Climate Change 2016 Information Request - Qantas Airways

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Founded in regional Queensland in 1920 – as the Queensland and Northern Territory Aerial Service – Qantas is the second-oldest airline in the world and has played an important role in the development of the Australian and international aviation industry. Today the Qantas Group is a diverse global aviation business, comprising Qantas Domestic, Qantas International, the Jetstar low-cost carrier group and Qantas Loyalty. In total, the Qantas Group operates more than 7,300 flights each week and, together with its codeshare and oneworld partners, offers flights to more than 1000 destinations around the world. The Qantas Group's fleet numbers over 300 aircraft with an average age of 7.6 years – the youngest in two decades – including the award-winning Qantas A380 and the Jetstar Boeing 787 Dreamliner. Qantas is ranked the world's safest airline by AirlineRatings.com, one of the top 10 airlines in the world by Skytrax, and holds many major awards for service, food and wine, technology and innovation. The Qantas Group carries 47 million passengers each year and employs more than 30,000 people

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Tue 01 Jul 2014 - Tue 30 Jun 2015

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Australia
Rest of world

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

AUD ($)

CC0.6

Modules
As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.
If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.
If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The Qantas Group Board sub-committee, the Committee for Health, Environment, Safety and Security (CHESS) has overall responsibility for climate change related issues. The Qantas Group's progress and status with regard to climate change and other environmental issues are reviewed at least three times per year at CHESS meetings and at Board meetings. Internal reports are provided by Management to the Board through the quarterly Qantas Board Risk report and quarterly CHESS reports. The position of CHESS in the corporate structure is outlined in the CHESS Charter available via http://www.qantas.com.au/infodetail/about/corporateGovernance/SESCCharter.pdf

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Corporate executive team	Monetary reward	Energy reduction project Efficiency target	Sustainability risk management is governed by the Qantas Board of Directors and is reinforced through explicit performance targets. Performance Incentive Plans are in place for executives that are assessed against an appropriate balance of the Qantas Group and business segment measures and financial and non-financial measures as part of the Qantas Transformation program. For some executives, environmental and GHG performance is part of the tailored

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			business specific measures. KPIs include fuel efficiency targets, GHG performance, energy performance targets, financial and non-financial measures.
All employees	Other non-monetary reward	Emissions reduction project Energy reduction project Efficiency project Behaviour change related indicator Environmental criteria included in purchases	To encourage employee engagement in environmental sustainability, a number of employee reward and recognition schemes are in place. The annual Environmental eXcel Award program provides recognition and financial incentives for environmental improvement initiatives. In the Financial Year 2014/15, the Qantas Group in conjunction with the Great Barrier Reef Foundation also rewarded selected employees who delivered outstanding environmental improvements with a visit to the Great Barrier Reef to understand the tangible impacts of climate change. These employees have become internal 'Ambassadors' on the issue. KPIs include involvement in projects that have raised awareness and demonstrated a measurable benefit in improving the environmental performance of the Group (reduction in emissions, waste, resource consumption, noise, air quality, soil or water).

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	All airport hubs where the Qantas Group operates. This includes international and domestic ports.	> 6 years	The Board's Committee for Health, Environment, Safety and Security (CHESS) Committee has overall responsibility for climate change related issues. The Qantas Group's progress and status with regard to climate change and other environmental issues are reviewed at least three times per year at CHESS meetings and at Qantas Board meetings where all climate change related risks and mitigation opportunities are re-assessed in terms of their level of impact and status of their mitigation and/or implementation. Internal reports are provided by Management to the Board through the quarterly Qantas Board Risk report and quarterly CHESS reports. The Qantas Board endorsed a number of long term emission reduction initiatives with the purpose of addressing climate change related risks and opportunities e.g., a revised six year utility consumption reduction target and continuous support for the implementation of fuel conservation initiatives tracked against a 2020 fuel reduction target.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Qantas takes a proactive approach to the management of risk. All risks and opportunities including those related to climate change are identified through Group's Enterprise Risk Management framework which is supported by the Group Risk Management Policy and sets out the requirements and responsibilities for risk management across the Group. This policy is reviewed and updated on an annual basis or as required. To assist employees to identify, understand and deal with risk, Qantas has developed the Qantas Group Risk Assessment Guide (QRAG) so that the process is reliable, comprehensive and consistent. The QRAG supports the Qantas Management System (QMS) and provides a sound, simple process for the management of risk regardless of the application. The QRAG follows a continuous cycle that starts with involving and communicating with stakeholders, preparing by considering the internal and external environment in which Qantas operates, considering what could happen, understanding the identified risks including the controls, assessing the level of risk and deciding how to manage the risk. This approach is used to assess climate change risks at both a company and asset level.

Additional risk and opportunity identification processes include consultation with internal and external stakeholders such as regulators, industry bodies and interest groups to identify material aspects, risks and opportunities to Qantas operations. The identified issues included energy use, GHG emissions and climate change.

At an asset level climate change risks and opportunities are formally identified by rating performance against internal and external benchmarks. Risks and opportunities are workshopped and

on the ground assessments conducted to ensure project feasibility from an operations, customer and regulatory perspective. The identified risks and opportunities are maintained on the environmental aspects and impacts register.

CC2.1c

How do you prioritize the risks and opportunities identified?

