English 2017

WHAT IS ECO AIRPORT

NARITA AIRPORT

As an eco-airport, Narita Airport will promote our environmental initiatives looking to the future

Becoming an Airport with the World's Highest Standards

Narita International Airport has served a total of 1 billion passengers as of July 2017. Thanks to the understanding and cooperation of many people including local residents, Narita Airport has played signicant roles in Japan's economic development and international exchanges as an international hub airport that places the highest priority on safety while responding to international aviation demand in the Tokyo Metropolitan Region.

As founder and administrator of the airport, Narita International Airport Corporation (NAA) pursues to achieve stable airport operations with the world's highest standards while providing high-quality service to passengers, reinforcing aviation networks, and taking environmental countermeasures and deepening the partnership with the local community for coexistence with the aim of becoming an airport with the world's highest standards.

We are currently making preparations at Narita Airport to welcome, with the highest levels of hospitality, athletes and others traveling for the 2020 Tokyo Olympic and Paralympic Games, which will attract global attention.

To respond to aviation demand in the Tokyo metropolitan area, which is expected to continue increasing even after the Olympics, we are working in collaboration with local residents and other stakeholders regarding the further functional improvements at Narita Airport, such as the construction of an additional runway. We will respond in a timely manner to changes in the airport environment and take measures to achieve greater harmony and mutual prosperity between the airport and local communities.

Environmental Initiatives Undertaken Throughout the Airport

Our airport operations are supported by many airport-related business entities, such as airlines, freight forwarders, tenants, and government agencies.

With the long-term Eco-Airport Vision 2030 as well as the concrete plan of action, the Eco-Airport Master Plan (FY 2016–2020) established, we conduct initiatives to reduce environmental impact throughout the airport as a whole.

WHAT IS
ECO AIRPORT

[CONTENTS]

We Are Promoting Initiatives to Achieve the "Eco-Airport Vision 2030"

In collaboration with stakeholders, Narita Airport will pursue the development of a sustainable society by taking measures to reduce the environmental impact of airport operations on local communities and addressing global-scale environmental issues.

Eco-Airport Vision 2030

- Pursuing Sustainable Development by the Community and the Airport
- Addressing Global-Scale Environmental Issues
- Promoting an Eco-Airport in Collaboration with Stakeholders

We will aim to reduce the airport's CO_2 emissions per flight by 30% compared to fiscal 2015 by fiscal 2030

Toward realization of the Eco-Airport Vision 2030, we have defined our action targets to promote the three initiatives and environmental management over the five years from fiscal 2016 to fiscal 2020.

+

Narita International Airport Eco-Airport Development and Planning Council

NAA and the Eco-Airport Development and Planning Council, an organization representing airport-related business entities, play a central role in promotion of environmental initiatives throughout the airport as a whole.

Eco-Airport Vision 2030: A Statement of Our Vision for the Airport in FY 2030

In 2016, we established the "Eco-Airport Vision 2030" for Narita Airport with fiscal 2030 as the target year. This is a statement of our vision for Narita Airport in fiscal 2030 based on expansion of global warming countermeasures, various changes occurred in the airport's environment such as hosting the Tokyo 2020 Olympic and Paralympic Games, and even further functional improvements after these events. To achieve this vision, we will address local and global-scale environmental issues in collaboration with stakeholders*.

* Our stakeholders refer to passengers, local residents, local government, airport-related business entities and their employees, and all other persons associated with the airport.

Eco-Airport Master Plan: to Achieve the Vision

Master Plan with Quantitative Targets Established

The Eco-Airport Master Plan (FY 2016–2020) sets concrete action targets for achieving the Eco-Airport Vision, and we are taking measures to attain these targets. We set numerical targets where possible. One such target is reducing airport CO_2 emissions per flight by 7% compared to fiscal 2015 by 2020. We will carry out measures to achieve the specific targets we have set.

Together with Stakeholders

To create an environment-friendly, recycling-oriented eco-airport, the Eco-Airport Development and Planning Council, which is made up of airport-related business entities, plays a central role in undertaking environmental initiatives. We will continue our dialogue with stakeholders such as passengers and local residents, and work toward the reduction of environmental impact from Narita Airport throughout society as a whole.

Eco-Airport Digest Map

Main environmental initiatives at a glance

In Passenger Terminals

1 General Waste Sorting

Waste is sorted for recycling into six categories in passenger terminal lobbies, and 10 categories in the office areas.

