

Narita Airport United in Promoting Environmental Conservation

# Eco-Airport Master Plan

**Common Awareness of Environmental Concerns**

We formulated the Basic Environmental Policy in September 2004 with the goal of employees throughout the organization sharing a common awareness in efforts to protect the environment. The plan sets out measures the airport can take to preserve the environment to achieve its environmental policy goal of working with environmental issues from a global perspective to become an environmentally friendly recycling "Eco-Airport". It also intends to build a relationship of trust with the community, and contribute to the creation of an affluent society in the 21st century. In March 2005, Eco-Airport Master Plan has set based on Basic Environmental Policy.

The plan calls for the reduction of the burden that airport construction and operation places on the environment, as well as environmental preservation in the local area around the airport, and the establishment and continuous improvement of systems to enable these activities to occur. The plan also sets out to raise levels of awareness among all our employees, and promote the concept of an environmentally friendly recycling eco-airport to the entire NAA Group and all the airport-related businesses.

We will formulate "master plans" for all its activities. These operations will comply with environmental laws and regulations, and work to enhance environmental conservation by setting independent goals and conducting periodic reviews.

**Setting Clear Numerical Targets and Practical Approaches to Preserving the Environment**

The main feature of the Eco-Airport Master Plan (the "Master Plan") is its clear numerical targets in defined fiscal years. For example the lowering of emissions of atmospheric pollutants and greenhouse gas CO<sub>2</sub>, and targets for waste recycling and waste generation reduction rates.

The benchmark year of fiscal 2002, the year that the interim parallel runway entered service, was selected because the airport operations at that time were about the same as it is today. 2006 was selected as the target year for the mid-term plan and 2010 for the long-term plan.

The categories set forth in the Master Plan apply to all operations at the airport, including aircraft landings and take-offs. The targets for each category are numerical ones wherever possible, and are set by analyzing the current situation then forecasting the impact on the environment in the target fiscal year. The Master Plan uses assessment indices that are specific to airports, i.e., "per single landing and take-off cycle," and "per person using the airport."

The Narita International Airport Eco-Airport Planning & Developing Council is responsible for overseeing the implementation of the Master Plan. The council members are from 38 industry groups that represent some 500 businesses associated with the airport. These include the airlines, the tenants' council, the freight companies, and various public agencies. There are committees within the council (the Waste Material Committee, Air Quality Committee, and Public Relations Committee) that discuss policies for individual issues.



**Targets for Important Items**

**Reduction of Atmospheric Pollutants (NOx)**

Reducing the volume of air pollutants per flight (from aircraft, vehicles and airport facilities)  
 5% reduction on benchmark year levels (fiscal 2002) by fiscal 2006 (mid-term target)  
 10% reduction by fiscal 2010 (long-term target)

**Reduction of Greenhouse Gas Emissions**

Reducing the volume of greenhouse gases per flight (from aircraft, vehicles and airport facilities)  
 5% reduction on benchmark year levels (fiscal 2002) by fiscal 2006 (mid-term target)

**Increase Recycling of General Waste and Reduce Emission**

Improve recycling rates for general waste  
 20% recycling rate by fiscal 2006 (mid-term target)  
 30% recycling rate by fiscal 2010 (long-term target)  
 Reduce volume of waste generated per airport user (passengers and employees)  
 12% reduction on benchmark year levels (fiscal 2002) by fiscal 2006 (mid-term target)  
 30% reducing by fiscal 2010 (long-term target)



### **Reduction of NOx and Greenhouse Gas Emissions to Cut Air Pollution**

We are continuing to introduce a range of strategies including encouraging the use of GPUs, low pollution airport vehicles, solar power and a co-generation system to reduce the emission of atmospheric pollutants.

The ratio of aircraft using GPUs at Narita Airport is steadily increasing each year and stood at 83% at fixed gates in fiscal 2005. Under the Eco-Airport Master Plan, a target of 100% compliance is expected. We are also working to encourage the use of Ground Power Unit trailer at remote gates as well.

