Sustainability Update 2017

Auckland Airport

Latest technology and sustainable design

Minimal carbon footprint

Minimal water consumption

Effective supply chain partnership

Minimal waste to landfill

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1.0 Vision

The vision for sustainability is contained in the company's Corporate Responsibility Policy (see figure 1) : "To ensure the Company operates and develops in a manner that finds the right balance between economic performance, environmental protection and social contribution, for the benefit of current, as well as, future generations."

Corporate Responsibility
Company Policy

Purpose

To ensure the Company operates and develops in a manner that finds the right balance between economic performance, environmental protection and social contribution, for the benefit of current, as well as, future generations.

As an expanding international airport, and business district, Auckland Airport has a positive impact on local, regional and national economies. Sound economic performance enables Auckland Airport to contribute to society through e.g. employment opportunities and sponsorship programmes.

Auckland Airport is also located on the very edge of the Manukau Harbour, a unique site that includes sensitive natural environments, important native species and a rich local heritage and culture.

Corporate responsibility, therefore, needs to be integrated into the management of our business. It is an essential element in creating and realising the long term vision for Auckland Airport.

Auckland Airport will:

- Implement a pro-active corporate responsibility strategy for its business that meets stakeholder expectations;
- Produce comprehensive metrics, set specific, achievable sustainability goals and/or targets for the following material areas:
    - Economic contribution
    - Community and Iwi engagement
    - Smart design and construction
    - Customer experience
    - Work location of choice
    - Safety and security
    - Ground transport
    - Noise and emissions
    - Energy and carbon
    - Waste and water

Successful implementation of this policy will enhance Auckland Airport's reputation, customer loyalty and passenger experience. It will also play a crucial role in the delivery of long term value for our owners, as well as our other stakeholders.

References

Global Reporting Initiative (GRI G4) and GRI Airport Operators Sector Supplement 2011
Hazardous Substance and New Organisms Act (HSNO) 1996
Resource Management Act (RMA) 1991

Next Review

This policy replaces an existing Sustainability Policy and will be reviewed in May 2018

Approved for distribution to staff by the Leadership Team on 04/05/2015

Auckland Airport

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Figure 1: Corporate Responsibility Policy

2.0 Introduction

Auckland Airport has had a sustainability/corporate responsibility policy in place since 2008. The policy is based on the three pillars of economic performance, environmental protection and social contribution.

In 2012 Auckland Airport set ambitious targets of reducing energy, water and waste intensity by 20% per passenger by 2020. In addition it set aspirational, long-term goals of 80% reductions by 2030.

The sustainability/corporate responsibility policy was last updated in May 2015. A stakeholder consultation exercise followed to reaffirm the ten material issues of importance to the business and also to meet stakeholder requirements.

The 2016 materiality assessment process included one-on-one interviews with key external stakeholders and resulted in a reporting priority matrix (see Figure 2).