2 Solar Power Panels

Solar power panels are installed at passenger terminal buildings and NAA Building. The generated electricity is used for lighting and other applications in those buildings.

3 Kitchen Wastewater Treatment Facilities and Grey Water Production Facilities

Waste water from restaurants in passenger terminal buildings is treated to be reused as flushing water in airport toilets.

4 Use of Geothermal Energy

Geothermal energy is used for air conditioning in the connecting corridor of Passenger Terminal 2, reducing energy consumption.

On Taxiways

5 LED Lighting

Highly energy-efficient LED lights have been installed for taxiways and some parts of lighting in passenger terminal buildings.

Around the Airport

Greenport Eco-Agripark

We maintain a hands-on nature conservation park, located on the noise mitigation land. The park features a rich diversity of natural life.

Noise Mitigation Embankments

Mitigation embankments and wooded buffer zones have been constructed to reduce aircraft noise.

Environmental Monitoring

To reduce environmental impact from the airport as much as possible, year-round and short-term noise, air quality and water quality measurements are taken. The measurement data is disclosed on the NAA website.

On Aprons

GPU (Ground Power Units)

Quiet, zero-emission GPUs have been installed at all fixed stands of passenger terminals to provide electric power and air conditioning to parked aircraft.

Construction Waste Management

We reduce construction waste for apron pavement repair work through our in-house developed technique called "Bonded Overlay Method."

For Vehicles

6 Fast Chargers for Electric Cars

In convenience for customers driving electric vehicles (EVs) and for airport-related business entities, fast chargers are installed in parking lots P1 and P2.

7 Hydrogen Station

This station supports drivers of fuel cell vehicles, which are becoming popular in recent years.

Low Emission Vehicles

We promote the introduction of low emission vehicles such as EVs as well as fuel-efficient and low-exhaust cars.

For Aircraft

Landing Charge System for International Flights Based on Narita Aircraft Noise Index

To encourage low-noise aircraft, we have introduced a noise-related landing charge system. At the same time, they also contribute to the reduction of CO_2 emissions.

8 Noise Reduction Hangar (NRH)

A hangar-type noise reduction facility drastically decreases sound levels of aircraft engine testing.

At Airport Facilities

9 Recycling Plant

Asphalt, concrete and other construction waste is crushed and recycled into paving material.

10 Rainwater Treatment Facility

Rainwater from a holding pond is treated and reused for cooling water in the Central Heating and Cooling Plant and for flushing water in the passenger terminal toilets.

Special Feature

Communication between Airports

01 International

ACI World Environment Standing Committee and Asia-Pacific Regional Environment Committee

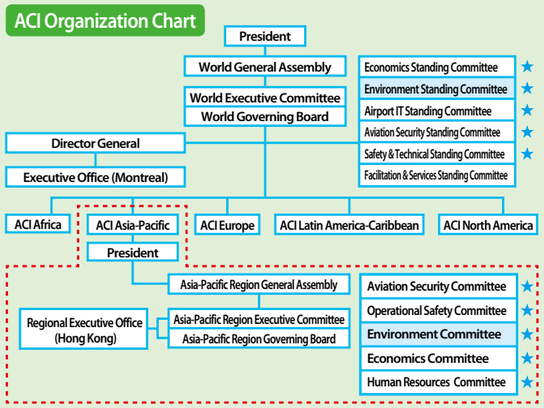
Narita International Airport Corporation (NAA) and its predecessor, New Tokyo International Airport Authority, has participated in international airport organizations, and is now a member of ACI (Airports Council International). ACI is a non-profit organization representing the world's airports, aiming to maximize cooperation and mutual assistance among airports; advocate collective voice of the world's airports to international organizations of the aviation industry such as ICAO*1 (International Civil Aviation Organization); and establish a safer and sustainable air transport system.

ACI has six world standing committees as shown in the chart below (economics, environment, airport IT, aviation security, safety & technical, and facilitation & services), and each committee holds regular meetings.

ACI activities are conducted also through five regions (Asia-Pacific, North America, Europe, Latin America-Caribbean, and Africa).

In the field of environment, we belong to the World Environment Standing Committee and the Asia-Pacific Regional Environment Committee, discussing airport-related environmental policies.

ACI Organization Chart



★ Committees in which NAA participates

World Environment Standing Committee

The World Environment Standing Committee is dealing with issues such as aircraft noise, illegal wildlife trade, relationship with airport stakeholders and local communities, and so forth.

