

A STAR ALLIANCE MEMBER 

*AIR NEW ZEALAND* 



# Sustainability Report / 2015



# A more sustainable airline socially, environmentally and economically

## Kia Ora

**Two years ago we launched our Go Beyond plan that outlined our focus on improving our business to deliver sustainable profitability. I've been extremely pleased with our progress in this area, with 2016 shaping up to be another great year for the airline.**

From a global perspective, it is clear our world is facing unprecedented challenges like population growth, climate change, rapid urbanisation, volatile commodity markets, uncertain and expensive food supplies and rising inequality.

All of this uncertainty will remain the 'new normal'. We cannot be apathetic nor panicked about it. We simply have to engage with the reality positively and confidently. It's the great challenge to our generation of business, community and political leaders and one that I think will be best tackled collaboratively.

There is a huge opportunity for business to step up and play a key role in addressing these global sustainability challenges. Business growth is critical to economic development and social progress. It is business that has lifted living standards of billions of people around the world. Even in developed countries like New Zealand we need business growth to provide employment and support our social systems.

Fundamentally, business needs a strong society and society needs strong business. The two are inextricably linked. Strong businesses must continue to grow in order to have the money, people and technology to invest in better communities, more skilled people, alternative energies, greater biodiversity and product innovation. However, in doing so we need to think differently about how we go about it and find a way to grow within the limited resources of our planet.

At Air New Zealand, to respond to this challenge, we've committed to a purpose that's bigger than just our airline – that is to supercharge New Zealand's success socially, environmentally and economically.

This wider purpose informs the sustainability agenda for Air New Zealand, one that I'm

extremely passionate about and committed to. We have an aspiration to put sustainability at the heart of our business strategy, to ensure we are sustainably growing our business.

For Air New Zealand this means continuing to use our resources and expertise to respond to natural disasters in both New Zealand and the South Pacific. Over the coming year we'll be launching new initiatives to ensure we are having an even greater positive impact in the communities we work in.

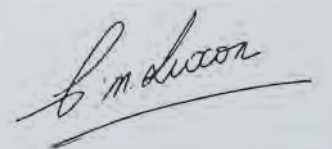
We aim to take a leadership position in carbon management, through our continued investment in a modern fleet and operating it as efficiently as possible, continuing to investigate renewable fuels domestically and abroad, and supporting climate science through our partnership with the New Zealand Antarctic Research Institute. We are also making the most of the country's renewable electricity supply by transitioning to an electric vehicle fleet, and are actively working towards a zero waste to landfill target at our major ground operations.

As a key player in the tourism industry it's important we do all we can to live up to the standards expected of New Zealand by both Kiwis and visitors alike. This is critical given much of our tourism offering centres on the quality of our unique natural environment. Our partnership with the Department of Conservation is helping to bring birdsong back to our Great Walks, sees endangered species transported around New Zealand, and enables monitoring of our marine reserves – and through our marketing channels we're helping bring to life the story of New Zealand's natural heritage.

Economically we're a big contributor to tourism. Tourism is New Zealand's second largest export sector generating over \$10 billion in export earnings, with around 40% of visitors to our country arriving on Air New Zealand or our revenue-share alliance partners.

We continue to work at increasing the value of tourism to our economy through expanding our international network – adding three new international destinations in 2015, and expanding our alliance partners to give our customers greater network choice. We're also investing in new events and working with regional New Zealand to support the visitor proposition and unique offerings in New Zealand's regional centres.

We're pleased to present our first sustainability report, highlighting some of the initiatives Air New Zealand has implemented to date, and stating our aspiration for new activity in the coming year and beyond. We recognise we're only part way on a journey, but we're determined to make sure that the next 75 years are at least as good as the past 75 years, by making a substantial contribution to New Zealand's social, environmental and economic success.



**Christopher Luxon**  
Chief Executive Officer



# A critical friend

## Our Sustainability Advisory Panel

Over the past year we have established and been guided by a new Sustainability Advisory Panel. The appointment of the panel reflects our ambition to substantially improve our sustainability performance, and is indicative of the need to take on external advice, guidance and critique. This panel has played a key role in establishing our overall sustainability framework and related goals and has helped to assess and establish the materiality of the sustainability challenges we face.

Our Sustainability Advisory Panel comprises six external members who were selected based on the range of skills and expertise we considered necessary to shape and inform our sustainability programme.

We are also a partner of Forum for the Future, which delivers access to international tools, resources and sustainability expertise, as well as critique on the progress we are making in our sustainability programme.

**Air New Zealand's Chief Executive Officer, Christopher Luxon and Chief Flight Operations and Safety Officer, Captain David Morgan also sit on the Sustainability Advisory Panel.**



**Sir Jonathon Porritt (United Kingdom)**

Founder Director of Forum for the Future Panel Chair and sustainability specialist

Jonathon Porritt is an eminent writer, broadcaster and commentator on sustainable development. He co-founded Forum for the Future, now the UK's leading sustainable development charity. He was formerly Director of Friends of the Earth, co-chair of the UK Green Party, chairman of UNED-UK, chairman of Sustainability South West, a Trustee of WWF UK and a member of the Board of the South West Regional Development Agency. Jonathon received a CBE in January 2000 for services to environmental protection.



**Suzanne Hunt (United States)**

President, HuntGreen LLC, Biofuels expert

Suzanne Hunt is the Founder and President of Hunt Green, LLC. Suzanne is based in New York State and works on energy, climate, environment, food, agricultural, and international development, policy and investment. She was a senior advisor to the Carbon War Room and directed the Worldwatch Institute's bioenergy programme for two years. Prior to that Suzanne worked at Environmental Defense on social and environmental policy reform.



**Brian Pearce (Switzerland)**

International Air Transport Association (IATA) Chief Economist

Brian Pearce is IATA's Chief Economist. His role is to analyse the economic and policy landscape facing the airline industry and to provide an evidence base and credible economic analysis to guide IATA's policy work. An economist with over 25 years of international experience in several industries, he is also a Visiting Professor at Cranfield University's Department of Air Transport. Prior to joining IATA he worked at the UK think-tank Forum for the Future as its Director of Sustainable Investment.

## Sustainability Advisory Panel Chair's message

"Air New Zealand has embarked on an ambitious journey of change, and I was delighted to be asked in 2014 to convene a Panel of global experts to help to guide and accelerate its progress.

The sustainability challenges we face today are now clear for all to see. At a global scale, we have moved beyond debating whether or not the climate is changing, to assessing at what point within our own lifetimes, a tipping point will be reached, and how serious the impacts will be.

Closer to home, countries the world over are seeing their natural environment coming under ever greater pressure, with huge impacts on natural resources and biodiversity. Food and water security have risen up the agenda as serious threats to people's wellbeing and prosperity.