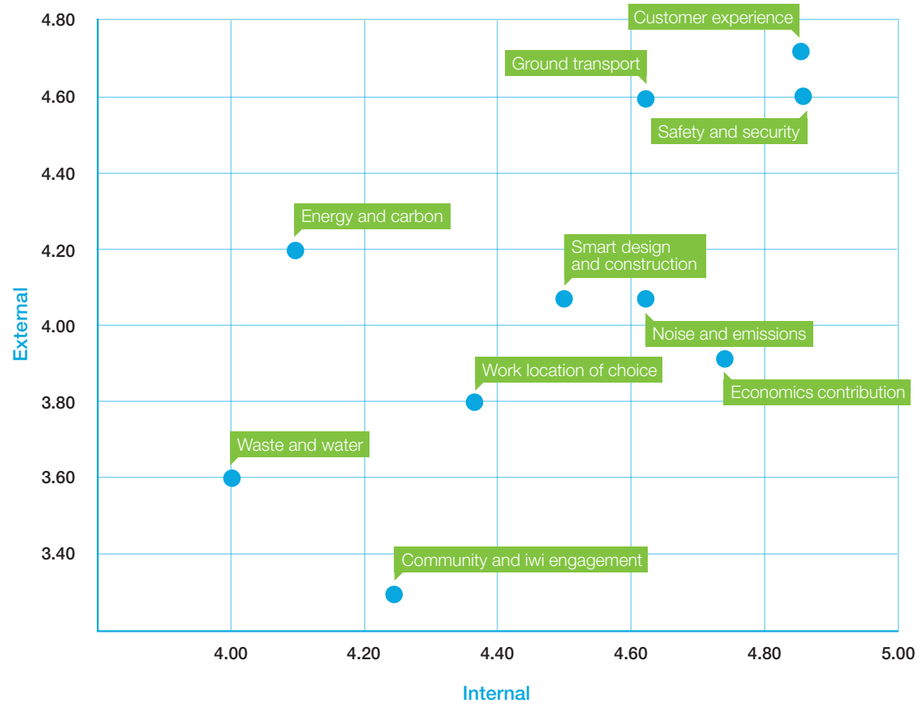


Figure 2: Reporting priority matrix

This document provides an update on the first five years of eco-efficiency performance (FY2012 to FY2016) and covers the material issues of energy, waste, water, carbon and smart design and construction.

3.0 Eco-efficiency

Eco-efficiency has been proposed as one of the main tools to promote a transformation from unsustainable development to one of s sustainable development[1].

It has been at the centre of Auckland Airport's sustainability programme since inception and is a focus both for the operation and development of the business and its assets.

4.0 Energy, water and waste minimisation

Auckland Airport has set itself ambitious, 20% by 2020 and 80% by 2030 reduction targets and goals around energy, waste and water intensity with financial year 2012 as a base line. It continues to monitor, measure and report its performance across its assets and, increasingly, across the entire airport campus.

[1] World Business Council for Sustainable Development (2000). Eco-Efficiency: Creating more value with less impact

5.0 Performance

Continued focus on energy and carbon reductions has seen energy consumption (electricity and gas) in the international terminal reduce by 16% per m2 over the last six years. This equates to a 37% reduction in carbon intensity per passenger and a total reduction of 2,209 tonnes of scope 1 and 2 carbon emissions.

A pro-active waste minimisation programme has seen waste recovery and recycling increase from 18% to 42% over the same period. This again reduces carbon emissions through avoiding waste to landfill.

Across all airport operations the 20% by 2020 target has been achieved for waste with a 42% reduction, energy with a 30% reduction and carbon with a 16% reduction on a per passenger basis (see Figure 3). Water has decreased by just 2% due mainly to passenger growth, this clearly indicates a need to increase the focus on water efficiency during operations and water efficient design in any new developments

Eco-efficiency performance FY16

FY12 base year

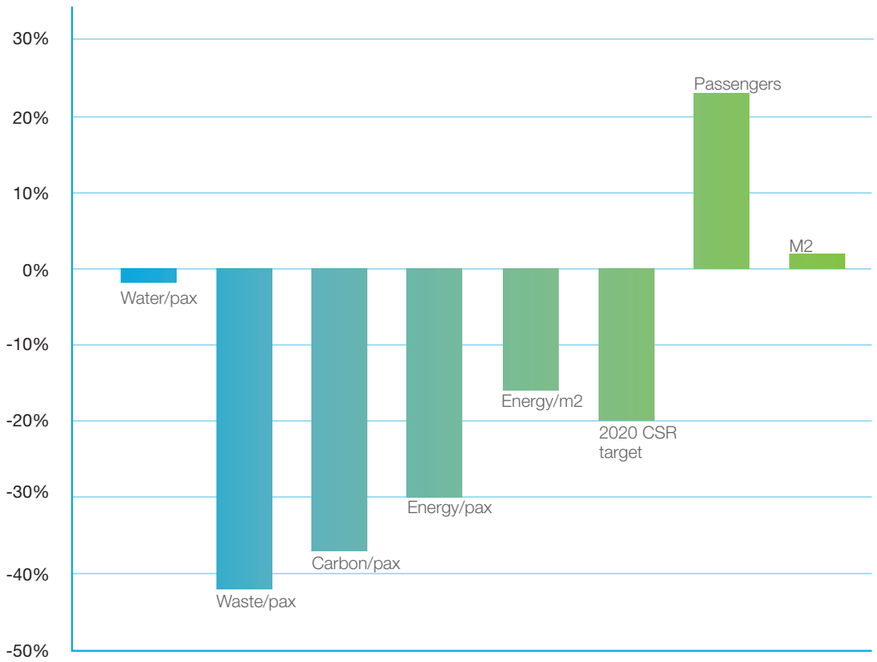
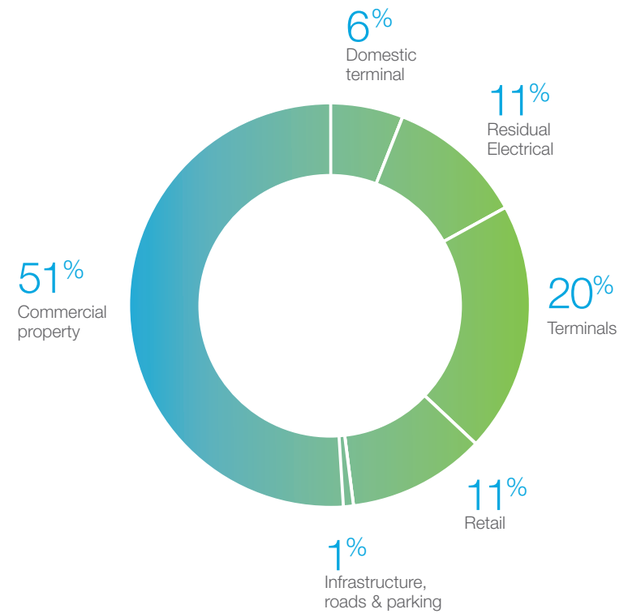