Asia-Pacific Regional Environment Committee

Stretching from East Asia to Middle East and Oceania, airports in the Asia-Pacific Region have many different weather conditions.

In this region, where future aviation growth is expected, the importance to combat environmental issues are growing as well. For the purpose of enhancing environmental countermeasures by member airports, the Asia-Pacific Regional Environment Committee was established in April 2013. There were 14 founding members, and the number increased to 23 as of March 2017.

Currently, the Committee is sharing information about environmental measures of member airports, and promoting the Airport Carbon Accreditation (ACA) program as a common objective.

The committee also conducts environmental surveys at each airport in the Asia-Pacific region, regularly collecting information on a total of 10 items including environmental policy and management, noise, air quality, water, etc.

Furthermore, the "Green Airports Recognition" has been introduced since December 2016, aiming to promote best practices for minimizing the environmental impacts of the airport industry.

*1 ICAO (International Civil Aviation Organization) is a UN (United Nations) specialized agency under the Economic and Social Council. It was established in 1947, and its headquarters is in Montreal, Canada.

Expansion of Airport Carbon Accreditation

Currently, a program for reducing CO_2 emissions in the airport industry called Airport Carbon Accreditation (ACA) is widespread among ACI. In order to combat global warming and increased GHG emissions, the aviation industry has organized ATAG*2 (Air Transport Action Group). Member organizations have been taking their own measures for the reduction of CO_2 emissions. ACA program encourages member airports to implement best practices in carbon management, and accredit them with certificates according to the level of their achievement. This system is rapidly spreading due to high awareness of global warming.

*2 ATAG: A non-profit association that represents all sectors of the air transport industry such as aircraft manufacturers, air navigation service providers, and air traffic control unions, including ACI.

ACI Asia-Pacific Regional Environment Committee

Manager's Comment

Kazuya Tamaki
Senior Manager
Eco-Airport Development and Planning
Community and Environmental Affairs Department
NAA

I participate in both the ACI World Environment Standing Committee and the ACI Asia-Pacific Regional Environment Committee. Truly varied topics about environmental issues are discussed at ACI, and we can not only grasp the latest trends in global aviation industry but also deepen our knowledge and understanding of the environment. Regarding important topics like reducing greenhouse gas emissions, we also recognized the importance of taking environmental measures in cooperation with all member airports based on the common understanding.

Even though each member airport has different circumstances, sharing information about their various measures gives us meaningful opportunities to gather useful information for our initiatives.

I believe that promoting our environmental initiatives through friendly competition among member airports will raise the level of each airport and contribute to the development of aviation industry.

During the breaks, we enjoy frank discussion about the latest topics on their airports and cultural difference, deepening our friendships.

Through the ACI activities, I will work on environmental issues of Narita Airport, Japan, and the world for the contribution to addressing those problems.

Special Feature

Communication between Airports

02 Domestic

New Chitose Airport

Osaka International Airport
(Itami Airport)

Kansai International Airport

Narita International Airport

Tokyo International Airport
(Haneda Airport)

Chubu Centrair International Airport

NAA exchanges various information and hold regular meetings with major airport operators in Japan.
For the purpose of providing high-quality service and improved convenience that respond to the social and environmental changes in the aviation industry and various needs, we exchange information about the issues and challenges for airports and take measures to solve them.
Regarding our main priorities such as airport noise issues and in technical fields, we are enhancing the level of response by sharing information, mutual hearings, and visiting airport facilities.
Let us introduce some of our environmental initiatives conducted in cooperation with other airports.

Environmental Liaison Conference with Major Airports in Japan

Environmental Liaison Conference

The "Environmental Liaison Conference with Major Airports in Japan" ("Major Airports Conference") is held periodically at member airports. Formed in 2007, the conference includes Japan Airport Terminal Co., Ltd. (Tokyo International Airport), Kansai Airports Co., Ltd. (Kansai International Airport and Osaka International Airport), Chubu Centrair International Airport Co., Ltd., New Chitose Airport Terminal Building Co., Ltd., and NAA. The conference enables the different airports to discuss about their own tasks and issues which are difficult to tackle alone. The participants exchange information on their best practices, while establishing more unified ties.
The 16th Major Airports Conference was held at Chubu Centrair International Airport in May 2017. The meeting agenda included setting targets for environmental initiatives of each airport; promotion of GPU usage; and aircraft cabin waste recycling. A facility tour was also conducted, making the conference more fruitful.
We will strengthen our partnership with other member airports, aiming to be more environment-friendly airports.