Qantas executive-led Sustainability and Resilience Council has primary responsibility to prioritise the sustainability issues most relevant to Qantas and to ensure that these issues are included in our strategic planning and reporting processes. The issues which represent significant risks and opportunities to Qantas are prioritised using the Qantas Group Risk Assessment Guide (QRAG). Risks and opportunities at both a company and asset level are prioritized using a likelihood and consequence matrix which rates risks between very low to extreme based on the following consequence types: safety to flight, airworthiness, injury and illness, compliance, financial loss, reputation, operations/customer and environment. Each consequence type has consequences ranging from Level 1 – a relatively low impact consequence through to Level 6 an extreme consequence. Climate change risks are prioritized using all consequence types matched against an assessment of likelihood which ranges from very rare to almost certain. Extreme risks are identified where consequence levels are identified above Level 4 and are almost certain to occur. Identified risks are placed on the Group's risk register and high and extreme risks are reported to Executive Management monthly and to the Board of Directors quarterly. Criteria for prioritizing opportunities include an assessment of return on investment, ease of implementation, change process relating to regulatory considerations and payback period.

A separate materiality process was undertaken in which risks and opportunities were prioritised in workshops involving Finance, Investor Relations, Safety, Business Resilience, Group Fuel & Environment, Community, Communications, People and Procurement to prioritise the identified issues. One of the seven material areas identified was energy use and emissions. This prioritisation is shown in pages 36-37 of the Qantas Annual Review 2015.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i. How the business strategy has been influenced (the internal process for collecting and reporting information to influence the strategy)

A key component of the Group's business strategy is to be recognised as a leading airline group committed to environmental sustainability. To attain this goal, the Group has developed an Environment strategy which has a core focus to mitigate the effects of climate change. The Group's environment strategy is updated annually through input from business units across the Group with coordination by the Group Fuel & Environment department and endorsed by the Qantas Board. Initiatives are designed to capitalise on potential opportunities as well as

effectively manage risks. All strategic initiatives are evaluated against external drivers including current and impending carbon pricing, the rising price of fuel, and the sustainability of the current business model. Initiatives are assessed using information collected and reported within the business including fuel consumption, fuel efficiency measures, emission intensity, carbon offsets purchased and electricity use. Qantas information collection, internal and external reporting systems form the central part of the comprehensive strategy to position the Group as a leading airline in environment, customer, financial and climate change management.

ii. What aspects of climate change have influenced the business strategy

The Group's environment strategy recognises that as an international airline, Qantas business is global in nature and has a large carbon footprint. The key climate change aspect influencing Qantas business strategy is climate change mitigation through the reduction of emissions. To do this, the strategy focuses on four key areas: 1) continuous improvement in fuel efficiency through the adoption of fuel efficiency and emission reduction targets, 2) early adoption of innovative fuel and carbon management solutions, 3) embedding environmental values to increase marketability and strengthen belief in the brand, and 4) influencing global regulators to achieve sustainable lowest cost carbon compliance. As part of implementing the strategy, Qantas is working on the development of the UN International Civil Aviation Organisation (ICAO) to develop a global market based measure (MBM) to offset aviation emissions.

iii. The most important components of the short term strategy that have been influenced by climate change

The Group has set a fuel efficiency target and is on track to achieve an average fuel efficiency improvement of 1.5 per cent on average per year to 2020 which is aligned with the goal set by International Air Transport Association (IATA) for the industry. This approach also achieves performance benchmarks that improve the overall profitability of the business. The strategy also outlines the Group's approach to engaging in carbon pricing mechanism developments at both a local and global level over the next 6-8 years. The short term strategy will direct activities over the next 1-3 years focused on lowering operational costs while improving environmental performance.

iv. The most important components of the long term strategy that have been influenced by climate change

As a member of IATA, the Group has endorsed IATA's stated vision to achieve carbon neutral growth from 2020 and to reduce emissions by 50 per cent by 2050. A key pillar of this strategy is the development of sustainable aviation fuels. To achieve genuine sustainability, it is essential that such fuels deliver both cost and environmental benefits. Similarly, the Group has endorsed the International Civil Aviation Organisation (ICAO) and IATA agreement on the development of a global MBM for aviation emissions (agreed by ICAO states in October 2013 for implementation by 2020). The Group is actively participating in the work related to the development of the MBM through the Global Market-based Measure Technical Task Force (GMTF), which is comprised of representatives and experts from ICAO member states, industry and non-governmental organisations.

v. How this will create a strategic advantage over competitors
The Group is one of the largest fuel users in Australia, consuming approximately 4.6 billion litres of jet fuel in the Financial Year 2014/15 (a cost of approximately $4.5 billion). This scale provides strategic advantages in influencing and developing alternative fuel value chains.

The Group's strategy aims to achieve a competitive advantage in operational and compliance costs, especially by creating a point of differentiation with customers and enabling the business to adapt to changing environmental and regulatory landscapes.

vi. Substantial business decisions

Climate change has increasingly become a deciding factor in substantial business decisions as regulatory, physical and reputation aspects become more of a risk to our business. Examples of substantial decisions include:
• Investment decisions around carbon offset procurement to manage both customer voluntary and compliance requirements.
• Fleet investment decisions to provide ongoing fuel efficiency improvements for the Group to reduce emissions.

• Resources dedicated to developing an aviation biofuel industry that will provide a low carbon sustainable alternative to fossil fuels.
• Emissions reductions targets to lower emissions by 50 per cent by 2050.
• Public policy engagement such as participation in consultations regarding developments in climate change and renewable energy policy in Australia. This includes carbon pricing mechanisms, government backed carbon financing or funding opportunities and renewable energy targets.