All of which means that there's never been a more critical time for businesses to take decisive action in helping to create a more sustainable world.

To help Air New Zealand meet this challenge, Forum for the Future has brought together a Panel that combines technical expertise with the vision and gravitas to act as 'critical friend' to Air New Zealand, and to help stretch its ambition for the benefit of the business and for the wider benefit of New Zealand and beyond.

Panels like this can only be effective when their ideas and recommendations are taken seriously at all levels of the company. Air New Zealand has given the Panel a clear mandate, not only as key advisors in framing the overall ambition, the Air New Zealand sustainability framework and related goals, but also in providing critical comment on progress. The active participation of the CEO and Chief of Flight Operations and Safety is extremely encouraging, as is the speed and enthusiasm with which Air New Zealand

has been prepared to follow up on our recommendations at this early stage.

The Panel acknowledges the difficult choices that Air New Zealand faces. The significant climate change impacts arising from aviation should not be downplayed. And whilst Air New Zealand is among the industry leaders, with regard to trialling and adopting more efficient technologies and flight operations, there is no 'silver bullet' technological solution to this core challenge. Working with others in the sector will be crucial in tackling this challenge.

But Air New Zealand is almost uniquely well placed to take advantage of all the business benefits that flow from proactively addressing these challenges – in terms of working closely with its supply chain, its role in promoting more resilient communities, and its commitment to protecting New Zealand's natural environment. We're particularly keen to see it taking a leading role within New Zealand's crucially important tourism sector, to ensure that the '100% Pure' image is delivered in reality.

It's still relatively early days in the Panel's existence, but we are confident that Air New Zealand's example will provide a strong signal not only to the aviation industry but to the broader business community in New Zealand. For us, that's what 'supercharging' both its own business and New Zealand's broader economic success is all about."

**Sir Jonathon Porritt**  
Chair, Air New Zealand Sustainability Advisory Panel



**Dame Anne Salmond (New Zealand)**

New Zealand anthropologist and writer

Dame Anne Salmond is a New Zealand anthropologist and historian best known for her writings on New Zealand history, her study of Māori culture, and her efforts to improve intercultural understanding. In 2013, Dame Anne was named the Kiwibank New Zealander of the Year and also won the Royal Society of New Zealand Rutherford Medal. Dame Anne has served as Chairwoman of the New Zealand Historic Places Trust Board, and in 2007 had the rare honour of being elected a Corresponding Fellow of the British Academy.



**Rob Fenwick CNZM (New Zealand)**

New Zealand entrepreneur, director and conservationist

Rob Fenwick co-founded New Zealand's first commercial composting business, Living Earth, which has composted about two million tonnes of organic waste. He chairs Antarctica New Zealand and New Zealand Antarctic Research Institute, The Kiwi Trust and Sustainable Seas – a National Science Challenge. He is a founding member of the Air New Zealand Environment Trust and a director of Ngāti Whātua o Orakei's commercial holdings. Rob has an honorary doctorate in Natural Resources from Lincoln University, and the Fenwick Ice Piemont in Antarctica is named for him. He is the 2015 Sir Peter Blake Medallist.



**Derek Handley (New Zealand)**

New Zealand entrepreneur, speaker, author

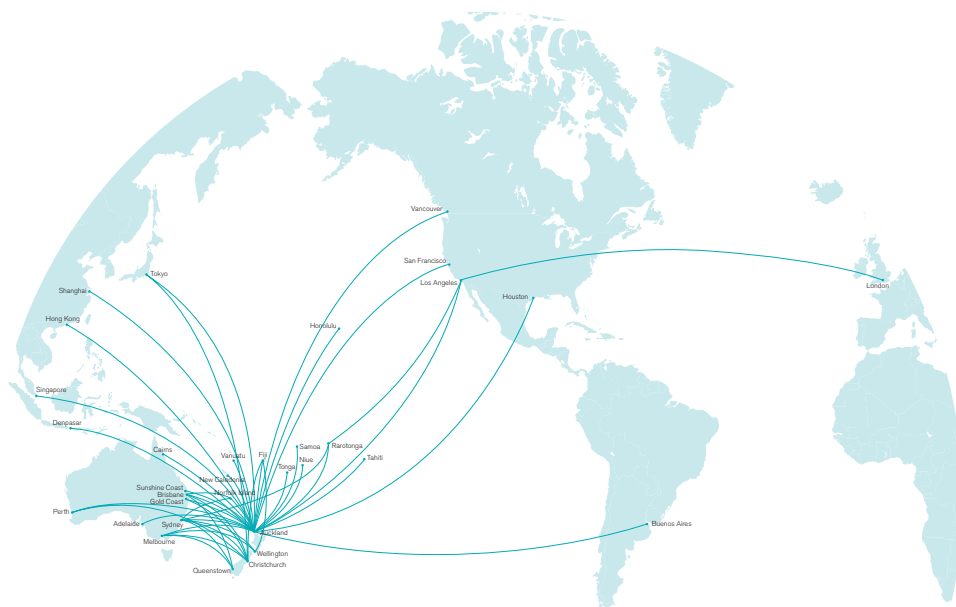
Derek Handley is a New Zealand entrepreneur, speaker and author and has been named in the 'Silicon Alley 100' of the most influential technology people in New York. Derek is a former New Zealand Herald Business Leader of the Year and Ernst & Young 'Young Entrepreneur' of the Year in New Zealand. He is a co-founder and chairman of Snakk Media, one of the first publicly listed B-Corporations in the world. Derek also helped create what is now the B-Team, an international not-for-profit initiative. He is an Adjunct Executive Professor for Auckland University of Technology and a Sir Peter Blake Trust Leader.

# Who we *are*

Air New Zealand provides air passenger and cargo transport services within New Zealand, as well as to and from Australia, the Pacific Islands, Asia, North America and the United Kingdom. Later this year we will commence services to South America.

Air New Zealand encompasses business units providing engineering and ground handling services. Subsidiaries include our three regional airlines and extend to booking systems, travel wholesaling and retailing services.

Air New Zealand is a publicly listed company on the New Zealand and Australian stock exchanges, with the New Zealand government being the majority shareholder (holding 52% of shares). Our financial performance in FY15 resulted in NZ\$140m in tax payments and a dividend of NZ\$93m to the New Zealand government.



We carry over  
**38,000**  
customers every day

We purchase more than  
**\$1.2b**  
of goods and services  
from other New Zealand  
businesses every year

We operate more than  
**3,500**  
flights each week –  
3,000 domestic flights in  
New Zealand

## About this report

**This sustainability report is a first for Air New Zealand and highlights some of our achievements to date. It also highlights where to next – our aspirations and the opportunities for future improvements.**

While we have considered international reporting standards in the preparation of this report, we have not followed any particular standard. Some of our key data, particularly our carbon dioxide emissions data for aviation fuel has been subject to a level of assurance as stated on page 17.