Joint Exhibition at "EcoPro"

Airport Booth

Every year, we participate in one of the biggest environmental events, "EcoPro – International Exhibition on Environment and Energy –."
This exhibition, held at Tokyo Big Sight for three days in December, attracts some 170,000 visitors. we hold a joint exhibition in collaboration with Ministry of Land, Infrastructure, Transport and Tourism, Japan Airport Terminal Co., Ltd., Tokyo International Air Terminal Corporation, Kansai Airports Co., Ltd., and others.
The airports present their initiatives to visitors in an easy way to understand. Leveraging the characteristics of the joint event, we set an airport booth in collaboration with other airports and offer participants fun and informative activities such as collecting stamps of each airport.

Staff meeting

Manager's Comment

By creating a joint exhibit with the airport booth, we introduce our various environmental initiatives.
Our booth is next to the booths of other airports, so visitors will of course compare them. Therefore, inspired by other exhibits, I consider the booth layout and the operation of programs every year to introduce Narita Airport's original initiatives to as many people as possible, in an easy way to understand.

During the exhibition, we provide explanations of our environmental measures and respond inquiries from visitors. It would be my pleasure if they recognize our initiatives and feel Narita Airport much closer.

Shoichi Higuchi
Eco-Airport Development and Planning
Community and Environmental Affairs Department
NAA

Activity Highlights

As an "Eco-Airport," Narita International Airport engages in initiatives to combat global warming, contribute to the local environment, resource recycling, and so on.
In this section, we will cover a variety of activities in place to reduce environmental impact.

Solar Power Generation

For efficient use of natural energy, we have introduced solar power generation systems since 1999. Solar panels with capacities of 120 kW are installed on the roofs of Passenger Terminal 1 and the NAA Head Office Building. These systems provide about 120,000 kWh of electricity per year, and the produced power is used for lighting and other purposes in passenger terminals and the NAA Building. Small solar power panels used for outdoor signs are found in restricted areas of the airport. In addition, the approximately 2,000 kW Sanrizuka Solar Power Plant was constructed adjacent to the airport with a renewable energy feed-in tariff system in march 2015.
Measures taken by other organizations include the installation of solar panels on the government agency building constructed in the cargo area. Generated power is consumed within the complex.


Solar panels on the NAA Head Office Building


Sanrizuka Solar Power Plant

LED Lighting


LED taxiway lighting

LED Taxiway Lighting

We have been promoting the shift of taxiway lights to navigate aircraft from halogen lamps to LEDs (light emitting diodes).
LED lighting lasts longer than halogen lamps and reduces the replacement frequency of lighting components. The LED itself consumes 10% of the power of a halogen bulb and is four times more energy efficient even when including the lighting device. As of the end of 2016, 58.0% of taxiway lights are using LEDs, showing a steady rise in the introduction rate.

Use in Passenger Terminals

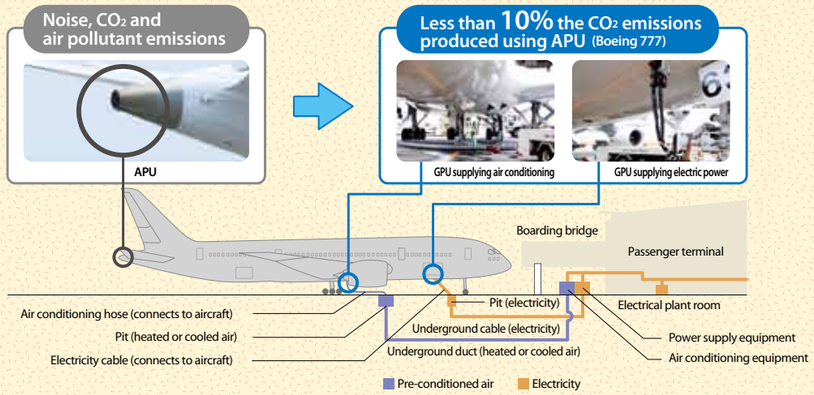

Passenger Terminal 2
LED lights on the ceiling of international arrival lobby

LEDs are also used for the backlights in advertising boards and information signs in passenger terminal buildings. LED backlighting offers a distinct display and provides many other advantages in terms of convenience, running cost, and the environment such as lower heat emission, significantly less power consumption, and longer life.
In conjunction with renovation of the international arrival lobby in Passenger Terminal 2, which was completed in March 2016, we replaced lighting fixtures with LED lighting. As a result, about 1,270 LED lights were installed, cutting annual power consumption by approximately 40% compared to before the renovation.
Moreover, airport road lighting has been gradually converted to LED lights.
We will expand the introduction of high-efficiency lighting fixtures such as LED lighting in conjunction with future facility renovation plans.

