



EARTHCHECK

For more information about how EarthCheck can help your business, please email: [andre.russ@earthcheck.org](mailto:andre.russ@earthcheck.org)

EarthCheck Pty Ltd  
PO Box 12149  
George Street  
Queensland 4003  
Australia

P: +61 7 3238 1902  
E: [andre.russ@earthcheck.org](mailto:andre.russ@earthcheck.org)  
W: [www.earthcheck.org](http://www.earthcheck.org)



# AUCKLAND INTERNATIONAL AIRPORT, NEW ZEALAND

Auckland International Airport (AIA) serves as the gateway to New Zealand; the jumping off point for adventure and fun. Over 70 per cent of visitors enter or leave New Zealand via Auckland International Airport, which handles over 13 million passengers a year. More than 20 international airlines fly there, making it Australasia's second busiest international airport, after Sydney.

The management of the airport was corporatised in 1988 and ten years later, it became the fifth airport company in the world to be publicly listed.

Auckland International Airport is considered one of the 10 best airports in the world and it generates billions of dollars for the New Zealand economy. Creating thousands of jobs and making a vital contribution to New Zealand trade and tourism industries, the airport plays a vital infrastructure role.

## SUSTAINABILITY SNAPSHOT

Auckland International Airport has been pro-active over the past two to three years in embedding sustainability into the way it does business.

In 2008, Auckland International Airport established a sustainability forum comprising 11 members of staff who aim to represent all key stakeholders. The forum is a 'think tank' tasked with producing a five-year sustainability action plan (2008 to 2012) that will ensure 14 key areas of sustainable business performance are monitored and managed.

Two years later, Auckland International Airport was awarded EarthCheck's Bronze Benchmarking (May 2010) and Silver Certification (December 2010).

### EARTHCHECK BENCHMARKING RESULTS FOR 2009 - 2010

Potable Water Consumption is **22.5% better than Best Practice**

Waste Sent to Landfill per passenger is **4.2 per cent better than the Best Practice**

There were no proven noise infringements for the year benchmarked.

**100%** of the Airport's water samples passed required levels.



## MANAGING GROWTH

Auckland International Airport is continually developing its capacity and services to ensure its ability to cope with an anticipated 24 million passengers a year by 2025.

Environmental audits of high-risk tenants and facilities occur at least on an annual basis. AIA also audits its own environmental performance against international best practice (ISO14001) and EarthCheck.

## ENERGY CONSUMPTION

Auckland International Airport has a range of measures to conserve energy, including simple messaging on light switches that remind staff to turn them off when they leave at night, to a comprehensive greenhouse gas emissions reduction plan produced in 2008. This latter initiative has focused attention on improving heating, ventilation and air conditioning (HVAC) plant and equipment, in the main terminal, and using building management system software to improve energy efficiency.

AIA has introduced some new technology to the airport in the form of UVC Coil cleaning, which effectively cleans and maintains the cooling coils at maximum efficiency, as well as purifying the air for staff and passengers. Installed in 2010, the system covers over 100 air handling units at the international terminal, and will deliver **energy cost savings of over NZ\$100,000 per annum, as well as reducing their total carbon footprint by over 5%.**

In addition, they also have started to work in a new way with property tenants by funding energy efficiency projects and sharing paybacks. For example, a freight forwarding business with a warehouse installing low energy lighting, with daylight and occupancy sensors, will give **energy savings of over 90% and a simple payback of 2.1 years.**

The total energy efficiency program capital spends for FY2010 was circa \$500,000, with an anticipated payback of less than 2 years.

## GREEN POWER

Auckland Airport has installed solar water heating and has the largest photovoltaic array in the southern hemisphere on the international terminal roof. The solar water heaters provide hot water for public restrooms while the photovoltaics contribute energy for corridor lighting.

## GHG EMISSIONS

Over 70 per cent of visitors enter or leave New Zealand via Auckland International Airport, resulting to an amount of passengers that's equivalent to three times the country's entire population passing through its gates. So, it might come as a bit of a surprise to hear that the airport's emissions profile falls well below the threshold for inclusion in New Zealand's emission trading scheme.

AIA's total footprint (including scope three emissions from construction projects) has fallen by over 7% between FY2007 and FY2010. They anticipate reducing the total scope 1 and 2 emissions by over 5% this financial year (July 2010 to June 2011) due to a concerted focus on energy efficiency in the main terminal building.

## WASTE RECYCLING

At Auckland International Airport, waste is separated at source with facilities available to retail, airline tenants and the general public. There also is some segregation by waste management contractors who collect co-mingled recyclable waste.

Aluminum cans and cartons are not currently crushed but a small income is collected from cardboard due to the large quantities generated. The airport is currently reviewing their existing waste management practices to further build on these systems.

Due to AIA's bio-security laws, food waste generated airside has to be sent for steam sterilisation. Landside food waste is not currently segregated but this will form part of review of waste management practices.

Visitors have been provided with public recycling facilities and suppliers will be encouraged to look at reducing packaging waste through a 'greening the supply chain' initiative.

AIA's main IT supplier has a take back system for packaging and consumables, a system that is planned for other areas of the supply chain.

## WATER SAVING MEASURES

Auckland International Airport has installed low flow fittings in its new pier that was built to Leadership in Energy and Environmental Design (LEED) standards. They also are in the process of retrofitting low flow fittings to showers across the terminal, which will lead to a 40% energy and water saving.

Outdoor landscaping favours native plants that are less water hungry than exotics. AIA does not currently have grey water recycling in place but is considering this as part of the sustainable development of the surrounding airport business district.

Rainwater is harvested from the international terminal building and used in the cooling towers. The system provides about 4,000m<sup>3</sup> per annum.

## CHEMICAL PRODUCTS

Most of the chemicals used throughout Auckland International Airport are used by contractors rather than directly by staff. Engineering support services receive some chemicals oils, greases and diesel in bulk.