The ratio of low-pollution service and other airport vehicles stood at 7% at Narita Airport according to a survey conducted in fiscal 2005. We plan to provide information to airport related businesses on natural gas, electric, hybrid and low emission gasoline vehicles (★) to encourage their use.

In May 2006, the website of the Narita International Airport Eco-Airport Planning & Developing Council listed the airlines that frequently use GPUs and the companies using low-pollution vehicles in its Environment Friendly Corporation pages to encourage more initiatives.

Under our energy conservation initiative, we continue to make use of solar power, its co-generation system and thermal storage system and are also practicing energy efficiency in the operation of its air conditioning and lighting in airport facilities and familiarizing airport staff

on energy conservation activities.

We are also continuing on its greening program on the land that we own in order to increase the absorption of CO<sub>2</sub>.

★ Vehicles meeting a minimum 50% of the 2005 gas emission standards.

### **Promotion of Sorting and Recycling of General Waste**

At Narita, emphasis is also placed on sorting and recycling general waste. Waste at our headquarters building and our facilities is sorted into 9 categories and with the cooperation of airport-related businesses, waste in the cargo area are sorted into 8 categories for recycling.

In December 2005, the recycle drive was expanded with general waste from Terminal 1 & 2, the domestic terminal and the Terminal 2 multistory car park, which used to be separated into 6 categories in the office area (bottles, cans, newspapers, cardboard, burnable and non-burnable) being converted to an 8-category system with the addition of plastic bottles and magazines, and from 4 categories in the public access area (bottles, cans, newspapers and burnable) to a 6-category system with the addition of plastic bottles and magazines.

Work will also begin on encouraging the sorting and recycling of the largest source of waste, that unloaded from aircraft. At the moment, some airlines are separating and recycling cans and newspapers. In



fiscal 2005 a working group was established by some members of Eco-Airport Planning & Developing Council such as airlines, catering companies, cleaning and waste disposal companies and us to examine methods of encouraging more sorting and recycling to expand the scale of this initiative. With the relocation and enlargement of garbage collection points in February 2006, studies are continuing into methods of using these points more efficiently to encourage the sorting and recycling of waste from aircraft.

### **Development of Parks Using Natural Environmental Assets**

Approximately 680 hectares of land owned by us around the airport for use as a barrier to aircraft noise has been put to good use by making it available to promote agriculture and by landscaping activities. Under the Eco-Airport Master Plan, we plan to also make use of vacant farmland, etc. in our initiatives to protect the natural environment.

The Greenport Eco-Agri Park development is underway as part of the drive to preserve the natural environment around the airport for this purpose. The Agri Park will involve approximately 22 hectares of our land at Iwayama in Shibayama, and will utilize the site's natural features, such as water, forests and bamboo groves, adding a walking path for visitors to enjoy. As its name suggests, the park will have a farm area where visitors can experience aspects of the agricultural lifestyle. There are also plans to include shops that will sell

products from the farms near the airport. The project will retain as much of the natural surroundings as possible, and seek to deepen visitors' understanding of environmental conservation and farming. Hand in hand with agricultural NPOs and volunteer organizations, the Agri Park will be open to everyone.

### **Expanding Links with the Community Improving Communication**

Improving communication with the community is an important item in the Master Plan. The activities of the Narita Airport Eco-Kids Club, established in fiscal 2005, have been a pivotal move in environmental communication.

The club promotes an awareness of the importance of the environment among the children who will be responsible for future generations, publicizes the environment strategies in place at Narita Airport and operates eco-tours in the natural environment around the airport. In its first fiscal year, it conducted three separate eco-tours for 5th and 6th grade primary school children focusing on themes such as solar power systems, prevention of aircraft noise, general waste recycling and environment watching.

We will also continue to focus on making information available to the public through its website, etc, staging environment displays, conducting clean up campaigns in and around the airport (roadside clean up activities) and participating in various other forms of community activity.