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

Qantas uses an internal price of carbon on scope 1 emissions related to business travel. Individual business units offset all business travel as a method to reduce emissions at a varying price managed by Group Fuel & Environment's portfolio approach to purchasing offsets for both air and ground transport.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Cap and trade	Support with minor exceptions	Market-based Measure: Qantas is working on the development of the global aviation sector agreement on emissions agreed to by the member states of the UN International Civil Aviation Organisation (ICAO) at its Assembly in 2013. The mechanism is being designed to meet the international target of carbon neutral growth from 2020, with details to be agreed at the next ICAO	Qantas continues to make a number of recommendations regarding the technical design of the monitoring, reporting and verification requirements, the emissions unit eligibility requirements, the registry requirements, and the governance requirements. Negotiations are ongoing.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		Assembly in 2016, for implementation from 2020. Qantas is working on the detailed design of the policy as a representative of the ICAO technical working groups. This mechanism is referred to in ICAO Resolution A36-22 and will be applicable to all 194 member states from 2020.	
Energy efficiency	Support	Emissions Reduction Fund Policy: The Group has engaged directly with the Australian Government and through a number of industry associations on the design and implementation of the legislation and subordinate rules regarding the Government's Emissions Reduction Fund – a $2.5 billion fund to finance energy efficiency activities.	The Group worked with the Government to design a methodology to measure aviation sector emissions improvements to enable future participation under the policy.
Other: Voluntary Carbon Standard	Support with minor exceptions	The Group is directly engaged with the Australian Government's Department of Environment in its review of the National Carbon Offset Standard Carbon Neutral Program (legislative instrument), including providing recommendations on fundamental amendments to the program.	Qantas continues to make recommendations which were accepted and implemented by the Government regarding administrative efficiency in monitoring and reporting. Qantas has made further recommendations regarding program governance that we understand the Government is considering implementing now. Qantas continues to engage with the Government regarding extending the eligibility of international units and long term program certainty.
Cap and trade	Support with minor exceptions	Engagement with NZ and EU governing bodies regarding the schedule reviews of their respective emissions trading schemes. Engagement with the Australian opposition party with regard to their long term climate change policy specifically cap and trade. The Group has engaged directly with the Australian Government and through a number of industry associations on the design and implementation of the legislation and subordinate rules regarding the Government's replacement carbon price policy – the Safeguard Mechanism. Direct engagement through formal and informal submissions, meetings with the Department, Minister's office and Regulator. Indirect engagement through input into industry association formal submissions, leading industry working groups, consultation meetings.	Support the on-going functioning of the emissions trading schemes in NZ and the EU We support a bi-partisan long term policy solution to climate change mitigation. Qantas made a number of recommendations during the multiple Government consultation processes, including in relation to the Governance, administrative process, transparency, confidentiality, monitoring, reporting and verification requirements. Qantas is currently engaged directly and indirectly with Government on an aviation industry position under the policy.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
International Air Transport Association	Consistent	The International Air Transport Association (IATA) has a vision to achieve carbon neutral growth by 2020 and to reduce carbon emissions by 50 per cent by 2050. The strategy for this is based on four pillars: technological progress, operational measures, infrastructure improvements and economic instruments (such as a global market-based measure for international aviation emissions). IATA supports a global solution to climate change.	The Qantas Group is a member of IATA's Environment Committee (ENCOM). ENCOM has responsibility for the development of IATA's climate change strategy and recently was tasked with developing a united industry position regarding global approach to international aviation emissions. The Group played an active role in this process, including assistance in formulating and endorsement of the industry position that was developed calling for a global market-based measure. This is reflected by the United Nation's International Civil Aviation Organisation (ICAO).
Carbon Market Institute	Consistent	Supports the development of international carbon markets.	Active member engaged in all of the working groups. Attended the Paris COP21 and spoke in support of the development of carbon markets.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The Qantas Group has a number of governance, information and risk management processes designed to align policy activities with climate change strategy. These include:
- Ownership of majority of direct policy activities by the Group Fuel and Environment department, who also own the climate change strategy.
- Bi-monthly coordination meetings between the Group Fuel and Environment department and Government Affairs department to ensure high level alignment between strategy and policy.
- Weekly coordination Group Fuel and Environment meetings to ensure policy activities are aligned with actual carbon market observations and purchasing.
- Group Fuel and Environment department's ownership of the International Air Transport Association's Environment Committee engagement and input into policy development to ensure policy positions and the Group's climate change strategy are aligned.