We are committed to transparency in reporting against our sustainability goals and identified targets and welcome reader feedback.

**Email: [sustainability@airnz.co.nz](mailto:sustainability@airnz.co.nz).**

Normalised earnings before  
taxation of

**\$496m**

in FY15

Revenue in FY15 grew 5.9 percent to **\$4.9b**

We have  
**11,000**  
Air New Zealand employees  
around the world

In FY15 we paid a dividend to the New Zealand government of

**\$93m**

In 2015 we celebrated our  
**75th**  
anniversary as New Zealand's  
national carrier

We move over  
**37 million**  
kilograms of cargo freight out of  
New Zealand every year

# Supercharging New Zealand's Success

Socially, Environmentally, Economically.

## Our Sustainability framework

In 2015 we developed a new sustainability framework which outlines how we will implement a programme of activity to deliver on the Go Beyond aspiration to supercharge New Zealand's success socially, environmentally and economically.

The framework includes two areas within each of the social, environmental and economic pillars – **Our Communities, Our People, Carbon, Nature and Science, Tourism, Trade and Enterprise**. It outlines priorities for the coming years, key indicators of our success and a governance layer that will support the programme.

While we are well advanced on some areas of the framework, other aspects are only in early stage development, reflecting where we are on our sustainability journey.

This report uses the framework as the basis for communicating our progress.

PILLARS	For our People Manaakitanga		For our Place Kaitiakitanga		For our Economy Ōhanga ora	
						
	Our Communities	Our People	Carbon	Nature and Science	Tourism	Trade and Enterprise
	Contribute to the development of wider New Zealand through air connectivity and community programmes		Minimise our carbon footprint through world leading fuel efficiency, biofuels and offsetting programmes, and operational excellence		Grow the economic value of tourism for New Zealand through destination promotion and market development	
	Become a world leading employer by caring for, inspiring and upskilling our people		Make a significant contribution to New Zealand's conservation and climate science programmes		Invest in New Zealand and maintain a network enabling New Zealand business to succeed at home and abroad	
GOALS	<ul style="list-style-type: none"><li>Inspiring young New Zealanders</li><li>World class knowledge sharing</li><li>Disaster relief</li><li>Aircraft noise</li><li>Environmental education</li></ul>		<ul style="list-style-type: none"><li>Fuel efficiency</li><li>Biofuels</li><li>Carbon offsetting</li><li>Renewable electricity</li><li>Waste management</li></ul>		<ul style="list-style-type: none"><li>Destination promotion</li><li>New market development</li><li>World class events</li><li>Māori culture</li></ul>	
	<ul style="list-style-type: none"><li>People safety and wellbeing</li><li>Diversity</li><li>Talent incubator</li><li>Employee engagement</li></ul>		<ul style="list-style-type: none"><li>Terrestrial biodiversity</li><li>Marine science</li><li>Climate science</li><li>Environmental compliance</li></ul>		<ul style="list-style-type: none"><li>Global connectivity</li><li>Cargo services</li><li>Showcasing New Zealand products</li><li>Emerging business support</li><li>Sustainable sourcing</li></ul>	
PRIORITIES	<ul style="list-style-type: none"><li>Community programmes implemented</li><li>Zero noise breaches</li></ul>		<ul style="list-style-type: none"><li>1.5% annual aviation fuel efficiency improvement</li><li>100% ground fleet electric (where feasible)</li><li>Zero waste to landfill at Auckland (ground) by June 2020</li></ul>		<ul style="list-style-type: none"><li>Increase available seats into, out of and around New Zealand by 21% by June 2020</li><li>Value of New Zealand destination promotion</li></ul>	
	<ul style="list-style-type: none"><li>Improved people safety</li><li>SLT 40% female</li><li>Top quartile global engagement</li></ul>		<ul style="list-style-type: none"><li>Biodiversity projects delivered by June 2020</li><li>Climate science project delivered by December 2018</li><li>Maintain zero environmental non-compliances</li></ul>		<ul style="list-style-type: none"><li>Emerging business support programmes implemented</li><li>100% of vendors compliant with Supplier Code of Conduct by June 2020</li></ul>	
TARGETS						
ENABLERS	SUSTAINABLE PROFITABILITY		BUSINESS PROCESSES		REPORTING AND COMMUNICATION	
	<ul style="list-style-type: none"><li>Long-term financial sustainability</li><li>Five year profit targets</li></ul>		<ul style="list-style-type: none"><li>Sustainability consideration incorporated within:<ul style="list-style-type: none"><li>Business Planning</li><li>Corporate policies</li><li>Project management office</li></ul></li></ul>		<ul style="list-style-type: none"><li>Audited sustainability programme</li><li>Annual sustainability report</li><li>Internal and external communication</li></ul>	
					<ul style="list-style-type: none"><li>Advisory Panel of external subject matter experts plus the Air New Zealand Chief Executive Officer and Chief Flight Operations and Safety Officer</li><li>Air New Zealand Board six-monthly reviews</li></ul>	





# Our Communities

Air New Zealand is connected to New Zealand through services to 22 domestic destinations across the country. We want to make a contribution to the communities we operate in through sharing our resources and expertise.

## Supporting Communities

Throughout our history we have supported national charities and causes. We also support numerous individuals and groups every year with travel support for medical, sporting and educational reasons as well as reasons of severe hardship. While our charity contribution is important, in the coming year we plan to work on projects where we can have greater community impact.

Our employees and customers have provided insights to inform the type of projects we will pursue in the coming year. Initiatives will focus on knowledge sharing, inspiring young New Zealanders, environmental education and growing the economic success of regional New Zealand.

In 2016 we will become a founding partner of a new initiative 'Gividend' being piloted in New Zealand. This platform will allow private investors to divert dividend streams into organisations addressing social and environmental challenges in New Zealand.

## Providing Disaster Relief

We play a role in providing disaster relief, particularly in the South Pacific. In the past year this included disaster relief following Tropical Cyclone Pam in Vanuatu.

Disaster relief programmes operate in conjunction with New Zealand's Ministry of Foreign Affairs and Trade (MFAT), Red Cross and Air New Zealand Cargo. Initial

disaster response typically involves MFAT and Red Cross coordinating needs on the ground in terms of shelter, drinking water, food, medical supplies and equipment. Our Cargo team moves this initial aid at no cost. Once immediate disaster response needs have subsided, and in coordination with Red Cross, a "relief rate" is provided for other organisations and individuals that wish to provide assistance to the affected country.

We also assist with air transport of excess baggage for charitable purposes on a case-by-case basis, for example donated education supplies, clothing and medical equipment. Our support after the Christchurch earthquakes saw us move emergency personnel and their equipment as well as providing free and subsidised airfares.

