmental initiatives
	10	Study tour organized by KIX Eco-Island Promotion Council
2009	7	Trial use of truck-mounted ground power units (GPUs) begins
	11	KIX Science Classes held
	12	Exhibit at Eco-Products 2009 exhibition
2010	1	Partial changes to aircraft auxiliary power unit (APU) usage restrictions (use reduced from 30 to 15 min. before departure)
	9	Photovoltaic system installed for temperature-controlled building for medical products
	12	Exhibit at Eco-Products 2010 exhibition
2011	1	IATA Environment Stand display installed at KIX
	3	Rapid charger installed at KIX for electric vehicles
	7	Japan fully adopts digital terrestrial broadcasting; measures targeting signal interference
	9	Electricity-powered commercial shuttle vehicles introduced (two vehicles by fiscal year end)
	12	Exhibit at Eco-Products 2011 exhibition
2012	4	• New Kansai International Airport Company (NKIAC) established • Professor KIXeco quiz system launches at Environmental Center
	5	KIX wins judges' special award, Airports Council Int'l (ACI) Asia-Pacific 2011 Green Airports Recognition Awards
	6	Phase 2 airport island construction almost completed, land development work by KALD is completed
	7	Kansai International Airport and Osaka Itami Airport are merged
	8	KIX earns runner-up award in 2012 Osaka Environmental Awards for efforts to grow seaweed beds
	10	KIX Sky Park opens adjacent to Phase 2 Terminal Building, trial begins for hydrogen fuel-cell buses
	11	Olive tree planting ceremony along walking path for Phase 2, decision made to do KIX Megasolar project
	12	Exhibit at Eco-Products 2012 exhibition. Four regular chargers for electric vehicles installed in parkade
2013	2	Int'l Strategy Comprehensive Special Area expanded by Kansai Innovation to include KIX (green innovation theme)
	3	• Smart Eco Logi Council holds ceremony for launch of 20 large CNG trucks in international freight zone • KIX Eco-Island Promotion Council changes name to KIX Smart Island Council
	4	KIX Smart Island Plan adopted
	8	Summer Vacation Family Eco Classes held
	10	East Asia Airport Alliance (EAAA) annual general meeting held. "Environmental Relay Declaration" adopted
	12	Exhibit at Eco-Products 2013 exhibition. Winter Vacation Family Eco Classes held
2014	1	KIX announces event for EAAA Environmental Relay
	2	KIX Megasolar starts generating electricity (largest photovoltaic system of any Asian airport)
	5	Hydrogen Grid Project launched
	6	Rapid charger installed for electric vehicles at open parking lot No.5, with 24-hour operations
	7	•"Megasolar Observatory" and "Visualization Monitor" start operating • Small wind turbine power generator installed—a first for any Japanese airport
2015	2	Trial operations launched for first fuel-cell forklift at any airport in Asia, plus demonstration trial of hydrogen grid
	8	Megasolar system starts operating on roof of air freight warehouse in the International Cargo Area at 1st Island
	9	Megasolar system starts operating on roof of air freight warehouse in international freight zone
	10	Exhibit at Biwako Environmental Business Exhibition 2015
	12	• Awarded the FY2015 Environment Minister's Award for Global Warming Prevention Activities • Exhibit at Eco-Products 2015 exhibition
2016	1	Largest hydrogen station at an airport in Asia opens
	3	• Awarded 2015 Kansai Eco Office Grand Prize from Union of Kansai Governments • Two new model fuel-cell forklifts added for demonstration trials
	4	• Kansai Airports begins operating Kansai International Airport • Four more regular chargers installed for electric vehicles in parkade
	6	• Environmental initiatives introduced at Fifth Fukeko Festival • Potato harvest event at KIX Sora Farm promotes environmental education • KIX Smart Island Exhibit in passenger terminal
	8	KIX Family Eco-Classes: Hydrogen/Magnesium Air Fuel Cells
	12	• Airport Carbon Accreditation (ACA) Level 2 obtained, a first for airports in Japan • Exhibit at 2016 EcoPro International Exhibition on Environment and Energy
2017	1	Terminal 2 opens (international flights)
	4	Large hydrogen filling station for industrial vehicles opens, a first in Japan
	5	Conducts trial operations of fuel-cell bus at Kanku Tabihaku 2017 and to the Terminal 2 building
	6	• Hosted Smart Island Environmental Exhibition • Held KIX Eco Class at KIX Sky Farm • Held idling stop campaign
	8	Held KIX Science Class
	12	Exhibited at 2017 EcoPro International Exhibition on Environment and Energy

Environmental Chronology

KIX : Kansai International Airport (3/3)