Encouraging GPU Usage

When an aircraft is parked and its engines are shut off, essential power and air conditioning can be provided by a small engine fitted to the aircraft known as an APU (Auxiliary Power Unit)*1. APU operation, however, generates noise and emits substances that cause global warming and air pollution. Consequently, the use of APUs is restricted and the use of GPUs (Ground Power Unit)*2 is encouraged at Narita Airport.
GPUs enable us to reduce greenhouse gas and air pollutant emissions, as they provide power and air conditioning from ground facilities.
Currently, GPUs have been installed at all fixed stands in Passenger Terminals 1 and 2. They are also installed at most stands in Passenger Terminal 3 and cargo area (power supply only).
Additionally, since state-of-the-art aircraft such as the B787 and A380 require electricity that exceeds the capacity of existing GPUs, we are also increasing its power supply.

[GPU and Supply Channels]



*1 APU: Abbreviation for Auxiliary Power Unit. A small-scale engine in addition to the main engine, used for supplying each part of the aircraft with compressed air, hydraulics, and electricity
*2 GPU: Abbreviation for Ground Power Unit. A facility on the ground that supplies an aircraft with the necessary air conditioning and electricity. There are both stationary and movable types.

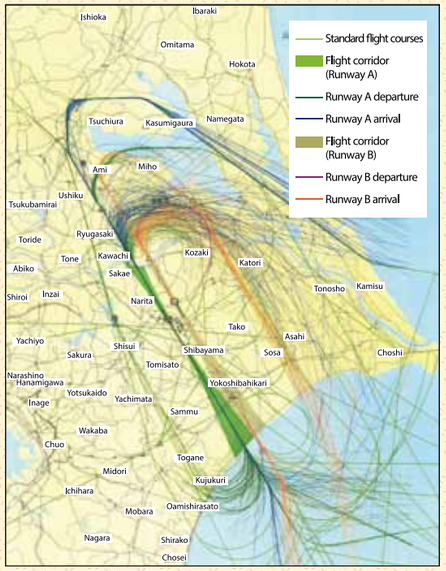
Establishing and Monitoring Flight Corridors (Monitoring Zones)

To minimize the impact from aircraft noise, flight corridors (monitoring zones) for direct ascent and descent have been established from the Tonegawa River to the Kujukuri Coastline. They are monitored to ensure that aircraft do not deviate from the corridors.
In case of deviation without any valid reasons such as weather or safety, their flight numbers and reasons are disclosed to the public. Also, the Ministry of Land, Infrastructure, Transport and Tourism issue directives to the airlines concerned if necessary.

Aircraft in Violation

Fiscal year	2012	2013	2014	2015	2016
Number of aircraft deviating without valid reason (percentage of total flights)	5 (0.002%)	2 (0.001%)	5 (0.002%)	7 (0.003%)	16 (0.007%)
Number of flights	212,078	226,182	228,220	235,190	245,705

Aircraft Tracking Map with Flight Corridors (Example)



Activity Highlights

General Waste Sorting


Sorted recycling bins in passenger terminals

The greatest volume of general waste produced at Narita Airport is unloaded from aircraft, which comprises about half of the total amount. Some of this waste, such as catering waste must be incinerated by quarantine laws. For other waste, while adverse conditions such as limited onboard sorting space and time available for cabin cleaning exist, a portion of airlines do sort and recycle waste such as inflight magazines, bottles, cans and plastic bottles.

Meanwhile, general waste from passenger terminals, cargo area, offices and other facilities is sorted into bottles, cans, plastic bottles and so on, ensuring that reusable items are recycled. In an effort to reduce general waste and increase the recycling rate of plastic bottles, waste receptacles for plastic bottles with leftover beverages have been installed in front of security checkpoints since fiscal 2015.

We also recycle paper that is shredded at the airport, and about 200 tons of shredded paper were recovered in fiscal 2016.

Led by the Eco-Airport Development and Planning Council*, recycling initiatives have been expanded to include the airport as a whole. We will pursue the reduction of waste and promote our recycling initiatives in cooperation with airport-related business entities.