## Safe Driver Messages

In 2014 a video outlining information for safe driving on New Zealand roads was added to our international inflight entertainment system and was viewed by a large number of customers on our in-bound flights.

This year we delivered two new initiatives to help improve driver safety and educate overseas visitors about unique driving conditions in New Zealand.

The first initiative is a new onboard application that will give travellers tools and education before getting in the driver's seat. Developed using content from the New Zealand

Transport Agency, the application provides tips for driving in New Zealand such as road rules and conditions. The application will initially launch in English however there are plans for additional languages to be added.

In another initiative, a series of new short videos have been introduced providing an in-depth guide to driving in New Zealand. The videos explain New Zealand's road rules and provide tips for visitors on driving safely in New Zealand. Developed by CamperMate, the videos are available in English, Chinese, French, and German languages.

## Environmental Education

The Air New Zealand Environment Trust has contributed significantly to the Kids Restore the Kepler programme which invests in school groups gaining environmental education through restoring the environment around the Kepler Track. This programme recently won the Leadership in Communication and Education Award at the Ministry for the Environment's 2015 Green Ribbon Awards.

Environmental education will be a focus for our community activity in the coming year, reflecting our focus on young New Zealanders and the need to ensure future generations are connected to New Zealand's natural environment.

## Aviation Noise Management

Noise monitoring is undertaken at airports across New Zealand and internationally, and noise control forms part of our environmental management system.

We aim for zero noise breaches at airports we fly to in order to minimise noise disturbance and nuisance. Our modern fleet and noise abatement techniques are critical to achieving this.

At the same time, optimum flight paths around and near airports will be key to ensuring that we can minimise noise and make incremental fuel efficiency gains in the future.

In the past year we have achieved our target of zero noise breaches at airports we fly to.



# Our People

We employ 11,000 people across New Zealand, Australia, the Pacific, Asia, the Americas and the United Kingdom.

We aim to be a world-leading employer and have a range of initiatives in place in order to achieve this goal, including a commitment to promoting diversity in our workplace and implementing best-in-class safety and employee wellbeing practices.

## Listening to Our People

**We recognise that in order to successfully implement our sustainability strategy we must harness the energy of employees across all aspects of our business.**

In 2015 we undertook a major internal campaign to identify sustainability initiatives that Air New Zealanders consider most important. Through this project we received inputs about the journey we are on.

Some of the key learnings include support for:

- Knowledge sharing and inspiration – helping to inform and inspire young New Zealanders
- Emerging New Zealand businesses
- A need to ensure our programmes have nationwide coverage
- Support for protecting New Zealand's endangered wildlife and reducing our climate change impact

## Engagement

We want to create a high performing culture that is transparent and trusting. A highly engaged workforce will increase innovation, productivity and delivery of our Go Beyond vision – ensuring that together we are growing our business in a sustainable way.

Our overall employee engagement score in 2015 is in the upper quartile of New Zealand and Australian companies. However, we aim for an engagement score in the upper quartile of global companies.

## Employee Diversity

We are proud of our workforce diversity and know that it will deliver diversity of thought, innovation and customer insight. We want to ensure Air New Zealand benefits from the experience that age, ethnicity and gender can provide, and aim to have good representation of these groups across all roles within our company. While we value diversity, we recruit based on the ability of applicants' skill and experience.

We have a goal to have 40% female membership of the Senior Leadership Team by 2020. In 2015 we launched our Women's Network globally to offer additional events, coaching and mentoring to female employees.

We are well on the way to achieving our 2020 target, with 33% female membership of our Senior Leadership Team in June 2015, up from 16% in January 2013.

In the past year we have launched a Young Professionals Network for under 30s, and three members have been selected to attend the 2015 One Young World conference in Bangkok. Selection was based on ideas for how Air New Zealand can supercharge New Zealand's success socially, environmentally and economically.

Our new Pride Network has been established in the past year, with a range of networking events being arranged for LGBT employees.

As well as having an Air New Zealand culture group for the past 10 years, we have formed a Māori and Pacific network to enable staff participation in various events in Auckland, Wellington and Christchurch.

## Women in Leadership

40% of Senior Leadership Team to be female by 2020.

Baseline (Jan 2013)	June 2015	Target (2020)
16%	33%	40%



Freedom of Association

We respect freedom of association and unions are a very important part of our workforces. At least 70% of our employees are covered by 37 collective employment agreements.

High Performance Engagement

Over the past year we have worked with employees to increase their engagement and lift productivity. This includes creation of High Performance Engagement, a collaborative way of working where the people closest to the issues we face are actively involved in developing solutions. A High Performance Engagement charter was developed to set out clear objectives for Air New Zealand, our employees and their representatives.

People Safety

We want safety to be a shared value and want to be the safest and healthiest workplace in New Zealand. We also want to exceed the minimum requirements of proposed new health and safety legislation.

In May 2015 our Wellington cargo team celebrated 10 years of 'Destination Zero Harm', an achievement that reflects the team's commitment to keeping their colleagues safe.

The number of workplace injuries and incidents at our various sites throughout New Zealand is reducing. However, we remain focused on how we can eliminate these incidents, through early hazard identification, risk management and continuous learning.

Our planned new approach to safety and wellbeing in the coming year will be founded on mindful leadership, culture and systems.

Security

Strict aviation standards and international regulations govern the safety of our customers, employees and our aircraft and systems.

We have a dedicated security team that monitors procedures for all our operations including onboard security and security of all our facilities, assets, information technology systems and people.

Aviation Institute

Air New Zealand's Aviation Institute is a dedicated training institute based in Auckland, and in the past year has trained over 8,000 people.

The institute has a wide reach, training our employees as well as engineers, cabin crew and hospitality students. It also provides support for five New Zealand-based flying schools, through teaching materials and standards review.

Our Greenteam

We have an internal 'Greenteam' comprising around 3,000 Air New Zealanders who can engage in a range of large group environmental activities every month, from tree planting to beach clean ups with non-profit groups and assisting with the Department of Conservation's biodiversity work.

The Greenteam also encourages and educates colleagues on initiatives for reducing waste, water use and electricity.



Based on TRFIR rate: Injuries (medical treatment and lost time incidents) x 1,000,000 / actual hours worked.



# Carbon

We have an aspiration to be the world's most fuel-efficient long-haul oceanic operator and are implementing a range of initiatives that will reduce the negative environmental impacts of our operations.

## Emissions Targets

We are a member of the International Air Travel Association (IATA) and have committed to its targets on fuel efficiency and carbon emissions:

- **1.5% average annual fuel efficiency improvement between 2009 and 2020**
- **Carbon neutral growth from 2020**
- **A reduction of 50% in net emissions by 2050 compared to 2005 levels**

We are well on the way to achieving the annual fuel efficiency improvement target.