Year	Mo.	Event
2018	2	Introduces additional two fuel-cell forklifts
	4	Establishes new environmental plan called One Eco-Airport Plan
	9	Keynote and exhibit at the six World Smart Energy Week Osaka Show
	10	Hosts the tenth ACI Asia-Pacific Regional Environment Committee
	12	• Airport Carbon Accreditation (ACA) Level 3 obtained • Exhibit at 2018 EcoPro International Exhibition on Environment and Energy • Holds the Fuel-Cell Bus Trial Ride in KIX
2019	2	With additional four fuel-cell forklifts introduced, seven fuel-cell forklifts in total
	9	With additional FCV introduced, three FCV in total
2020	1	Solar panels on the rooftop of the Terminal 2 building were installed and energy generation started
	2	An additional 15 fuel-cell forklifts introduced meant 22 fuel-cell forklifts in total
	3	Trial operation of the electrical ground power unit (eGPU) got underway
	4	Plastic shopping bags used in shops directly managed by the Kansai Airports Group are replaced with paper bags
2021	3	Set a long-term goal of net-zero greenhouse gas emissions
	7	• Started T2 smart airspace demonstration experiment • Selected as a “Priority Survey Airport” by the Civil Aviation Bureau of the Ministry of Land, Infrastructure, Transport and Tourism with the aim of making the airport carbon-neutral
	11	Airport Carbon Accreditation (ACA) Level 4 obtained
2022	3	Introduced a new fuel-cell bus
	4	Established Environmental Standards Regulations at KIX
	6	• A partnership agreed with Airbus to capitalize on hydrogen in the Japanese aviation industry • Concluded the basic agreement on the mass production of International SAF (Sustainable Aviation Fuel)
	10	Joined the 30by30 Alliance for Biodiversity
	12	Obtained and issued J Blue Credit
2023	2	Registered the seaweed bed initiatives for Co-Creation Challenges of the TEAM EXPO 2025 program
	3	Formulated the Environmental Plan, “Environmental Vision 2050 and Environmental Goals 2030”
	4	Received the 2022 Osaka Prize for Climate Change Measures
	7	Installation of collection boxes for horizontal recycling of PET bottles
	10	Certified for seaweed beds on the seawall at KIX Island as a “Natural Symbiosis site”
2024	5	Platinum recognition awarded (for creating a rich seaweed bed and blue carbon) at the Green Airports Recognition 2024 hosted by ACI Asia Pacific & Middle East
	10	Announced the signing of a memorandum of understanding with Airbus and Kawasaki Heavy Industries to conduct a feasibility study on hydrogen infrastructure development.
2025	2	Start of electricity supply from the solar power generation system Sora×Solar®
	4	Platinum recognition awarded (for the SAF project) at the Green Airports Recognition 2025 hosted by ACI Asia Pacific & Middle East
	5	First supply of domestically produced SAF to passenger flights
	7	Introduction of a hydrogen-powered fuel-cell minibus

ITAMI : Osaka Itami Airport (1/2)

Year	Mo.	Event
1939	1	Opened as No. 2 Osaka Airport
1958	3	Complete return of airport from U.S. forces to Japan. Renamed “Osaka Airport” by the Ministry of Transport (runway was 1,828 m long)
1959	7	Designated a class 1 airport under Civil Airport Development Law, renamed “Osaka Itami Airport”
1960	4	International flights begin
1964	6	Passenger jet service begins
1969	1	Construction of terminal building completed
1970	2	Additional runway (3,000 m) opens and airport takes its present form
1975	12	Abolished domestic line operation between 9:00 pm to 7:00 am the following morning
1976	7	Abolished international line operation between 9:00 pm to 7:00 am the following morning
1977	10	Limited on aircraft movements for regularly scheduled flights of 370 movements per day (200 for jets)
1990	12	MOT concludes the agreement with local municipalities (11 cities) and local groups (mediation group) on the airport continuation
1994	9	International flights shift to newly opened Kansai International Airport
1997	4	Osaka Monorail starts operation
1999	7	Former international terminal building is renovated and opens as South Terminal
2002	6	Erected noise barrier at the engine testing site
2004	3	Established the Osaka Itami Airport’s Eco Airport Council
2006	4	Switched from 24-hour operations to 14-hour operations (7:00am to 9:00pm)
2010	4	Began examining ways of reducing amount of grass clippings incinerated as waste (recycling as fertilizer and feed)
2012	4	New Kansai International Airport Company established
	7	Management of Osaka Itami Airport and Kansai International Airport is integrated
	10	Successfully produces fertilizer made of grass clippings from the airport’s landing strips
2013	3	Introduced landing fee system based on actual noise level

ITAMI : Osaka Itami Airport (2/2)

