





Targets of the New Eco-Airport Master Plan

Global Environment Initiatives

*1 Quieter aircraft: Low emission, low fuel consumption aircraft listed as Class A–C quiet aircraft in the Narita Aircraft Noise Index
 *2 GPU usage rate: Usage ratio against supply opportunity
 *3 Low emission vehicle: Electric, hybrid, natural gas, fuel cell, methanol and low consumption/low emission vehicles (gasoline, diesel)
 *4 BEMS: Refer to page 25
 *5 Airport facilities: Facilities on and off the airport managed by NAA and aviation fuel facilities at Chiba Port and Yotsukaido, etc.
 *6 Thermal recycling power generation: Recycling of heat generated by the incineration of waste to generate power

Initiative themes	Targets	Scope	Entity	Description	Benchmark year (fiscal 2010)	Mid-term target (fiscal 2013)	Long-term target (fiscal 2015)		
Global Warming Measures 	Reduction of carbon dioxide emissions from aircraft, vehicles and airport facilities (per flight) Reduction of energy use (per flight) Studies into the effective use of recyclable energy	Entire Airport	NAA Airport companies and organizations (Council)	NAA and the airport companies and organizations will strive to reduce carbon dioxide in the airport overall by undertaking the following initiatives in relation to aircraft, vehicles and airport facilities.	• 4.88 tonnes CO ₂ per flight	• 3% reduction in carbon dioxide emissions (per flight) from aircraft, vehicles and airport facilities over fiscal 2010	• 5% reduction in carbon dioxide emissions (per flight) from aircraft, vehicles and airport facilities over fiscal 2010		
			Aircraft	NAA	1. Continued efforts towards introduction of quieter aircraft (international landing charge system based on the Narita Airport Noise Index) 2. Encourage use of ground power units (GPU) at fixed stands 3. Construction of taxiways in a manner which will reduce aircraft taxing times 4. Urge airlines to reduce APU usage times	• Ratio of quieter aircraft ^{*1} : 81.5% • GPU usage ratio ^{*2} : 94.0%	• Ratio of quieter aircraft: 85% • Ratio of ground power unit (GPU) usage at fixed stands in the terminal building: 98%	• Ratio of quieter aircraft: 90% • Ratio of ground power unit (GPU) usage at fixed stands in the terminal building: 100%	
		Vehicles	Airlines		1. More fuel efficient aircraft 2. Reduced use of APUs and increase use of ground power units (GPUs)				
			NAA		1. Low emission vehicles 2. Promote the use of the power charging system for trucks in the cargo area holding yard 3. Use of low emission service vehicles (buses, etc.) in the airport 4. Study the introduction of bio-diesel fuel 5. Eco-driving promotion 6. Study and provide assistance to promote the use of public transport for electric cars, etc.) 7. Encourage the use of low emission vehicles to come to the airport (recharging stations for electric cars, etc.) 8. Encourage the use of car sharing services 9. Cooperation, etc. in proving trials for fuel cell vehicles	• Ratio of low emission vehicles ^{*3} : 35.8%	• 3 point improvement over fiscal 2010 in the ratio of low emission vehicles in the service vehicle fleet	• 5 point improvement over fiscal 2010 in the ratio of low emission vehicles in the service vehicle fleet	
		Airport facilities	Airport companies and organizations (Council)		1. Introduction of low emission vehicles during vehicle replacement 2. Use of low emission service vehicles (buses, etc.) in the airport 3. Eco-driving promotion 4. Promote the use of the power charging system for trucks in the cargo area holding yard 5. Cooperation with the trial introduction of bio-diesel fuel 6. Operation of natural gas refueling stands	• Ratio of low emission vehicles: 43.2%	• 3 point improvement over fiscal 2010 in the ratio of low emission vehicles in the airport (service vehicles, GSE vehicles)	• 5 point improvement over fiscal 2010 in the ratio of low emission vehicles in the airport (service vehicles, GSE vehicles)	
			NAA		1. Expanded use of LED lights for taxiway lighting 2. Promote the introduction of LED lighting in the terminal buildings and other parts of the airport 3. Energy management in accordance with the Energy Saving Act and introduction of energy-saving devices when replacing equipment 4. Use of BEMS ^{*4} in energy conservation measures in terminal buildings 5. Examine more extensive installation of solar power generation 6. Undertake energy conservation measures in offices (cool biz, warm biz, etc.)	• Ratio of LEDs in taxiway lighting: 33.8% • Carbon dioxide emissions from airport facilities ^{*5} : 0.76 tonnes CO ₂ per flight • Energy consumption in airport facilities: 20.8 GJ per flight	• Ratio of LED lights for taxiway lighting: 50% • 3% reduction over fiscal 2010 in carbon dioxide emissions (per flight) from airport facilities • 3% reduction over fiscal 2010 in energy consumption (per flight) in airport facilities	• Promotion of use of LED lights for taxiway lighting • 5% reduction over fiscal 2010 in carbon dioxide emissions (per flight) from airport facilities • 5% reduction over fiscal 2010 in energy consumption (per flight) in airport facilities	
			Airport companies and organizations (Council)		1. Introduction of energy-saving facilities and equipment when replacing facilities and equipment 2. Implement energy-saving measures in office buildings (LED lighting, reduced lighting times, etc.) 3. Introduce cool biz and warm biz 4. Advanced energy efficient facility operation 5. Use of waste for thermal recycling ^{*6} generator units				