Figure 3: Eco-efficiency performance 2016

6.0 Energy management

Energy accross the campus



The company's energy management team implements a specific energy policy and energy management plan based on the international standard ISO 50001. The plan relates to existing aeronautical infrastructure and the property portfolio. It also looks at the design, construction and operation of future aeronautical infrastructure, properties and gateway infrastructural assets.

The plan focusses on an energy and fuel efficiency programme to reduce consumption, on site renewable generation and innovative technologies, such as energy storage, that can contribute to the energy mix and energy management.

Our focus on energy efficiency has seen electricity consumption from operations reduce from 30GWhrs in FY08 to 19GWhrs per annum in FY16. Natural gas consumption, mainly for space heating in terminal infrastructure, has been reasonably stable at 10GWhrs across the same time period (see Figure 4).

Over the same period there has been a continued decline in liquid fuel consumption through vehicle fleet upgrades (see Figure 5).

Additional improvements will increasingly be built in at the design stage using sustainable design standards (see 10.0).

Full details can be found in the energy management plan found on the company website here:

https://corporate.aucklandairport.co.nz/~/media/Files/Corporate/Social-Responsibility/Energy-Management-Plan.ashx

Auckland Airport electricity and natural gas usuage

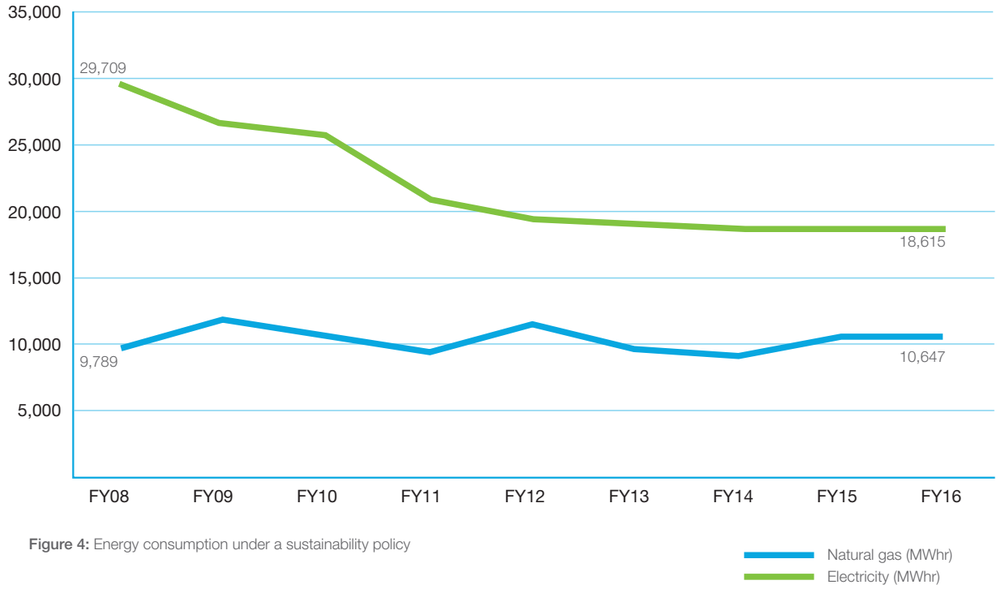
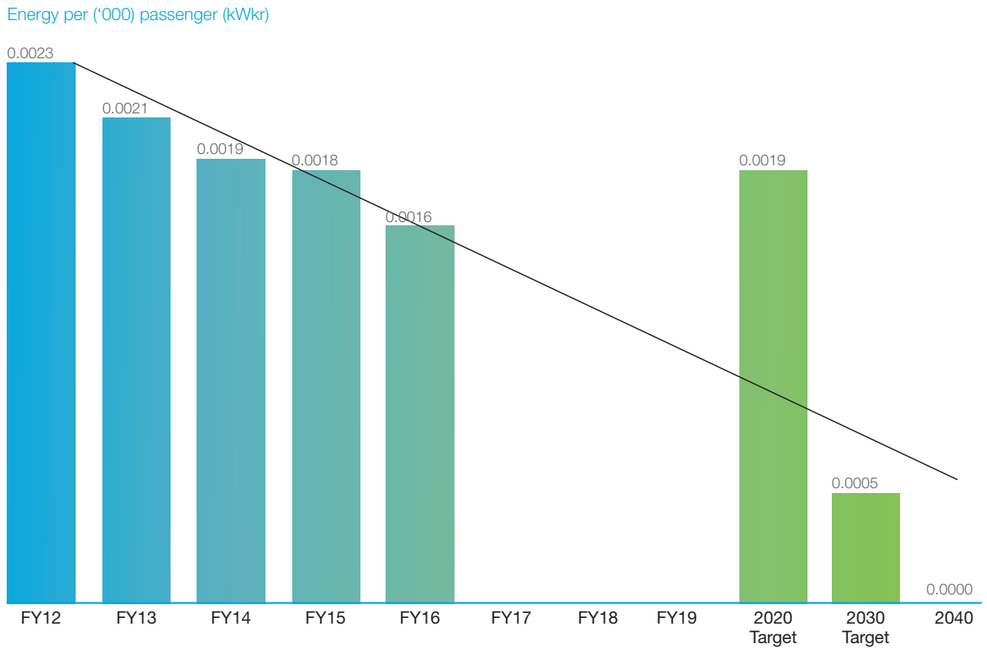


Figure 4: Energy consumption under a sustainability policy

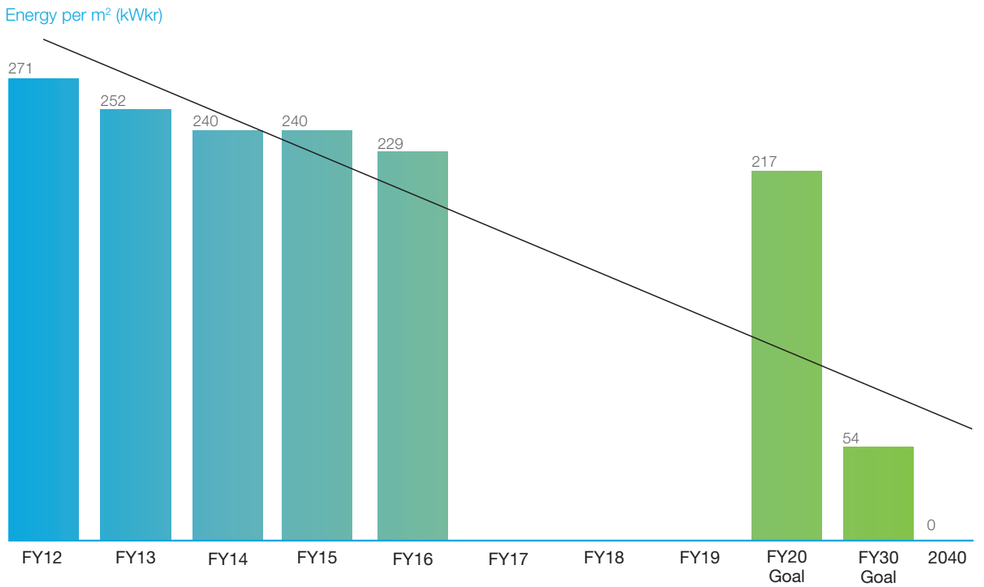
Auckland airport liquid fuel usage (vechile fleet and fire training)