Year	Mo.	Event
2014	2	Received 7th Toyonaka Eco Citizen Award 2013 (for recycling grass clippings as fertilizer and feed)
	9	Received the Grand Prize at the 2014 Osaka Environmental Awards (for recycling grass clippings as fertilizer and feed)
	10	Receives the Chairman’s Prize at the 2014 Reduce, Reuse, Recycle Promotion Merit Awards (for recycling grass clippings as fertilizer and feed)
2016	4	Kansai Airports begins operating Osaka Itami Airport and Kansai International Airport
	12	• Airport Carbon Accreditation (ACA) Level 2 obtained, a first for airports in Japan • Exhibit at 2016 EcoPro International Exhibition on Environment and Energy
2017	5	Constructs warehouse for storing grass clipping feed
	6	Holds idling stop campaign
	12	Exhibits at 2017 EcoPro International Exhibition on Environment and Energy
2018	3	• Receives Silver at ACI Asia-Pacific Green Airports Recognition 2018 (for recycling grass clippings as feed) • AIP defines the auxiliary power unit (APU) usage restrictions
	4	• Installed light-blocking panels and rooftop greenery in the terminal building • Establishes new environmental plan called One Eco-Airport Plan
	8	Presents ITAMI environmental action in INTER-NOISE 2018
	12	• Upgrades to Airport Carbon Accreditation (ACA) Level 3 obtained • Exhibit at 2018 EcoPro International Exhibition on Environment and Energy
2019	3	Fuel-cell vehicle introduced for the first time
	4	Iwatani Hydrogen Refueling Station in Osaka Itami Airport opens in the airport
	6	ITAMI environmental measures are presented in INTER-NOISE 2019
	10	One rapid charger is installed
2020	4	Plastic shopping bags used in shops directly managed by the Kansai Airports Group are replaced with paper bags
2021	3	Set a long-term goal of net-zero greenhouse gas emissions
	7	Selected as a “Priority Survey Airport” by the Civil Aviation Bureau of the Ministry of Land, Infrastructure, Transport and Tourism with the aim of making the airport carbon-neutral.
	11	Airport Carbon Accreditation (ACA) Level 4 obtained
2022	4	Established Environmental Standards Regulations at ITAMI
	6	• A partnership agreed with Airbus to capitalize on hydrogen in the Japanese aviation industry • A basic agreement on cooperation concluded to commercialize Sustainable Aviation Fuel (SAF)
	8	Presented ITAMI’s instantaneous display system of aircraft noise level and ITAMI environmental action in INTER-NOISE2022
2023	3	Formulated the Environmental Plan, “Environmental Vision 2050 and Environmental Goals 2030”
	8	Introduced the largest EV charging outlets in Japan (for 184 stations)
2024	3	Commenced an EV charging service, “WeCharge”
	10	Announced the signing of a memorandum of understanding with Airbus and Kawasaki Heavy Industries to conduct a feasibility study on hydrogen infrastructure development.
2025	2	Start of electricity supply from the solar power generation system Sora×Solar®
	5	Lounge Osaka became the first airport lounge facility to receive Eco Mark certification

KOBE : Kobe Airport

Year	Mo.	Event
2006	2	Open Kobe Airport
2018	4	• Kansai Airports Kobe begins operating Kobe Airport • Establishes new environmental plan called One Eco-Airport Plan
	12	• Upgrades to Airport Carbon Accreditation (ACA) Level 2 obtained • Exhibit at 2018 EcoPro International Exhibition on Environment and Energy
2019	2	Established the Kobe Airport Environmental Promotion Council
	4	AIP defines the auxiliary power unit (APU) usage restrictions
	5	The limit on aircraft movements for regularly scheduled flights is expanded to 80 movements per day
2020	3	Operating hours extended to 16 hours between 7:00 am and 11:00 pm
	4	Plastic shopping bags used in shops directly managed by the Kansai Airports Group are replaced with paper bags
2021	3	Set a long-term goal of net-zero greenhouse gas emissions
	7	Selected as a “Priority Survey Airport” by the Civil Aviation Bureau of the Ministry of Land, Infrastructure, Transport and Tourism with the aim of making the airport carbon-neutral.
	11	Airport Carbon Accreditation (ACA) Level 4 obtained
2022	4	Established Environmental Standards Regulations at KOBE
	6	• A partnership agreed with Airbus to capitalize on hydrogen in the Japanese aviation industry • A basic agreement on cooperation concluded to commercialize Sustainable Aviation Fuel (SAF)
2023	3	Formulated the Environmental Plan, “Environmental Vision 2050 and Environmental Goals 2030”
2024	6	Signed an agreement to promote cooking oil collection in Kobe City towards a sustainable society
	10	Announced the signing of a memorandum of understanding with Airbus and Kawasaki Heavy Industries to conduct a feasibility study on hydrogen infrastructure development.
2025	6	Launch of a demonstration project for perovskite solar cells in collaboration with Kobe City and Sekisui Chemical

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