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target
Intensity target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 2 (market-based)	100%	20%	2010	224024	2020	No, and we do not anticipate setting one in the next 2 years	The base year is the Financial Year 2009/10. This target is for the purpose of reducing electricity (MWh) consumption by 20 per cent by the Financial Year 2019/20.
	Scope 3: Waste generated in operations	100%	30%	2010	39881	2020	No, and we do not anticipate setting one in the next 2 years	The base year is the Financial Year 2009/10. This target is for the purpose of reducing waste diverted directly to landfill (tonnes of waste) by 30 per cent by the Financial Year 2019/20.
Abs3	Scope 1	100%	50%	2005	10813687	2050	No, but we anticipate setting one in the next 2 years	The base year is the Financial Year 2004/05. The International Air Transport Association (IATA) has a vision to achieve carbon neutral growth by 2020 and to reduce carbon emissions 50 per cent by 2050. Therefore, this target is for the purpose of reducing scope 1 emissions by 50 per cent by the Financial Year 2049/50.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	99.6%	16.5%	Other: metric tonnes CO2e per 100 revenue tonne kilometres	2009	0.10281	2020	No, but we anticipate setting one in the next 2 years	The base year is the Financial Year 2008/09. This target is for the purpose of improving fuel efficiency (i.e., metric tonnes CO2e per 100 revenue tonne kilometres) by 1.5 per cent per year on average by the Financial Year 2019/20.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	0.82	No change	0	Whilst we are targeting an improvement in our fuel efficiency, the change in absolute emissions will also be impacted by: - Growth of available seat kilometres; - Growth of demand for air travel; - Extent of commercialisation of sustainable aviation fuels; and - Government Climate Change Policy decisions. The Group's approach to measuring the impact of intensity targets on absolute emissions has changed to focus only on direct contributions of what constitute the intensity target.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	50%	100%	Steady improvement from utility conservation initiatives and a switch to tri-generation has enabled Qantas to exceed their stated target of 20 per cent reduction in electricity emissions over 10 years. This reduction has been delivered in less than 5 years and is equivalent to an absolute reduction in Scope 2 emissions of 30 per cent. A revised Scope 2 emission reduction target is being developed and will be in place for FY16.
Abs2	50%	96%	Steady improvement from waste reduction initiatives has driven the Group's performance over the waste diverted directly to landfill towards the 30 per cent reduction by the Financial Year 2019/20.
Int1	55%	35%	Steady improvement from fuel optimization initiatives has driven the Group's fuel efficiency performance towards the International Air Transport Association (IATA) aligned 1.5 per cent per year on average fuel efficiency improvement by Financial Year 2019/20.
Abs3	25%	0%	This target is based on reduction in emissions from 2005 in which Qantas emissions were 10,813,687 tonnes CO2-e. Since 2005, the growth of global aviation and the present reliance on traditional aviation fuel has meant an increase in carbon emissions during a period when emissions reductions are being mandated across the globe. Emissions have actually decreased by 6 per cent since 2013 and Qantas is working to decrease emissions further to meet our stated long term target.

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Product	Commercial passenger carbon offset program (Fly Carbon Neutral) and our corporate customer carbon offset program (Future Planet)	Avoided emissions	Other: National Carbon Offset Standard	0.01%	Less than or equal to 10%	Qantas Fly Carbon Neutral and Future Planet products gives our entire customer base the ability to offset emissions (including their portion of flight emissions, but also any other scope 1, 2 and 3 emissions). Flight emissions are estimated following a life cycle assessment methodology, which uses emission factors from the National Greenhouse Accounts (NGA) Factors as prepared by the Australian Government's Department of Environment. In addition, both Fly Carbon Neutral and Future Planet, including all methodology and emission factors used for the estimation of emissions, are reviewed and certified by the Australian Government's National Carbon Offset Standard (NCOS). Since commencement of the program in 2007, Qantas has offset 2.0 million tonnes of carbon.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	20	0

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	46	43150
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Transportation: fleet	Aircraft weight reduction (including pantry weight reduction) initiatives rolled out across Qantas aircraft.	1800	Scope 1	Voluntary	601000	0	<1 year	16-20 years	
Energy efficiency: Processes	Improvements to advanced navigation techniques, including Required Navigation Performance and User Preferred Routing rolled out to new ports plus increased utilisation of available procedures.	3385	Scope 1	Voluntary	1131000	0	<1 year	16-20 years	Air traffic management project
Transportation: fleet	Auxiliary Power Unit (APU) management: Reduction in usage of APUs through connecting aircraft to Ground Power Units that use more efficient and less expensive alternative energy sources to aircraft fuel, including extending APU management protocols to other Qantas Group airlines (JetConnect).	2610	Scope 1	Voluntary	871500	400000	<1 year	16-20 years	Flight Operations and Engineering Project
Transportation: fleet	Aircraft weight reduction: Lavatory waste changes and cabin crew reduction.	845	Scope 3	Voluntary	281300	0	<1 year	16-20 years	Flight Operations and Engineering Project

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	Engineering and maintenance improvements including reducing potable water on board and engine refresh programs.	20810	Scope 1	Voluntary	6954430	0	<1 year	16-20 years	
Energy efficiency: Processes	Single engine taxi in procedure allowing aircraft to manoeuvre on the ground using only one engine.	2470	Scope 1	Voluntary	826700	0	<1 year	16-20 years	
Energy efficiency: Processes	Improvements in aircraft technical performance for example using dynamic domestic set heading allowances and better sequencing on approach into high volume airports	11230	Scope 1	Voluntary	3753530	0	<1 year	16-20 years	

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	In Australia, the Qantas Group is required to report under the National Greenhouse and Energy Reporting Act (NGERS) and under the National Carbon Offset Standard which is applied to the Qantas Fly Carbon Neutral program. As part of maintaining certification within this program, Qantas is required to maintain and update its Emissions Reduction Plan annually. This reporting requirement along with the Qantas Annual Review are considered to be an opportunities to provide transparency to our stakeholders and help identify energy efficiency opportunities within the business.
Employee engagement	At Qantas we believe that an important way to reduce emissions is by engaging and involving employees in driving emissions reductions through information sessions, emission reduction programs and creating incentives to reduce emissions. Examples include employee seminars on carbon offsetting, climate change and driving utility efficiencies, Environment eXcel awards and environmental performance KPIs, which are included in performance incentive plans for some executive managers. All employees are encouraged to offset the emissions associated with any personal flights they take through the Group's Fly Carbon Neutral program.
Internal finance mechanisms	Qantas has embedded the cost of carbon into its internal reporting systems and business cases. Qantas has calculated its current and forward emissions profile and has plans in place to mitigate and/or manage impacts.