* **The Narita International Airport Eco-Airport Development and Planning Council** was established in January 2005 in order to further airport-wide environmental initiatives with airport-related business entities.

Composting of Kitchen Waste

Some of the food waste from airport restaurants and the NAA cafeteria is composted. In fiscal 2016, approximately three tons of compost from about 14 tons of raw garbage was produced.

Compost is then used in greening projects in and around the airport, or given away to the public at events in the airport or local community. Many people look forward to this annual supply.

Restaurant Kitchen Wastewater Recycling


Kitchen Wastewater Treatment Facilities

Kitchen wastewater from restaurants in passenger terminals contains many impurities such as fat and organic substances. Therefore, it is treated at the Kitchen Wastewater Treatment Facilities to remove impurities through biodegradation. Afterwards, water is taken to the Grey Water Production Facilities where it is disinfected and purified through membrane separation and activated carbon absorption, allowing it to be reused as grey water*. Grey water is reused for flushing toilets in passenger terminals and at NAA Head Office Building. Approximately 200 million liters of grey water was generated from restaurant wastewater in fiscal 2016.

* **Grey water** is treated rainwater and wastewater for recycling. It is called "grey water" because it is midway between potable water and wastewater.

Rainwater Recycling


Rainwater Treatment Facility

Oil separation plant and holding pond have been installed at Narita Airport to prevent rainwater runoff from affecting the quality and volume of water at downstream waterways. Rainwater is collected in a holding pond with a capacity of approximately 610,000 m^3 located on the western side of Runway A and flows out from there into drainage canals outside the airport.

In order to use rainwater effectively, we operate a treatment facility that purifies rainwater runoff.

Rainwater is collected in the pond, converted into grey water at the facility, and used as cooling water in the Central Heating and Cooling Plant as well as flushing water in passenger terminal toilets. In fiscal 2016, the rainwater treatment facility produced about 440 million liters of grey water.

Energy Conservation Measures in Passenger Terminal Buildings


Daylight sensor


Central Control Room in Passenger Terminal 2

Due to its immense facilities, Narita International Airport consumes a large amount of energy. Including aviation fuel facilities in the Port of Chiba and Yotsukaido, the electricity and gas consumption of fiscal 2016 amounted to 4,723 TJ (terajoules)*, when converted to thermal energy.

More than half of the electricity consumed at the airport is the operation of air conditioners, and other equipment used in passenger terminals. We strive to save energy through the strict control of lighting and air conditioning according to areas for passenger, office, retail and others. For example, boarding gate areas are divided into zones in accordance with flight schedules and air conditioning is run in each zone only when necessary. Daylight sensors are installed in 56 locations in the terminal buildings, and lighting is automatically turned on or off in response to the light level in those areas. Motion sensors in restrooms reduce lighting when no one is present for a certain period.

In addition to these measures, a Building and Energy Management System (BEMS) was introduced in Passenger Terminal 2. The system monitors the operations of the air conditioning, power, and heating/cooling systems across a wide and complex area. The data are collected for analysis to visualize and optimize their operations. By collecting and analyzing data and making the operational status visible, we aim to optimize the operation of air conditioners and other components. Also, energy-saving measures such as optimizing the amount of outside air brought in by air conditioning units, adjusting the output of air conditioning unit fan inverters, and reconsidering the running time of ventilation supply/exhaust fans are implemented on a large scale. In large spaces such as passenger terminals departure lobbies, we have implemented all-return control to reduce the volume of outside air introduced by heating/cooling systems. Also, air conditioning operation load has been reduced while maintaining the interior environment by measurement of temperature, humidity, CO_2 concentrations, etc. Those measures satisfy both of energy savings and comfort. Another measure to reduce energy consumption is the use of geothermal heat, which maintains constant temperature throughout the year. It is used for air conditioning facility of the connecting corridor between the Passenger Terminal 2 main building and satellite.

* **TJ (terajoule):** 1 TJ = 10^{12} J (joules). Joule is the SI unit of work or energy.

Activity Highlights

Greening Projects

According to the Greening Master Plan for Narita Airport and Environs, we develop green areas in consideration of vegetation, aesthetic value, and unique topographical features.

Satoyama (Countryside Forest) Development

Utilizing existing forestry, natural environments are conserved as Satoyama (cultivated countryside forests). For more effective use of Satoyama, in 2005, in conjunction with Chiba Prefectural Government, Narita City, the Narita Local Hotels Association and the Narita Satoyama Development Association, we created walking trails extending to four kilometers from off-site drainage ways. The trails allow visitors to jog or walk through pristine natural environments while enjoying the seasonal colors.