## Modern Fleet

We have invested in a fleet modernisation programme across both our jet and turbo-prop fleets. In 2014 we became the first airline to be delivered the Boeing 787-9 Dreamliner, which uses approximately 20% less fuel compared to the aircraft it replaced.

Our fleet modernisation programme has resulted in our seat weighted average fleet age reducing from 9.1 years to 7.8 years in the past year, and we are committed to \$2.6 billion in fleet expenditure over the next four years.

## Fuel Efficiency Initiatives

Our fuel efficiency programme involves aviation fuel conservation experts, pilots and engineers collaborating on new initiatives. This includes:

- Reducing aircraft weight (as lighter aircraft consume less fuel)
  - 'Just-in-time' fuelling – aviation fuel volumes on each aircraft are finalised once updated loadings, weather and route information is confirmed. We were the first airline to adopt this fuelling approach.
  - Installing zonal driers in aircraft which operate as dehumidifiers. These reduce moisture weight between the cabin and aircraft

shell. All our Boeing 787-9 aircraft have this technology installed and we plan to have zonal driers operating in all Airbus 320s and Boeing 777-200s in the next two years.

- Utilising new aircraft technology, such as aerodynamic winglet tips on Boeing 767 aircraft (saving approximately 5% fuel).
- Utilising ground power in Auckland rather than auxiliary power units that use aviation fuel. This can save up to 180kgs of aviation fuel per hour.

## Optimal Airspace Use

Significant fuel and emissions savings can be made through route optimisation, continuous descent paths and tailored arrivals and departures that have minimal direct Air Traffic Control intervention.

We have previously operated demonstration flights to show the fuel savings achievable –

for example, in 2008 we flew a world-leading test flight to measure impacts of optimum flight conduct through the Aspire 1 flight from Auckland to San Francisco (which saved at least 9 tonnes in CO<sub>2</sub>).

We have also demonstrated fuel savings when flying into Auckland Airport using continuous descent paths, rather than flying level flight segments as was once required by standard Air Traffic Control procedures.

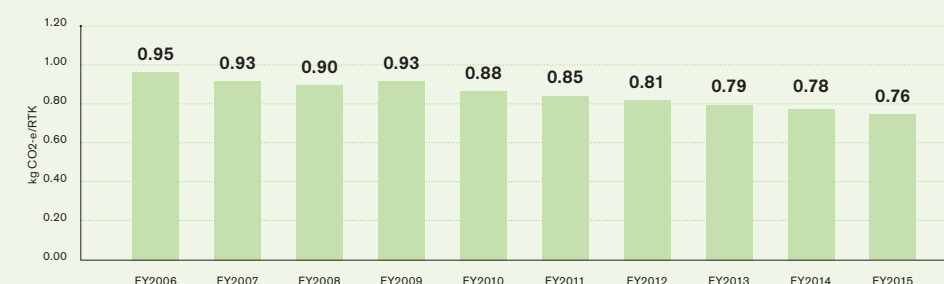
## Aviation fuel efficiency

1.5% average annual fuel efficiency improvement.

2015 improvement compared to 2014	2015 improvement compared to 2006
2.2%	19.96%

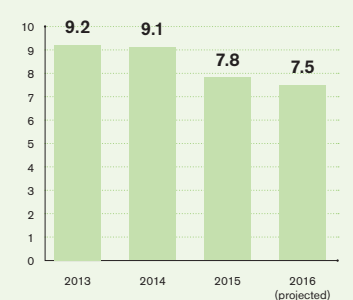
Carbon emissions – Revenue / Tonne / Kilometer basis

## Fuel efficiency: CO<sub>2</sub>-e per Revenue Tonne Kilometre



\*Revenue-tonne-kilometres (RTK) is a measure of the weight that has been paid for on the aircraft (freight and passengers) multiplied by the number of kilometres transported. Freight values are from Air New Zealand records, and passenger weights are estimated at 100kg per passenger (including checked and carry-on baggage) as recommended by the International Air Transport Association (IATA) for generating a fuel efficiency target. CO<sub>2</sub>-e emissions are from Air New Zealand's use of aviation fuel over the same time periods.

## Average aircraft fleet age in years (seat weighted)







Biofuels

We flew one of the industry's first biofuel test flights in 2008. This used a jatropha-derived second generation biofuel, which proved the technical feasibility of using alternative fuels. The test flight also provided supporting data to the subsequent (ASTM) certification of plant based biofuels for commercial airline operations.

We continue to investigate opportunities, both local and international, to support and procure advanced generation biofuels.

We also play an active role in industry bodies such as the Sustainable Aviation Fuel Users Group.

In the year ahead we will support New Zealand Crown Research Institute SCION in its development of a 'biofuels roadmap' for New Zealand

Carbon Emissions

Under New Zealand's emissions trading scheme, we have legal obligations to account for carbon emissions from domestic aviation fuel use.

In addition to compulsory offsetting, customers are currently given an option to make a voluntary contribution to the Air New Zealand Environment Trust, which supports projects that protect and enhance the natural environment (see page 23).

Moving forward, we will give our customers the opportunity to voluntarily offset their travel through a range of certified carbon offset options, currently being developed.

Electricity

As New Zealand's electricity emissions profile is well positioned (approximately 80% renewable) our electricity emissions are comparatively low.

Our 2011 to 2015 electricity target was to reduce consumption by 20% across our New Zealand portfolio.

We have exceeded this through a range of measures. Savings have been made through various large-scale projects such as LED bulb replacements in engineering hangars. Our 'Eco Treasure Hunt' programmes (developed

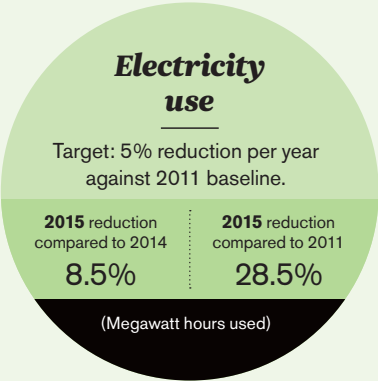
by GE) have identified efficiency improvement projects throughout our Auckland, Christchurch and Nelson engineering facilities.

Highlights include:

- 1,594 electricity metering points being installed across New Zealand sites allowing real-time reporting and audits.
- 480 solar panels comprising a 122kW solar array being installed and operational at our Auckland engineering base. This supplies energy direct to hangars at the base.

We also collaborate with New Zealand's Energy Efficiency and Conservation Authority (EECA) to identify potential energy saving opportunities.

In 2012 we were the winner of the Supreme Award at the EECA awards for excellence and innovation in energy efficiency and renewable energy.