Community Environment Initiatives

Initiative themes	Targets	Scope	Entity	Description	Benchmark year (fiscal 2010)	Mid-term target (fiscal 2013)	Long-term target (fiscal 2015)
Noise Mitigation Measures 	Preserve the integrity of noise impact zones as prescribed in the noise prevention law Increase the ratio of quieter aircraft	Aircraft	NAA	1. Monitoring of aircraft noise and release of readings 2. Continued efforts towards introduction of quieter aircraft (international landing charge system based on the Narita Airport Noise Index)	• Ratio of quieter aircraft introduced under the Narita Airport Noise Index: 81.5%	• Ratio of quieter aircraft: 85%	• Ratio of quieter aircraft: 90%
			Airlines	Introduction of quieter aircraft			
Air Quality Conservation 	Reduce the emission of air pollutants (per flight)	Entire Airport	NAA	1. Promotion of initiatives to reduce air pollutants from aircraft, vehicles and airport facilities 2. Monitoring of air quality around the airport and release of readings	• Nitrogen oxide emissions: 20.3 kg per flight	• 3% reduction over the fiscal 2010 in nitrogen oxide emissions (per flight) from aircraft, vehicles and airport facilities	• 5% reduction over the fiscal 2010 in nitrogen oxide emissions (per flight) from aircraft, vehicles and airport facilities
			Airport companies and organizations (Council)	Implementation of initiatives to reduce air pollutants from aircraft, vehicles and airport facilities			
Water Quality Conservation 	Sustain water quality in rain water runoff	Entire Airport	NAA	Monitoring of water quality around the airport and release of readings	• Sustain water quality in rain water runoff • Sustain subterranean water quality	• Sustain water quality in rain water runoff • Sustain subterranean water quality	
		Aircraft	NAA	Proper handling of deicing agent (deicing agent treatment facilities, collection by vacuum sweepers, construction of temporary holding ponds (lagoon) for runoff)			
			Airlines	Proper usage of deicing agent			


Targets of the New Eco-Airport Master Plan

Resource Conservation Initiatives


*7 Council: Narita International Airport Eco-Airport Development and Planning Council