Development of Drainage Ways and Waterside Environments

Environmental work on off-site drainage ways connecting to the Tokkogawa River north of the airport is being carried out, creating concrete canals which closely follow natural streams. Cherry blossom trees donated by local residents and others are thriving successfully on the banks, and provide a colorful spectacle in spring.

Narita Sakura no Yama (Cherry Blossom Mountain)

Cherry blossom trees were planted with the assistance of Narita City restoring those lost due to airport construction. In spring, the area is crowded with people enjoying the blooming flowers.

Toyomi Shinonome no Oka (Hill of Dawn)

An outlook for observing planes, opened on a noise embankment in the Toyomi district. The hill is a favorite spot for aircraft enthusiasts and local families alike.

Orchard Development

Chestnut trees have been planted which allow people to enjoy nature with chestnuts picking. In autumn, local children are invited to their harvest.

Shibayama Mizube no Sato (Waterside Park)

Many water plants, including iris sanguinea, iris pseudacorus, and water lilies have been planted in the park. Walking trails and benches in place allow people to relax and appreciate the surroundings.

Sanrizuka Sakura no Oka (Cherry Blossom Hill)

Minami Sanrizuka Nature Trail

In order to create an area for relaxation in the region, cherry blossom trees and azaleas have been planted at Sanrizuka Sakura no Oka. People can watch aircraft taking off and landing from a grassy knoll. The Minami Sanrizuka Nature Trail, which extends from Sakura no Oka, is a wood chip path through existing forestry, wonderful for strolling and forest bathing.

Asakura Yasuragi no Mori (Tranquil Forest)

Trails are provided in the existing forestry where people can relax and enjoy nature and forest bathing.

Greenport Eco-Agripark

See the following page for details.

Natural Parkland Development

Greenport Eco-Agripark is a pristine natural adventure park on a 17 hectares tract of our company's property which adjoins Shibayama Mizube no Sato Waterside Park, south of the airport (in the Iwayama district of Shibayama). The park opened in 2007 and features low hills and vales, typical of the Hokuso region, and a richly varied environment which is home to many species of insect and varied flora and fauna. Our aim is to restore the Satoyama landscape, and to protect an environment rich in biodiversity.

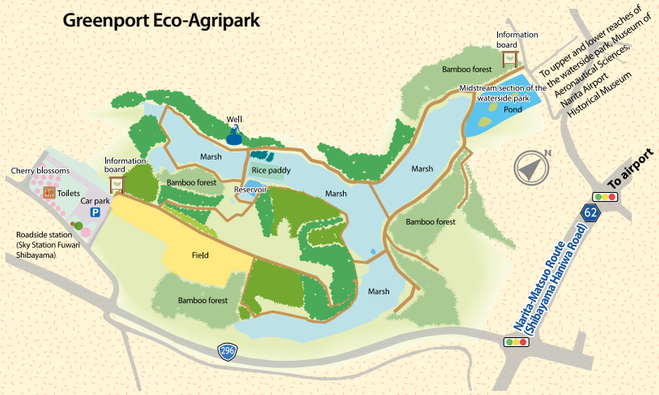
The Agripark offers not only a strolling spot for local residents but also hands-on experiences in rice cultivation in collaboration with Shibayama Town near the airport and nature observation classes by the Narita Airport Eco-Kids Club.

Rice-planting experience

In the Greenport Eco-Agripark

Narita Airport Eco-Kids Club nature observation class

Greenport Eco-Agripark



Address: 1864–2 Iwayama, Shibayama Town
Parking 30 vehicles; toilets available
Opening hours: 8 a.m. to 5 p.m.
Ten minutes from the airport by car

The Japanese Brown Frog, Inhabitant of the Narita Airport Area

Did you know that the number of the Japanese brown frog (*Rana japonica*) has been decreasing recently?

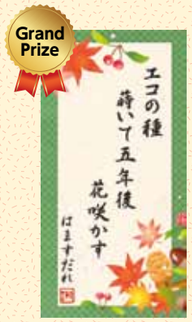
It is an endemic species found only in Japan, and distributed almost throughout Chiba Prefecture. However, habitats for the Japanese brown frog have decreased as a result of environmental change in their breeding ground, rice paddies. They are even listed in the Chiba Prefecture Red Database as a most important species for conservation.