Figure 5: Fuel consumption under a sustainability policy

Energy performance under the current plan

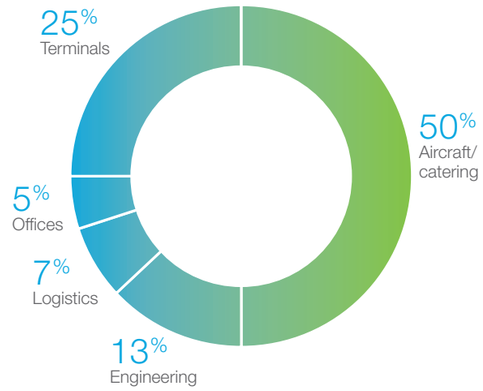


Benchmark airports (kWhr per 1000 pax year): London Heathrow 0.014, Paris 0.018, Frankfurt 0.016, Manchester 0.013.



7.0 Waste management

Waste across the campus



Auckland Airports waste minimization programmes maximise recycling and minimises waste to landfill. Through effective supply chain partnerships knowledge of waste streams allows the prediction of waste quantities and types from operations across the campus.

Measures to minimize waste follow the waste hierarchy - avoid, reduce, reuse and recycle and these have been identified and are being implemented.

Opportunities still exist to look at waste avoidance along the supply chain. This is being investigated with aeronautical tenants and can be expanded to retail and property tenants over time.

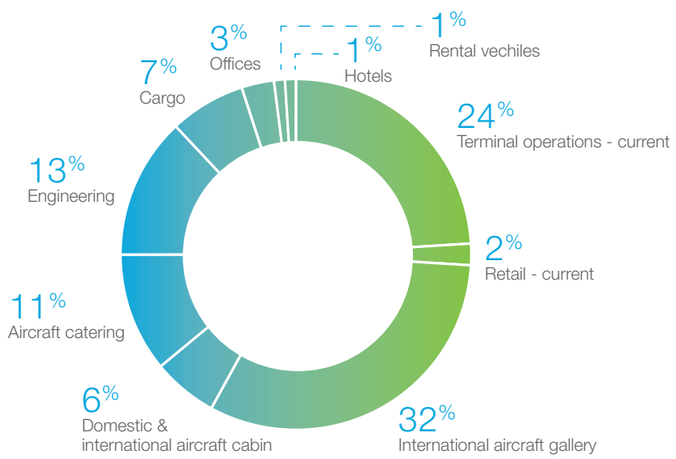
Material substitution is also being investigated by some airline customers to potentially facilitate waste minimization.

Our focus on waste minimisation has enabled a detailed understanding of waste generated across the campus (see Figure 6). This analysis shows the significant proportion (56%) of biosecurity or quarantine waste generated on campus. This potentially limits opportunities to recover and recycle a large proportion of the campus waste stream.

Total waste by airport precinct function

Figure 6: Airport campus waste profile

32% of all waste is generated in international aircraft gallery operations. The next largest generator is terminal operations (23%), followed by engineering operations (13%) and aircraft operations (11%).



As can be seen from Figure 6 (above) Auckland Airport has operational control over 26% of campus waste, generated in the terminals, and this has been the focus of the waste minimization programme.

Waste performance under the current plan

Corporate intensity reductions targets of 20% per passenger were achieved ahead of schedule in the 2015 financial year (See Figure 7).