Method	Comment
Partnering with governments on technology development	Qantas works actively with governments to implement effective economic instruments that incentivise research and development in new technologies that will help reduce the environmental impact of aviation. We continue to prioritise working with governments (as well as other key stakeholders) to build the case for sustainable aviation fuel production in Australia. We believe this is important not just for Qantas but for the Australian economy as a whole, given the global emergence of green technologies and their potential to drive growth and create jobs.

Further Information

Page: CC4. Communication

CC4.1

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Qantas Annual Review 2015 pg 36 and 41	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC4.1/2015AnnualReview.pdf	The Annual Review is part of our mainstream financial reporting approach and outlines total emissions for the Qantas Group as well as emission reductions and Qantas climate change related targets.
In other regulatory filings	Complete	NGER - FY15 GHG use and energy information by registered corporation	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC4.1/2015 EERS report.pdf	Qantas Annual emissions in Australia.

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation
Risks driven by changes in physical climate parameters
Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	The Qantas Group faces a carbon price in three jurisdictions: New Zealand, the European Union and Australia, which has direct financial costs for the Group. Along with carbon pricing mechanisms, the Qantas Group supports the formation of a market-based measure (MBM) for international aviation emissions, agreed by the International Civil	Increased operational cost	>6 years	Direct	Virtually certain	Medium	The financial implications in the Financial Year 2014/15 for the Qantas Group from carbon pricing is less than AU $1 million. Across all schemes due to the repeal of the Australian Carbon Price. Predicted financial impacts of the ICAO MBM are difficult to gauge at this stage of policy development.	The Qantas Group has a comprehensive climate change strategy that has been developed to reduce the Group's emissions and subsequent carbon liabilities. Fleet renewal, fuel optimisation and sustainable aviation biofuel are key elements of the strategy. We are renewing and optimising our fleet with technologically	Given the significant competitive challenges facing the global aviation industry, the Group has been unable to pass through the cost of carbon to customers resulting in a direct cost to the Group of less than $1 million. The cost of administrative work and reporting is absorbed by the business. Fleet Renewal: The most

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Aviation Organization (ICAO) for implementation in 2020. The market-based measure will see carbon neutral growth for the industry by 2020 and a 50 per cent reduction in emissions by 2050.							advanced fuel-efficient aircraft through purchasing the Airbus A380, Boeing 787 Dreamliner and the Airbus A320 neo. During Financial Year 2014/2015 the Group continued the transformation program, which included the accelerated retirement of older, less fuel-efficient aircraft including the Boeing 737-400 and Boeing 767. In order to deliver absolute emissions reductions over the medium to long term. Aviation biofuel remains an important strategic goal. The Group actively engages with policy makers in order to understand and influence the future of carbon pricing policy and clean energy technology to help mitigate the effects of climate change. Qantas also engages directly with ICAO to support the political decision-making and technical	significant cost the Group has is the US$17 billion investment in more fuel efficient, next generation aircraft, such as the Airbus A380, Boeing 787 Dreamliner and Airbus A320 neo. Qantas allocates approximately 1.5 full time equivalent (FTE) resource to manage the Group's carbon liability.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								design of the proposed MBM policy in order to influence its design to optimise the climate change mitigation outcomes.	
Emission reporting obligations	In Australia, the Qantas Group is required to report under the National Greenhouse and Energy Reporting Scheme which covers domestic emissions. In the EU, the Group must complete the European Union Emissions Trading Scheme verification processes. This results in an increased reporting and administrative cost on the business.	Increased operational cost	1 to 3 years	Direct	Virtually certain	Low	The prescriptive and often duplicated emissions reporting obligations in Europe and Australia are examples of the increasingly complex compliance landscape. Many reporting requirements do not take the unique attributes of aviation into consideration therefore adding increasing administrative burden. The administrative and reporting cost is absorbed by the business.	The Group Fuel and Environment department manages and coordinates the Qantas Group reporting obligations to ensure compliance with all carbon price regulatory regimes. The Group actively engages with policy makers to understand and influence the streamlining of emissions reporting obligations.	Compliance with the various policy decisions adds an increased administrative burden to the Group. However, no additional cost has been required to manage the cost pass-through or compliance with these schemes, as the processes have been converted to business as usual activities and embedded within the organisation. Qantas allocates approximately 1 full time equivalent (FTE) resource to manage the Group's emission reporting obligations.
Fuel/energy taxes and regulations	Environmental taxes: Punitive environmental taxes on airlines that are used by Governments for general revenue raising. Examples of this have been seen in the United Kingdom with the Air Passenger Duty	Reduced demand for goods/services	Up to 1 year	Direct	About as likely as not	Low	Aviation is also exposed to the application of punitive government revenue raising under the guise of environmental taxes or to fund developing nation projects, for example the UK	The Qantas Group is a member of the International Air Transport Association (IATA), which strongly supports a global market-based measure to manage international aviation emissions. The	Whilst environmental taxes have significant financial implications for our business, the cost of management has been absorbed within existing capabilities. Qantas allocates

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and Germany with the "ecological" departure tax. This ultimately increases the cost of airfares and can reduce demand.						Government's Aviation Passenger Duty (APD) and 'adaptation levies'. ADP will roughly cost between 75-85 pounds sterling for economy passengers and 150-170 pounds sterling for premium passengers. This has the potential to reduce demand for airlines by increasing ticket prices, which results in lost revenue and increased costs.	Group supports this approach and played an active role in shaping the IATA position.	approximately 1 full time equivalent (FTE) resource to manage the Group's energy regulation and tax liability.