Greenhouse gas inventory for Air New Zealand  
Scope 1 and 2

Total Operational Emissions Scope	GHG emissions sources	Tonnes CO <sub>2</sub> -e FY11	Tonnes CO <sub>2</sub> -e FY15
Scope 1	Aviation Fuel, LPG, Natural Gas, Ground Diesel, Ground Bio Diesel, Ground Petrol, Coal	2,959,402	3,073,455
Scope 2	Electricity	7,246	5,543
Totals		2,966,648	3,078,998
Biomass (Wood Pellets)		1,423	880

For more detail on our greenhouse gas emissions, see our 2015 Air New Zealand Greenhouse Gas Inventory Report and a copy of the assurance statement from Deloitte at [www.airnewzealand.co.nz/sustainability](http://www.airnewzealand.co.nz/sustainability)  
Scope 1: Direct GHG emissions from sources owned or controlled by Air New Zealand.  
Scope 2: Indirect GHG emissions associated with generation of imported electricity.







Auckland Engineering Base Solar Array.



In 2015 we initiated a new uniform recycling programme.

Light Vehicle Electrification

New Zealand's high proportion of renewable electricity makes it especially relevant to transition our ground fleet to electric options where possible.

In the next year we will begin transitioning our cars and vans to electric options.

By the end of 2017 we aim to have 100% of our vehicles electric, or where this is not operationally feasible, we will use hybrid or best-in-class emissions efficient vehicles.

We are also working to establish electric vehicle charging infrastructure at key customer points to help remove barriers to customer uptake. Nine charge points have been installed to date in Auckland, including our customer parking sites at Auckland Airport, with more on the way.

Ground Support Equipment

Significant numbers of airside ground support equipment can also be transitioned to electric or hybrid vehicles. We are well underway with this transition, and in 2016 plan to invest in electric pushback vehicles and necessary charging infrastructure in Auckland, Wellington, Christchurch, Dunedin and Queenstown, as well as other airports throughout the country where we have dedicated ground staff and vehicles.

By 2020 we aim to have 100% of our ground support equipment transitioned to electric where options exist.

Our larger New Zealand airport ramps currently have the following percentages of electric vehicles:

- Auckland Domestic: 30%
- Auckland International: 13%
- Wellington: 38%
- Christchurch: 42%
- Queenstown: 22%

Waste Management

Our waste minimisation programme is continuing to make progress, with recycling rates from New Zealand ground sites reaching 65% in the past year (up from 32% in 2013).

Highest rates of waste diversion are occurring at our Auckland and Christchurch engineering bases, where our employees have implemented major recycling initiatives that have diverted approximately 71% of waste from landfill in 2015.



In the next year we have a 70% target for our New Zealand ground recycling and aspire to have zero waste to landfill from our Auckland ground sites by 2020.

We will also continue to improve our domestic jet in-flight recycling programme, which was initiated in the past year.

Biosecurity controls make it difficult to manage food waste from flights arriving in New Zealand, however we recently started work with Auckland International Airport to pursue a recycling programme for non-food waste, for which we are targeting 60% diversion from landfill. In overseas ports we depend on locally-based ground service teams to assist with in-flight waste.

Uniform Reuse and Recycling

In the past year we have initiated a uniform recycling and reuse programme for pre-loved garments to avoid uniforms from New Zealand-based staff being shredded and sent to landfill.

We have started donating unbranded blazers, trench coats, trousers and merino knitwear to charities including Women's Refuge and the Auckland City Mission.

Uniform garments that cannot be reused due to their condition or because of branding and security risks, are being shredded and converted into furniture blankets and bedding felt. We estimate our uniform reuse and recycling programmes will save approximately 6.4 tonnes per year of material going to landfill.

Tencel shirts, cabin crew hats and leather belts are currently not reused or recycled, so we will improve this in the coming year, and also extend our uniform recycling and reuse programme to employees based in overseas ports.

Environmental Compliance Programme

Since 2009 our head office's Environmental Management System has been certified to the ISO14001 standard. We use the principles of this framework across our business operations within an Environmental Management System that covers hazardous substance approvals and handling certificates, and resource consent compliance, to ensure we operate in accordance with all legal requirements.

Third parties undertake environmental compliance audits annually and in 2015 we retained our Qualmark EnviroGold rating, reflecting our commitment to environmental performance.





# Nature and Science

## The natural environment is fundamental to New Zealand's identity and at the heart of our nation's tourism proposition.

### Supporting Biodiversity

While New Zealand is one of the richest and most diverse areas of biodiversity on Earth, we also have one of the highest percentages of threatened species.

In the past three years we have partnered with the Department of Conservation (DOC) to protect and enhance New Zealand's natural environment. Our focus has been on investing in biodiversity projects on New Zealand's Great Walks – an iconic part of our country's tourism offering.

We also enable the transfer of New Zealand's endangered species to safe habitats using our domestic network, and support marine science research. In 2015 we have worked with DOC on project plans and biodiversity targets through until 2020 and will begin implementing that plan over the coming year.

### Great Walks

Since our partnership with DOC was launched, significant funding has been directed to biodiversity projects on four of New Zealand's showcase Great Walks. This has focused on predator control work, including:

- Cutting 119 kilometres of track around Lake Waikaremoana for rodent control to be established
- Implementing possum and rat control across 800 hectares of conservation land in the lower Clinton Valley on the Milford Track
- Laying 50 kilometres of stoat trapping lines on the Routeburn Track
- Establishing 580 rat traps on the Rakiura Track.

Our support also has commercial benefits to DOC through Great Walks promotion, utilising Air New Zealand's marketing expertise and channels. Since the Great Walks partnership commenced overnight stays at Great Walks huts and

campgrounds have increased by 31% (an additional 24,736 people and 53,380 bed nights in 2015 compared to 2012). This growth means more international visitors and New Zealanders are experiencing our National Parks. It also enables revenue reinvestment for track maintenance and servicing.

### Precious Passengers

We are proud to have assisted in the transport of endangered species to safe new breeding sites around the country, as part of DOC's recovery programmes. Since 2012 we have assisted in the translocation of over 1,600 endangered indigenous species including kiwi, takahē, pāteke (brown teal), whio (blue duck), kea, kākāpō, tuatara and native gecko.



### Nature

Target: Implement biodiversity support programme with the Department of Conservation.

2015	2015
Projects continuing on three Great Walks (Lake Waikaremoana on hold)	Full support of species transfer programme delivered



Department of Conservation  
*Te Papa Atawhai*

"From the moment the Department of Conservation (DOC) and Air New Zealand partnered in April 2012, a strong sense of alignment and common purpose has existed. Both organisations share a vision for New Zealand as a place where nature is thriving – and all New Zealanders benefit from a healthy natural environment. Both recognise that our environment underpins our country's cultural, social and economic prosperity and wellbeing.