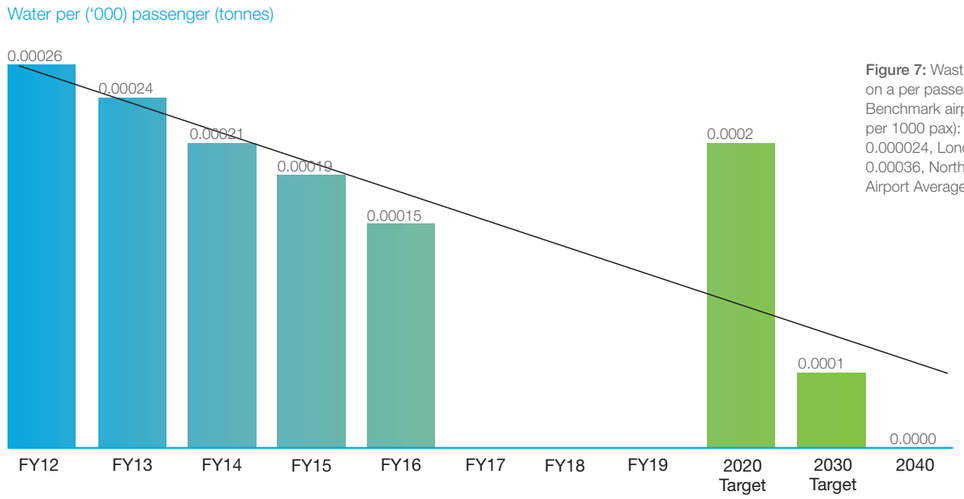


Figure 7: Waste reductions on a per passenger basis - Benchmark airports (tonnes per 1000 pax): San Francisco 0.000024, London Heathrow 0.00036, North American Airport Average 0.00026.

Recovery and recycling of waste has increased in the international terminal from 18% in 2012 to 42% in 2016.

The recycling rate from the domestic terminal in 2016 was 32% and Auckland Airports head office building, Quad 5, diverted 55% of waste away from landfill (see Figure 8).

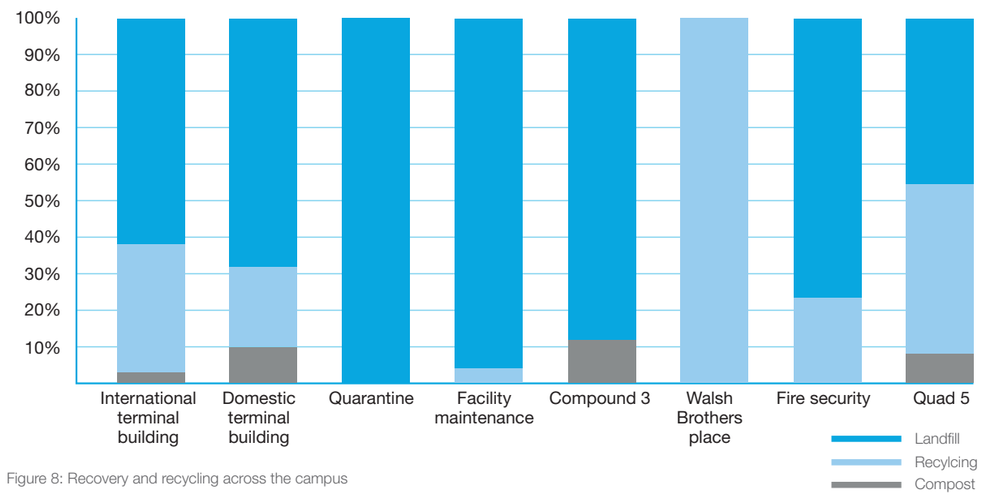
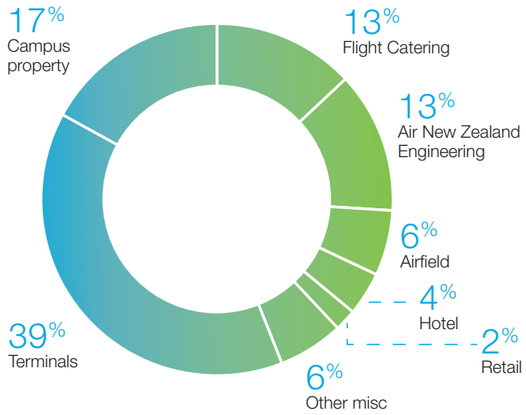


Figure 8: Recovery and recycling across the campus

Full details can be found in our waste minimisation plan found on the company website here:
https://corporate.aucklandairport.co.nz/~/media/Files/Corporate/Social-Responsibility/Waste-Minimisation-Plan.ashx

8.0 Water minimisation

Water across the campus



Water minimisation in current operations across the campus and the future design, construction and operation of buildings and infrastructural assets will have economic and environmental benefits. The current water minimization programme is looking to reduce consumption of potable water and the substitution of potable water with e.g. rainwater, bore water and/or grey water.