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Induced changes in natural resources	Australia's natural assets such as the Great Barrier Reef are at risk due to the implications of changing climatic conditions. These assets are fundamental to Australia's appeal as a tourist destination. The degradation of these assets could reduce tourism	Reduced demand for goods/services	3 to 6 years	Direct	Likely	Low	The deterioration of Australia's tourism as a result of induced changes in natural resources may impact the commercial success of the Qantas Group as well as that of the broader tourism industry. In Financial Year 2014/2015 total tourism related expenditure was $121 billion. Of this, $7.7 billion was directly	The Qantas Group contributes to efforts to mitigate the impact of climate change through a broad-based fuel and environmental improvement program. Group Fuel and Environment is dedicated to driving an environment improvement program aimed at reducing the Group's impact on the environment. As part of	Since 2010, Qantas has donated $600,000 to the Qantas Foundation Environmental Sustainable Fund, which has been distributed to a number of environmental charities in Australia. Qantas partners with the Great Barrier Reef Foundation as part of their Reef Blitz

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	demand, resulting in reduced airline customer demand.						attributable to all transport including aviation. A decrease in tourism due to the degradation of our natural environment would result in a reduction in transport needs and loss of revenue to Qantas.	this program, the Group supports the Great Barrier Reef Foundation, which funds research into the impact of climate change on the reef. Group Fuel and Environment continued to support a sustainable tourism program to generate greater awareness of human induced climate change and the benefits of sustainable tourism opportunities for passengers travelling to Australia's most pristine ecosystems including the Great Barrier Reef, Tasmania's wilderness and North Arnhem Land. The Group intends to continue developing this program as an education and awareness method to manage this risk.	Program, this is worth $35,000.
Other physical climate drivers	Changes in weather patterns such as jet stream activity and prevailing wind patterns impact aircraft performance and route planning, resulting in financial costs due to increased fuel consumption, examples of this	Increased operational cost	3 to 6 years	Direct	Likely	Low	The implications of weather related disruptions can include the following financial impacts: - Efficiency of aircraft performance. - Changes in flight planning, including increased fuel burn. - Ability to carry full loads of passengers or freight may be reduced. - Loss of	Whilst the Qantas Group has no direct control over the physical risks associated with climate change, it focuses on monitoring these risks, diversifying its operations, building capability in forecasting and managing disruptions, enhancing its crisis response capabilities, contributing to the	The cost of managing this risk is business as usual for an airline therefore absorbed by the business. Qantas allocates 1 full time equivalent (FTE) with meteorological capability to provide skilled analysis of weather related information.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	include cyclonic activity such as Cyclone Marcia in Queensland which disrupted operations in 2015.						revenue. - Additional crewing costs. - Additional fuel costs. - Displaced passengers and associated costs. - Resultant cancelled services. - Reduced aircraft utilisation. - Aircraft damage. Extreme weather events such as tropical cyclones and floods cause severe disruptions to the Qantas Group's business and can result in serious financial implications for the business.	protection of Australia's natural assets and internationally promoting Australia as a tourist destination. The Qantas Group has invested in additional capability and information to ensure minimum impacts to the Group's operations resulting from natural events such as tropical cyclones, tsunamis and volcanic eruptions. The following are examples of the actions taken to manage these risks: - Development and ongoing review of the Group's Fuel Policy, which states requirements dependent on the probability of weather related events. - In-house meteorological capability. Through Qantas Meteorological, skilled analysis of weather related information is linked to the Group's policies and procedures. - Development of probability based risk assessments to assist in route and contingency planning. - Forecast and real time flight planning functionality to optimise flight metrics based on wind conditions User	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Preferred routes. - Participation in the development of new standards to manage issues such as extreme weather. The Group's participation in developing these standards assists in safely minimising the disruption to the Group's operations .	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Aviation is currently a carbon intensive industry. A perceived lack of action by the Qantas Group or industry in general could result in brand damage and reduced demand for services.	Reduced demand for goods/services	3 to 6 years	Direct	Very unlikely	Low	In some parts of the world, aviation has been identified as an industry with a growing emissions footprint. Negative perception about the industry may lead to increased calls for financial penalties, operating restrictions and brand damage to airlines. Any perceived inaction by airlines may lead to further negative assessment by customers, which may impact market share and revenue. Predicted financial impacts of this	The Group has a comprehensive climate change strategy in place and has been committed to transparent reporting since 2007. The Group's communication objective is to ensure the perception of its operations are reflective of its environmental commitment and activity. The use of company websites, publications, executive presentations and media releases are used for this purpose. Regular customer feedback is requested through direct surveys and websites for	The reporting and communication commitments mentioned as part of the management actions have been embedded within the Group's existing processes resulting in no additional expense. The cost of the Group's commitment to offset the emissions from employee business travel and ground transport emissions was approximately $550,000 for the reporting year.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							form of reputational damage are difficult to gauge. By way of estimate, any event that causes public brand damage for a week or more has the potential to cost the business between $2 and $20 million.	regular monitoring of communication effectiveness and to understand customer perception of performance. Commercially the Group made a commitment to transparent reporting of sustainability performance, including dedicated information in the Annual and Sustainability reports as well as the leading sustainability indexes. Complementing the extensive activity to reduce the Group's environmental footprint, Qantas has taken a leadership position with continued innovation of the Group voluntary carbon offset strategy. Through the Group's continued investment in the Fly Carbon Neutral program over 1.8 million tonnes have been offset since 2007, and with 7 per cent uptake we understand the program to be the largest airline offsetting program of its kind in the world. The Group also offsets its employees travel for business purpose and emissions from ground vehicle use.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	There is a potential risk that customer may demand products that reduce their carbon footprint. Technology such as video conferencing may provide alternatives for face-to-face meetings therefore reducing demand for air travel.	Reduced demand for goods/services	3 to 6 years	Direct	Very unlikely	Low	In some parts of the world, aviation has been identified as an industry with a growing emissions footprint. Negative perception about the industry may lead to increased calls for financial penalties, operating restrictions and brand damage to airlines. Any perceived inaction by airlines may lead to further negative assessment by customers, which may impact market share and revenue. Predicted financial impacts of changing consumer behavior are difficult to gauge at this stage. By way of estimate, any event that causes public brand damage for a week or more has the potential to cost the business between $2 and $20 million.	The Group has two approaches to managing the risk of reduced demand for business travel. The first is to communicate the Group's approach to managing carbon emissions to business clients through dedicated sustainability reporting in the Annual Review as well as the leading sustainability indexes such as the CDP and DJSI. Complementing the extensive activity to reduce the Group's environmental footprint, Qantas has developed Qantas Future Planet which is a corporate sustainability leadership program in which Qantas has partnered with Australian and global businesses to lead by example to measure their environmental impact with best practice methodologies, reduce their impact through leading industry specific initiatives, offset at least their corporate travel emissions by flying carbon neutral with Qantas and influence change through education and powerful	The reporting and communication commitments mentioned as part of the management actions have been embedded within the Group's existing processes resulting in no additional expense. The cost of the Group's commitment to offset the emissions from employee business travel and ground transport emissions was approximately $550,000 for the reporting year.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								promotion. Complementing the extensive activity to reduce the Group's environmental footprint, Qantas has taken a leadership position with continued innovation of the Group voluntary carbon offset strategy. Through the Group's continued investment in the Fly Carbon Neutral program over 1.8 million tonnes have been offset since 2007, and with 7 per cent uptake we understand the program to be the largest airline offsetting program of its kind in the world. The Group also offsets its employees travel for business purpose and emissions from ground vehicle use.	