Yet we know that our nature is under significant threat. More than 2,000 of New Zealand's native species are threatened or

at risk of extinction because of introduced predators, pests and other environmental pressures. It will take the effort and investment of many to protect our nature and ensure it thrives into the future. DOC needs to work in close partnership with others so that we can make a bigger difference for our nature together.

The Great Walks are increasingly well known to New Zealanders and overseas visitors; they traverse some of our most spectacular landscapes and vital ecosystems. Similarly our marine space is some of the most spectacular and diverse

in the world. Our partnership work in both areas makes sense from my perspective: it is ecologically important while also providing strong exposure and a strong story to New Zealanders and overseas visitors. While my Department has a special relationship with and responsibility to tangata whenua, I am particularly excited to see a much broader and deeper partnership emerging between Air New Zealand, iwi and DOC. When I consider what can be achieved through these significant and influential entities working collectively towards a common outcome, I feel



immensely optimistic not only for our nature, but also for New Zealand's future.

We value the partnership immensely and its role in helping supercharge New Zealand's success and make it the greatest living space on earth."

### Lou Sanson

Director-General of the  
Department of Conservation





**Supporting Marine Ecosystems – New Zealand's Coastal Gems**

New Zealand's marine environment is vitally important to New Zealanders and tourists alike.

Since 2013, we have committed funding and resources to DOC's national marine reserve monitoring programme. This research is helping DOC scientists better understand the diversity of our marine environment with a goal of developing a framework that can enable comprehensive monitoring of marine ecosystem health.

**Customer Contributions to Conservation**

In the past year the Air New Zealand Environment Trust has received approximately \$127,000 from customer contributions.

Over recent years the Trust has supported a range of projects – the most notable being the planting of 85,000 native trees and creation of a conservation reserve on the Mangarara Station in Hawke's Bay. Investment in other conservation projects include the Motutapu Island

native tree nursery, Okarito wetland restoration, and revegetation of Pilots Beach, a breeding ground for little blue penguin on the Otago Peninsula. The Trust also contributes to the Kids Restore the Kepler programme, as noted on page 10.

**Climate Science in Antarctica**

As a response to our role as a significant emitter of carbon we have chosen to invest in climate research undertaken by New Zealand scientists working in Antarctica, through a partnership with Antarctica New Zealand and the New Zealand Antarctic Research Institute (NZARI). NZARI is a science foundation and charitable trust established to develop world-leading science on the ice, examining complex systems that govern the globe's climate and ocean circulation patterns. As Antarctica holds 70% of the world's fresh water, the climate science undertaken, particularly in the Ross Sea area, will be vital to understanding the impacts of climate change.

To date the funding we have contributed has seen scientists carry out world-leading research on the seasonal growth and decline

of sea ice in the Ross Sea area, which is helping them to understand the changing ice conditions in Antarctica, and the implications of that for global sea levels. We have also helped transport scientists and their equipment to the ice, seconded Air New Zealand employees to Antarctica to work as part of the team at Scott Base, and held a global competition that sent two environmental enthusiasts to the ice with a National Geographic photographer.

Over the next year we will extend our commitment to NZARI and the scientific research it undertakes in Antarctica. Our investment will enable a significant new multi-year science project, where New Zealand scientists will study iconic Antarctic species living in the coastal zone between Scott Base and Cape Adare. Current predictions are that climate change will significantly disrupt ecosystems in Antarctica's Ross Sea region. Scientists will investigate a diverse range of iconic Antarctic species as part of this project – giant sponges and starfish on the sea floor, ice-adapted fish, lichens and mosses. A sample of Adelie penguins based at Cape Adare, home to nearly 500,000

penguins, and other penguin rookeries along the Ross Sea coastline will be monitored as a part of this wider programme. The project will focus on how the behaviour of these Antarctic species can be used as biological indicators, or early warning systems, for future change in global temperatures, sea-ice and ocean circulation conditions.

*Antarctica holds 70% of the world's fresh water, so the climate science undertaken, particularly in the Ross Sea area, will be vital to understanding the impacts of climate change.*





# Tourism

We are committed to the tourism industry's 'Tourism 2025' strategy, which aims to grow New Zealand's tourism revenues to \$41 billion by 2025. The strategy recognises that global tourism continues to grow exponentially, driven by the emerging middle classes of Asia. Our role in achieving this goal is to generate demand for travel to New Zealand, invest in the development of new markets, and provide a network and connectivity to enable growth.

## Vital to our Economy

Tourism is New Zealand's second largest export earner and vitally important to New Zealand's economy.

International visitor arrivals to New Zealand increased 7% in the year ended July 2015 to reach 3 million arrivals. The value of tourism is also growing faster than tourist volumes, with expenditure by international visitors increasing 28% in the year ended June 2015, to reach \$8.7 billion (excluding international airfares), contributing to regional economies and generating foreign exchange earnings for New Zealand. Forty percent of all international visitors arrive on Air New Zealand or our revenue-share alliance partners.

To help facilitate the forecast tourism growth over the next five years we have planned seat capacity increases of 21% into and out of New Zealand and on domestic networks.

Generating demand for travel to New Zealand is integral to our offshore marketing, from our inflight safety videos to our retail advertising campaigns. Effective industry partnerships have also had a significant impact on tourism growth, and in May 2015 we extended our partnership with Tourism New Zealand, which will see us invest over \$10 million in co-operative offshore marketing. This is in addition to our existing offshore marketing spend.

## Sustainable Tourism

New Zealand's spectacular landscapes and natural scenery are the primary attraction for international visitors and protection of these is important to Air New Zealand. We recognise that as tourism grows, protection of the environment that attracts international visitors becomes an even more urgent priority. We know we must contribute to sustainable business practices and we support Qualmark, the tourism industry's quality assurance programme.

## Regional New Zealand

We are committed to New Zealand's regions and over the coming year will fly 700,000 additional seats to regional New Zealand.

Over recent years we have invested NZD\$300m in a newer regional aircraft fleet – 15 new 68-seat ATRs – so that we can bring greater passenger numbers and cargo in and out of the regions.

We engage continuously with key regional stakeholders to promote and support tourism activity through our marketing channels and promotional offers. We invest in events, activities and initiatives that drive long term economic growth into regional New Zealand.

Over the past 12 months our marketing channels in North America, Australia and New Zealand have profiled Rotorua as New Zealand's cycling capital and home of the Southern Hemisphere's best mountain biking trails. We supported the inaugural Crankworx Rotorua.

In 2014 we sponsored the inaugural Air New Zealand Queenstown International Marathon. Supported by our marketing channels, the marathon attracted nearly 6,000 competitors, 90% of whom were from outside the region, in what is shoulder season for Queenstown. The total 'out of town' spend associated with the event was more than \$5.5m. In the next year we are launching the Air New Zealand Hawke's Bay International Marathon and will continue to sponsor Napier's Tremains Art Deco weekend held annually in February.