Potable water substitution, with rainwater, is being encouraged through sustainable design guidelines requiring rainwater harvesting as a standard design feature (see 10.0).

Reducing potable water consumption will also reduce the production of wastewater for which there are increasing disposal costs.

Sustainable design also provides an opportunity to minimize future water demand through the specification of low flow fittings, fixtures and water efficient plant and equipment (see 10.0).

Water performance under the current plan

Water per ('000) passenger (l)

Operational performance dashboards indicate a need for an increased focus on water minimization (see Figure 9).

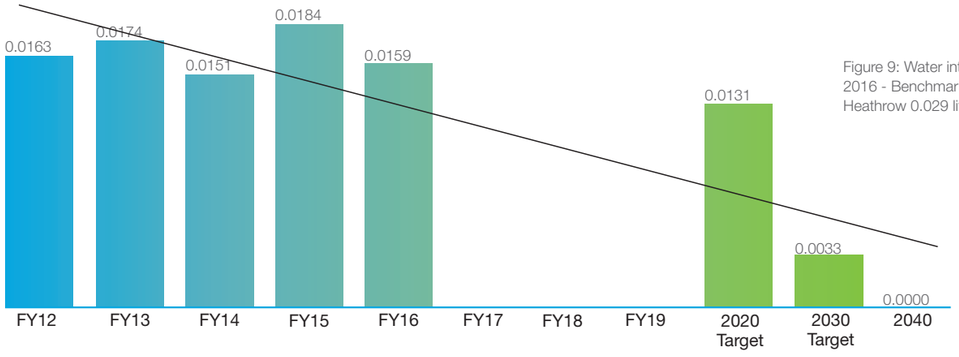


Figure 9: Water intensity 2012 to 2016 - Benchmark airports London Heathrow 0.029 litres per pax

Full details can be found in our water minimization plan found on the company website here:
https://corporate.aucklandairport.co.nz/~/media/Files/Corporate/Social-Responsibility/Water-Minimization-Plan-2016.ashx

9.0 Carbon and corporate disclosures

Annual carbon foot-printing is undertaken and reported through the Carbon Disclosure Project (www.cdp.net) and verified through the Carbon Emissions Management and Reduction Scheme (www.enviro-mark.com) certification.

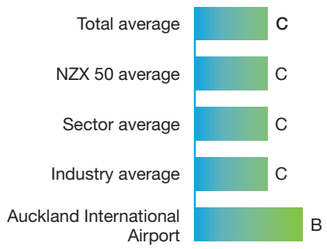
Our 2016 CDP result shows we scored above the average scores for our industry, sector and the NZX50

Certified Emissions Measurement And Reduction Scheme
CEMARS ISO 14064-1
certified organisation

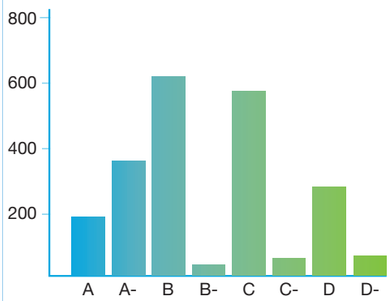
Benchmarking 2016 climate change scores:

Average CDP scores

Final score



Auckland International Airport overall benchmark



Auckland International Airport achieved a B, which is the score 28% of companies responding to CDP achieved, and 26% of companies within Industrials sector. Companies scoring a B find themselves within 53% highest scoring companies in their sector. On the chart on the far left, the score Auckland International Airport achieved is benchmarked agaisnt average scores within it's sector, sample and industry, and agaisnt the overall average score. The graph on the left shows the score distribution of all companies responding to CDP in 2016.