Just before the breeding season, male frogs make an affectionate "coo-coo-coo!" call to seek female frogs. Japanese brown frogs awaken from hibernation from January to March, when it is still cold, and lay their eggs slightly earlier than other frogs. Finding their eggs seems like a signal that spring is near.

Narita Eco-Haiku and Eco-Photo Gallery

The Narita Eco-Haiku and the Eco-Photo Gallery has marked their fifth year. It began as a fun way to get people involved with intention of drawing attention to environmental initiatives in our daily lives. As for Eco-Haiku, we receive many submissions from around the country every year. They express a high level eco-awareness by their ecological ideas that are practical in everyday life, putting emphasis on the importance of environmental conservation. Submissions to the Eco-Photo Gallery had themes such as the beauty of nature around the airport as well as aircraft, the airport, and ecology. This year, we received record-breaking 658 works. A selection of submissions including the Chairman's Prize winning photo can be viewed on the council's website and are displayed at the NAA Art Gallery in Passenger Terminal 1.

Eighth Narita Eco-Haiku Grand Prize Winner



Ninth Narita Eco-Haiku Grand Prize Winner

Eco-Airport Development and Planning Council Chairman's Prize
Location: Nogedaira, Narita City
Photographer: Tomoyuki Adachi

Web Narita International Airport Eco-Airport Development and Planning Council http://www.naa.jp/eco/fun/index.html (Japanese version only)

Publishing Environmental Information

We proactively disseminate information to encourage a broader understanding on environmental measures taken at Narita Airport, and results produced.
Our environment report is posted on the NAA website. It is not only distributed to airport-related business entities and local residents, but also sent to libraries and universities throughout the nation in order to expand its readership. We have also registered on a free application website for environment reports which allows more people to read it on digital format and request for the brochures.

NAA website
http://www.naa.jp/en/

Narita Airport Environmental Community
http://airport-community.naa.jp/
(Japanese version only)

Narita International Airport website
http://www.narita-airport.jp/en/

Eco-Kids Club 2017 First Eco-Tour Report

(Held on August 22nd, 2017)

The first eco-tour of fiscal 2017 was conducted in the latter half of summer vacation, on August 22nd. This time, 51 elementary school students participated in the tour, which consisted of varied and fun environmental education programs including a visit to the Delta Airlines hangar, observation of a GPU facility, and a hands-on noise measurement experiment along the runway. The enthusiastic eco-kids displayed positive attitudes as they learned about environmental initiatives.

Delta Airlines Hangar Tour

Supported by many staff, participants visited the control center and parts warehouse during the hangar tour. In the facility, the staff gave them explanations right beside an aircraft under maintenance, and the club members were carefully listening to the stories.

GPU Tour

GPUs are used to reduce noise and CO_2 emissions generated by parked aircraft. We introduced our efforts of GPU usage. The club members enjoyed touching the GPU equipment attached to aircraft and feeling the cooled air of about 0°C blowing out of the underground duct.

Noise Measurement Experiment

The club members conducted a noise measurement experiment nearby aircraft taking off and landing on Runway A. Also, they had a "yelling competition" to see which team could yell the loudest, making noise much louder than the aircraft.

Eco-Crafts

Eco-crafts is one of the most popular programs. For this session, participants made solar lanterns from empty plastic bottles of the tea they had for lunch. They enthusiastically decorated their own bottles with colored markers, origami paper, and other materials to create one-of-a-kind lanterns.

Comments from Eco-Kids

Here are some of the comments from the participants:
"It was great to have so many valuable experiences, like the noise measurements and seeing GPUs."
"I'm glad I was able to ask about things they don't teach us in school. I can't wait till next time."
"I learned so much because we went to places we can't where we normally can't enter !"

TO KNOW MORE

NAA publishes an environment report each year, with more in-depth reports on our eco-airport initiatives. Targets, results in progress, and issues of concern are all set out in an easy-to-understand format with illustrations, diagrams, tables and photographs. If you wish to have a copy, please request from the free application service on the website below. The report is also available in digital format.

Web https://www.naa.jp/en/environment/environment.html

NARITA INTERNATIONAL AIRPORT CORPORATION
Eco-Airport Development and Planning
Community and Environmental Affairs Department
NAA-Bldg., Narita International Airport, Narita City, Chiba
282-8601, Japan
Tel : +81-476-34-5609 Fax : +81-476-30-1561
URL : http://www.naa.jp/en/

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