For 18 years we have been a partner of Wellington's World of Wearable Art (WOW), which draws an audience of approximately 50,000 people.

In 2015 our 75th Anniversary exhibition at Te Papa attracted 388,000 visitors, many from outside Wellington.

For 29 years we have sponsored the Air New Zealand Wine Awards, which are attended by international media and attract close to 1,500 entries. In 2014 the Wine Awards were hosted in Napier and in November 2015 will be hosted in Nelson to showcase that region.





# Trade and Enterprise

For New Zealand businesses to succeed, global connectivity is critical. Our network – domestic and international – provides New Zealand business with access to key markets.

**International Connectivity**

We are strengthening existing routes and establishing new markets to support the country's tourism offering and trade opportunities.

*In the past year we have announced two new longhaul routes to Buenos Aires and Houston, both of which will help to drive economic advancement for New Zealand through tourism and trade.*

We have recommenced flights into Singapore through an alliance with Singapore Airlines. We also have a new alliance with Air China, which will result in air capacity between New Zealand and mainland China increasing by more than 25% year round, and have signed a code share agreement with Air India which will provide customers greater access and choice.

**Employment Contribution**

As an employer of nearly 10,500 people across New Zealand we contribute more than \$1 billion of wages to the domestic economy. Our services also facilitate creation of over 25,000 jobs within the New Zealand tourism industry.\*

**Enabling Cargo Exports and Imports**

Cargo is a crucial part of our offering and important to New Zealand's high value export chain. We play a key role in moving time-sensitive, high value exports and imports. We carry close to 30% of airfreighted exports from New Zealand (products valued at \$1.9 billion\*), and more than one third of New Zealand's air freighted imports (products valued at \$3.4 billion\*).

Our direct global cargo network operates over 380 international flights per week, serving 26 cities in 17 countries around the globe. In the past year our cargo team has transported over 37 million kilograms of exports from New Zealand.

We have a cargo network with 50 partner airlines and 15 land-based operators. This has opened up 120 destinations to our exporters and importers so that New Zealand can now sell to and import product from almost any point on the globe. We work with exporters in the meat, seafood, produce and flower industries to understand specific product requirements and how we can apply our knowledge and resources to help access key international markets.

**Ethical Carriage**

We comply with CITES regulations around the carriage of Endangered Species of Wild Fauna and Flora and their products. We take our responsibility for the ethical carriage of cargo even further by banning the carriage of certain goods, for example shark products or bi-products, whale meat and whale hunting equipment and supplies. We will not carry the 'Big 5' hunting trophies (lion, leopard, elephant, rhinoceros and buffalo).

**Sustainable Sourcing**

Sustainability is increasingly being integrated within our procurement processes to ensure we better understand our suppliers' products and services.

Over the past year we have revised our Supplier Code of Conduct with a focus on sustainable sourcing. This code was peer reviewed by Forum for the Future and we engaged with other external stakeholders.

We need to gain greater transparency within our supply chain, and our Supplier Code will allow us to start addressing sustainability issues with our key suppliers.

In the next year we are focused on implementing the code and will be working with strategic vendors and key supply chain risk categories, to get positive endorsement from suppliers representing 80% of our purchasing spend. With over 4,500 suppliers the scale of our supply chain presents a huge challenge, but also a significant opportunity to influence others. One of the biggest challenges will be understanding sourcing in international ports, where we depend on offshore catering providers.

**Showcasing New Zealand Food and Wine**

Our inflight team works alongside award-winning New Zealand chef Peter Gordon on the design of our Business Premier menus. We have also established four world class wine judges and commentators on our wine selection panel.

We are one of the biggest servers of New Zealand wine and have 100% New Zealand wine on board all our flights (excepting Champagne).

In 2015 we entered a partnership with New Zealand winemaker Villa Maria to provide wine in our Economy and Premium Economy cabins across all our domestic jet and international flights, as well as Koru lounges across Australasia and the Pacific Islands. Villa Maria has committed to implementing sustainable practices throughout its vineyard and production facilities, being the first major New Zealand winery to achieve BioGro Organic Certification, and was a founding member of Sustainable Winegrowing New Zealand.

We also have a memorandum of understanding with industry body New Zealand Winegrowers working together in offshore markets to promote New Zealand wine and wine tourism.

**Supporting Emerging New Zealand Business**

In the coming year we intend to work with partners to develop a programme that enhances our contribution to emerging New Zealand business, helping to better connect them to global markets.

**Sustainable Sourcing**

2015	2016	2020
Revised Supplier Code of Conduct established	Compliance by 80% of Suppliers (based on spend)	Compliance by 100% of Suppliers (over 4,500)

\*Based on 2014 data analysis by NZIER The Economic Contribution of Air New Zealand and updated by Air New Zealand to reflect subsequent growth.



# Where to *next?*

Over the year ahead we are focused on some exciting and challenging projects to further our sustainability performance. This journey will see us place particular emphasis on:

- Developing new initiatives for social and economic impact – based around the theme of knowledge and inspiration, and specifically targeting young New Zealanders and New Zealand business
- Further embedding our People Safety culture within our business operations
- Establishing a new aviation fuel efficiency steering group to focus on new innovation and greater operational efficiency
- Advancing our biofuels strategy and considering international off-take opportunities, as well as the development of the local biofuels sector
- Improving our approach to carbon emissions offsetting and providing our customers with new carbon offset options
- Commencing our transition to an electric light vehicle fleet and advancing the transition of ground service equipment to electric
- Improving our in-flight waste and recycling programme
- Establishing clear biodiversity project plans and objectives for delivery with the Department of Conservation for the period through until 2020
- Establishing a new long term science research project with the New Zealand Antarctic Research Institute
- Supporting a sustainable tourism plan that reflects the New Zealand tourism industry's 2025 growth strategy
- Working with New Zealand's regions in the development and execution of unique promotion and marketing plans to maximise regional tourism opportunities
- Establishing new routes in North and South America – Houston and Buenos Aires to create new opportunities for tourism, trade and enterprise
- Providing our shareholders with an opportunity to reinvest dividend payments in the new Gividend platform, which will support organisations addressing social and environmental challenges
- Continuing to work with our key suppliers both domestically and internationally, to obtain positive endorsement of our new supplier code of conduct, particularly for our strategic vendor or higher risk categories





Intertek's Green Leaf Mark is a consumer product and systems verification used to demonstrate that environmental claims have been independently verified. Certified with the Intertek Green Leaf Mark, it is also the first HP Indigo press whose carbon manufacturing footprint has been fully offset.

This is the mark awarded by the European community (EU) to producers who voluntarily employ verifiable measures that significantly reduce the harmful effects of there processes and products.

Cocoon Offset 100% recycled paper, process chlorine-free with de-inked pulp from 100% post-consumer waste.