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation
Opportunities driven by changes in physical climate parameters
Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Carbon pricing provides incentive for the Group to use aviation biofuel. The use of aviation biofuel would reduce carbon compliance costs and has the potential to reduce overall fuel expenditure and volatility.	Reduced operational costs	3 to 6 years	Direct	Virtually certain	Low-medium	The Qantas Group has a comprehensive climate change strategy which includes working to accelerate the commercialisation of aviation biofuel that have the potential to mitigate much of the incremental carbon costs. Any use of biofuels in the Group's Australian domestic or European operations would directly reduce the Group's AU$1 million carbon liability for the Financial Year 2014/15, although at this stage it is difficult to quantify an approximate figure.	Qantas is focused on developing sustainable aviation fuel to tackle the environmental & energy security issues associated with traditional fossil based fuels. Currently, Australia does not have a commercial source of aviation biofuel. The Group has significant scale in fuel purchasing & aims to use that scale to influence the development of an aviation biofuel supply chain within Australia. Qantas has been actively working towards this goal since 2009 through the following key initiatives: 2009: Qantas become signatory member of the	Qantas allocates approximately 1.5 full time equivalent (FTE) to manage the Group's biofuel initiatives.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Sustainable Aviation Fuel Users Group. 2010: Qantas worked with aviation stakeholders on an aviation biofuel industry roadmap study relevant to Australia and New Zealand with the CSIRO, Australia's peak scientific agency. 2012: On 13 April 2012 Qantas operated Australia's first commercial flight powered by aviation biofuel, using an Airbus A330. The Airbus was powered by a 50:50 blend of biofuel and conventional jet fuel in one engine. A few days later, Jetstar become the world's first low cost carrier to operate a commercial biofuel flight. 2013: Qantas and Shell Australia completed a landmark piece of research to understand the economic viability of producing aviation biofuel in Australia on a commercial scale. The study concluded that an aviation biofuel industry is viable in Australia, but obstacles remain, including feedstock availability, infrastructure and policy environment.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other regulatory drivers	Government clean energy funding and financing bodies provide incentive to invest in new technology to reduce emissions and operational costs.	Reduced operational costs	Unknown	Direct	Likely	Medium	Financing opportunities provided by Government have the potential to reduce operating costs or avoid additional costs on the Qantas Group. Funding opportunities to invest in carbon abatement projects have the potential to support fuel saving. Savings from fuel reduction activities in FY15 were approximately AU$14 million.	The corporate Group Fuel and Environment department works closely with Government Relations to provide input into the development of carbon policy and incentivisation structures in Australia. The Group has engaged directly with Australian Government and through a number of industry associations on the design and implementation of the legislation and subordinate rules regarding the Government's Emissions Reduction Fund (ERF) – a $2.5 billion fund to finance energy efficiency activities. Qantas has developed emission reduction projects under the ERF.	The cost of developing projects under the ERF and reporting is absorbed by the business. Qantas allocates approximately 1.5 full time equivalent (FTE) to manage these initiatives.