Auckland Airport is also a constituent of an increasing number of global investment indices including:

FTSE4Good Index Series *(http://www.ftse.com/products/indices/FTSE4Good)* is designed to measure the performance of companies demonstrating strong environmental, social and governance (ESG) practices. Our inclusion in the FTSE4Good since 2008 reflects our long-term commitment to sustainable business practice.

Dow Jones Sustainability Index (DJSI) Asia Pacific Index *(http://www.sustainability-indices.com/index-family-overview/djsi-family-overview/index.jsp)* is composed of Asia Pacific sustainability leaders as identified by RobecoSAM through a corporate sustainability assessment. The index represents the top 20% of the largest 600 companies in the Asia Pacific developed region.

From the DJSI industry overview report (over) our performance compares favourably with other large international airports such as Sydney and Paris.

INDUSTRY OVERVIEW REPORT | DJSI 2016

TRA Transportation and Transportation Infrastructure

ROBECOSAM
We are Sustainability Investing.

Sustainability Leaders as of September 2016

Number of Members		**9**	**5**	**3**	**8**	**4**	**1**	**1**
Number of Companies in Invited Universe		**71**	**18**	**11**	**33**	**25**	**6**	**5**
Company	**Country**	**DJSI World**	**DJSI Europe**	**DJSI North America**	**DJSI Asia Pacific**	**DJSI Emerging Markets**	**DJSI Australia**	**DJSI Korea**
Abertis Infraestructuras SA	Spain	●	○					
Aeroports de Paris	France	●	●					
Airports of Thailand PCL	Thailand	○				●		
Atlantia SpA	Italy	●	●					
Auckland International Airport Ltd	New Zealand	○			●			
Canadian National Railway Co	Canada	●		●				
CSX Corp	United States	○		●				
Deutsche Post AG	Germany	●	●					
DP World Ltd	United Arab Emirates	○				●		
Grupo Aeroportuario del Centro Norte SAB de CV	Mexico					●		
Grupo Aeroportuario del Sureste SAB de CV	Mexico	○				●		
Hyundai Glovis Co Ltd	Republic of Korea	○			●			●
Kawasaki Kisen Kaisha Ltd	Japan				●			
Mitsui OSK Lines Ltd	Japan	○			●			
MTR Corp Ltd	Hong Kong	○			●			
Nippon Yusen KK	Japan	○			●			
PostNL NV*	Netherlands	●	●					
Royal Mail PLC	United Kingdom	●	●					
Sydney Airport	Australia	○			●		○	
Transurban Group	Australia	●			●		●	
United Parcel Service Inc	United States	●		●				

*Industry Leader ○ Company in Invited Universe ● Member of DJSI

10.0 Smart Design & Construction

Building eco-efficiency in at the design stage of future developments, across the campus, is seen as essential to maintain and improve asset and building performance and move the business from unsustainable to sustainable development.

Auckland Airport's design standards have been developed to incorporate international best practice. There will be an increasing focus on, and engagement with, our entire supply chain throughout the design, construction and delivery of development projects across the entire airport campus.

11.0 Implementing Eco-efficiency

During 2014 and 2015 Auckland Airport was involved in piloting the Infrastructure Sustainability Council of Australia (ISCA) rating tool (www.isca.org.au).

ISCA is considered best practice and is being adopted throughout Australia, New Zealand and across the Asia Pacific region. The rating tool has three levels of achievement: commended; excellent; and leading.

The ISCA tool was chosen as it has been designed specifically for the sustainable development of infrastructural assets. There was also a strong synergy between the rating tool and the airport company's existing sustainability policy and the material issues it contains.

The pilot process provided an opportunity for Auckland Airport to both benchmark performance and produce a gap analysis to best practice. Auckland Airport was awarded a "commended" rating in October 2015 for its sustainable operation of terminal infrastructure.

Auckland Airport is a founding member of ISCA New Zealand and a "commended" rating will be sought, for selected airport developments, up to 2020, "excellent" from 2020 to 2025 and "leading edge" from 2025 onwards.

This approach ensures eco-efficiency is embedded from the asset planning, design and construction stages, through to operation and ultimately decommissioning i.e. the assets entire life cycle.