Initiative themes	Targets	Scope	Entity	Description	Benchmark year (fiscal 2010)	Mid-term target (fiscal 2013)	Long-term target (fiscal 2015)
Water Conservation & Recycling 	Reduce drinking water consumption (per airport user)	Airport facilities	NAA	<ol style="list-style-type: none"> Increase grey water usage Implement water conservation measures in office buildings Implement water conservation measures in passenger terminals in public spaces 	<ul style="list-style-type: none"> Drinking water consumption: 43.2 L per person Ratio of grey water use: 21.2% 	<ul style="list-style-type: none"> 3% reduction over fiscal 2010 in the use of drinking water (per airport user) Ratio of grey water use: 25% 	<ul style="list-style-type: none"> 5% reduction over fiscal 2010 in the use of drinking water (per airport user) Ratio of grey water use: 30%
	Increase grey water usage		Airport companies and organizations (Council)	<ol style="list-style-type: none"> Implement water conservation measures in buildings, etc. managed by themselves Implement water conservation measures for commercial use 			
3Rs of Waste 	Reduce waste emission (per airport user)	Airport facilities	NAA	<ol style="list-style-type: none"> Promote reduction and recycling of general waste emission in passenger terminals, cargo area tenant premises, NAA offices and other facilities managed by NAA Encourage the recycling of paper in NAA offices Increase green procurement Recycle industrial waste 	<ul style="list-style-type: none"> Volume of general waste incinerated: 0.60 kg per person Waste recycling ratio: 25.5% 	<ul style="list-style-type: none"> 3% reduction over fiscal 2010 in the volume of general waste incinerated (per airport user) 3 point improvement over fiscal 2010 in the waste recycling ratio 	<ul style="list-style-type: none"> 5% reduction over fiscal 2010 in the volume of general waste incinerated (per airport user) 5 point improvement over fiscal 2010 in the waste recycling ratio
	Improve waste recycling ratio	Aircraft Airport facilities	Airport companies and organizations (Council)	<ol style="list-style-type: none"> Promote the recycling of waste from aircraft cabins (in-flight magazines, bottles, cans and plastic bottles used inflight) Promote the recycling of industrial waste (plastic wrap and wooden skids used in cargo handling and kitchen scraps from in-flight catering preparation, etc.) Promote the recycling of paper Promote recycling and the reduction of general waste emission in office buildings 			

Biodiversity Initiatives

Initiative themes	Targets	Scope	Entity	Description	Benchmark year (fiscal 2010)	Mid-term target (fiscal 2013)	Long-term target (fiscal 2015)
Natural Environment Conservation 	Conservation of natural environments nurturing biodiversity	NAA greening projects and land vacated by resettlement	NAA	<ol style="list-style-type: none"> Understand and protect the natural environment Restore the Satoyama landscape Committed approach to environment conservation and improved awareness of NAA greening projects such as the Greenport Eco-Agripark Rational management of land vacated by resettlement Support for the revival of regional agriculture 	<ul style="list-style-type: none"> Implement proper conservation and action in relation to a natural environment that supports biodiversity 		
	Voluntary environment impact assessments when undertaking airport expansion	Areas adjoining Narita International Airport (Scope of expected environmental impact resulting from business activities)	NAA	<ol style="list-style-type: none"> Publication of survey results and assessments of forecasts Implement necessary environment conservation steps 			

Environment Management

Initiative themes	Targets	Scope	Entity	Description	Benchmark year (fiscal 2010)	Mid-term target (fiscal 2013)	Long-term target (fiscal 2015)
Environment Management 	Implement environment management to encourage environmental initiatives across Narita International Airport	Entire Airport	NAA	<ol style="list-style-type: none"> Stimulate the dissemination and sharing of information among airport employees (use of website, etc.) Take on a leading role on activities of the Council^{*7} (work through sub-committee's activities, etc. to promote environment conservation action) Strengthen the development and planning framework, undertake environmental education and awareness activities to improve environment management in the NAA group 	<ul style="list-style-type: none"> Promote and draw on environment conservation activities throughout Narita International Airport 		
			Airport companies and organizations (Council)	<ol style="list-style-type: none"> Share information among members of the Council (use of website, etc.) Actively participate in Council activities (promotion of environment conservation activities through the Committee) Implement environmental education and awareness activities for Council members and airport employees (EcoFesta, etc.) Implement environment conservation activities based on the Eco-Airport Master Plan 			
	Stimulate environment conservation activities through communication with stakeholders	All stakeholders (Local communities, customers, the public)	NAA Airport companies and organizations (Council)	<ol style="list-style-type: none"> Proactive publication of environmental information (websites, Environment Report, booklets, videos, information corners, etc.) Stimulate communication (run booths at environment exhibitions, environmental studies such as Eco-Kids Club and environment road shows, participate in regional events) Implement (and cooperate with) environmental education and awareness activities with active participation of employees Promote the dissemination of progressive environmental information (provide environmental information in terminals, etc.) 	<ul style="list-style-type: none"> Improve understanding and support for environment conservation activities at Narita International Airport 		
Promote environment conservation activities by working together with other airports at home and abroad	Other airports at home and abroad	NAA	<ol style="list-style-type: none"> Encourage information exchanges and joint environment conservation activities with other airports in Japan through environment liaison conference Actively participate in ACI activities Exchange information with overseas airports 	<ul style="list-style-type: none"> Promote environment conservation activities at Narita International Airport Take on a leading role on environment conservation activities in the airport and aviation industry 			