Driving Forward with Eco-Airport Initiatives

At Narita International Airport NAA drew up the "Eco-Airport Vision 2020" and "The Eco-Airport Master Plan (FY 2011 - 2015)" and is moving forward with a set of airport-wide environmental initiatives with airport-related business entities.



Five Initiatives of the Eco-Airport Master Plan (FY 2011- 2015)

1. Global Environment Initiatives

Reduction of CO₂ emissions from aircraft, vehicles and airport facilities (per flight)

- Standard value: 4.88 t-CO₂ (FY2010)
- Mid-term target: 3% reduction compared to FY2010
- Long-term target: 5% reduction compared to FY2010

We are encouraging the introduction of fuel efficient aircraft, low emission vehicles during vehicle replacement, energy conservation measures through the use of the Building Energy Management System (BEMS) in the passenger terminals and the expanded use of LED lights for taxiway lighting.

2. Community Environment Initiatives

Increase the ratio of quieter aircraft

- Standard value: 81.5% quieter aircraft ratio (FY2010)
- Mid-term target: 85.0% quieter aircraft ratio
- Long-term target: 90.0% quieter aircraft ratio

We are encouraging the use of quieter aircraft through a system offering reduced landing fees to quieter aircraft. We also monitor noise continuously to check noise levels.

3. Resource Conservation Initiatives

Increase grey water usage

- Standard value: Ratio of grey water use: 21.2% (FY2010)
- Mid-term target: 25%
- Long-term target: 30%

We are reducing the use of drinking water in terminal offices and tenant stores (food & beverage outlets, etc.) through water-saving measures and by increasing the use of treated grey (recycled) water from rain water and kitchens waste water.

4. Biodiversity Initiatives

Voluntary environmental impact assessments when undertaking airport expansion

• Mid- and long-term targets: Minimize the impact of the airport expansion on the surrounding

When expanding the airport, we examine the impact of the work on the surrounding area and publicize forecast assessments of the impact on the environment after completion of the expansion. This serves as the basis conservation measures to preserve the biodiversity around the airport.

5. Environment Management

Implement environment management to encourage environmental initiatives across Narita International Airport

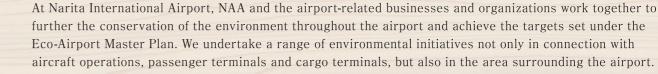
- Target for NAA: Promote and draw on environment conservation activities throughout Narita Airport.
- Target for airport-related business entities: Implement environment conservation activities throughout the entire airport.

We will step up our environmental management capacity via the Eco-Airport Development & Planning Council and improve our communication on environmental issues by organizing environment events

Projects

Eco-Airport Digest

Principle Environmental Initiatives at a Glance





1 General Waste Sorting



Waste is sorted for recycling into 6 categories in the passenger terminal lobbies, and 9-10 categories in the office areas.

2 Solar Power Panels

Runway B



Solar power panels are installed to the passenger terminals and NAA building. The generated electricity is used for lighting and as a power source for the NAA information corners.

Greenport Eco-Agripark



NAA maintains a hands-on nature conservation park, located on NAA noise mitigation land. The park features a rich diversity of

Noise Mitigation Embankments



Mitigation embankments and wooded buffer zones have been created to reduce

3 Kitchen Wastewater **Treatment Facilities and Grey Water Production Facilities**

Waste water from restaurants in the terminal buildings is treated for reuse as flushing water in airport toilets.

Environmental Monitoring



To reduce environmental impact from the airport as much as possible, consistent and regular noise, air quality and water quality measurements are taken. The measurement data is disclosed via the NAA website.

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GPU (Ground Power Units)



Quiet, zero-emission ground power units (GPU) have been installed at 67 fixed stands to provide power and air conditioning to parked aircraft.

4 LED Lighting



NAA is gradually introducing high energy-efficient LED lighting into the taxiway lighting system, and as a portion of lighting in the passenger terminal buildings.

Runway A

Terminal 2

(3)



Maintenance Area

Overlay Method

For apron pavement repair, NAA uses a Bonded Overlay Method, developed in-house, to reduce construction waste.



Low Pollution Vehicles



Narita Airport promotes the introduction of low emission vehicles such as electric vehicles, high-mileage and low-exhaust cars.

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Cargo Area



7 Recycling Plant

Asphalt, concrete and other construction waste is crushed and recycled for use as paving material.

8 Rain Water **Treatment Facility**

Terminal 1



Rain water from a holding pond is treated and used for chilled water in the Central Heating and Cooling Plant and for flushing water in the passenger terminal

6 Noise Reduction Hangar (NRH)



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A hangar-type acoustic shield used for aircraft engine testing which drastically reduces noise levels.

Narita Aircraft Noise Index International Landing Charge System



To encourage low-noise aircraft, NAA has introduced a noise-based landing charge system. Low-noise aircraft help contribute towards lower CO2 emissions.

5 Quick Charger for Electric Cars



In order to improve access for customers driving electric car and increase convenience for airport-related business entities, quick chargers have been installed in parking lots P1 and P2.

or aircraft