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Qantas has the privilege of transporting millions of domestic and international visitors to Australia's most pristine ecosystems every year, including the Great Barrier Reef and Tasmania's wilderness. The Group has launched a sustainable tourism program to create awareness of sustainable tourism opportunities within these areas and the importance of conservation. The Group intends to continue developing this program as an education and awareness method to manage this risk of climate change.	New products/business services	1 to 3 years	Direct	Virtually certain	Low-medium	Estimated financial implications of introducing this product are difficult to gauge at this early stage of implementation, however we are aware that Australian visitor participation in nature-based activities has increased by 31 per cent over the past five years. During Financial Year 2014/2015, 16.8 million domestic and 4.2 million international visitors participated in an outdoor/nature activity during their trip to Australia, equating to an economic value of around $39.3 billion in direct spending by these visitors.	The Qantas Group contributes to efforts to mitigate the impact of climate change through a broad-based fuel and environmental improvement program. Group Fuel and Environment is dedicated to driving an environment improvement program aimed at reducing the Group's impact on the environment. As a key opportunity within Australia's tourism industry, the Group intends to implement a sustainable tourism strategy to create a platform for sustainable tourism growth in Australia through adding bespoke partners that have a demonstrable link to conservation and are passionate about the opportunity to educate and motivate their customers to engage in conservation as well as demonstrate best practice through respecting the well-	Qantas allocates approximately 0.5 full time equivalent (FTE) to manage this initiative.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								being of people and the environment and indigenous culture. During Financial Year 2014/2015 the Group expanded the sustainable tourism products offering.	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other drivers	Improvements in Air Traffic Management have been prioritised to eliminate inefficient fuel burn across the network, which provides financial savings for the Group through reduced fuel consumption.	Reduced operational costs	1 to 3 years	Direct	Likely	Low-medium	Improvements in Air Traffic efficiency could provide the following benefits: Improvement in fuel efficiency through optimised aircraft performance and reduced flying distances, schedule integrity, reduction in delays and aircraft holding, enables better on-time performance and reduction in flow-on impacts, system capacity improvement and reduction in noise for airport communities. These initiatives have already saved the Group over $5 million in fuel	The Group's actions to maximise this opportunity are focused on investment and deployment of leading edge technology, actively driving industry forums for improved air traffic management and engaging with government to influence and incentivise take-up of these technologies. Operational measures continue to be implemented and are reliant on Air Service Navigation Providers. The Group's investment in aircraft technology allows the deployment of new navigation techniques and	The costs associated with benefiting from the advancement in new technology aircraft is related to the Group US$17 billion (at list prices) investment in next generation aircraft, such as Airbus A380 and Boeing 787. Additional costs are also associated with: Crew training, procedure design for new procedures and retrofitting of aircraft and new technology navigation systems. These costs are seen as an investment in allowing for the use of this aircraft

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							savings with the potential to grow substantially as technology increases (including air traffic management systems and on board aircraft equipment).	procedures that have the potential to deliver large financial and environmental benefits. Performance Based Navigation and maximising aircraft capability fo exmaple, Required Navigation Performance (RNP) improve predictability and accuracy of flight paths. This investment in technology has been complemented by significant increase in training to capitalise on the aircraft's capability. Through working with Air Navigation Service Providers the continued roll out of the RNP program across Australia enables more efficient, safer and noise sensitive paths to be flown. Qantas continues to be the leading airline group in Australia using this technology. In addition, continued procedural improvement associated with Free Flight (improved flight planning) and Dynamic Airborne Route Planning continue to improve fuel and environmental performance.	technology, and as such are treated as business as usual for an airline.

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Jul 2008 - Tue 30 Jun 2009	12071618
Scope 2 (location-based)	Wed 01 Jul 2009 - Wed 30 Jun 2010	224024
Scope 2 (market-based)	Wed 01 Jul 2009 - Wed 30 Jun 2010	224024

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
Australia - National Greenhouse and Energy Reporting Act

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	Other: NGER (Measurement) Technical Guidelines July 2013
CH4	Other: NGER (Measurement) Technical Guidelines July 2013
N2O	Other: NGER (Measurement) Technical Guidelines July 2013

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	0.05133	metric tonnes CO2e per GJ	NGER (Measurement) Technical Guidelines July 2013 - Table 2.3.2A
Other: Natural gas (light duty vehicles)	0.057	metric tonnes CO2e per GJ	NGER (Measurement) Technical Guidelines July 2013 - Table 2.3.2B
Other: Petroleum based oils (other than petroleum based oil used as fuel)	1.0825	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A
Other: Petroleum based greases (not combusted)	1.0825	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A
Other: Kerosene (other than for use as fuel in an aircraft)	2.5168	kg CO2e per liter	Derived factor calculated based on NGER (Measurement) Determination July 2014 – Division 2.4.3 Method 2—emissions of carbon dioxide from liquid fuels other than petroleum based oils or greases
Other: Kerosene for use as fuel in an aircraft	2.5168	kg CO2e per liter	Derived factor calculated based on NGER (Measurement) Determination July 2014 – Division 2.4.3 Method 2—emissions of carbon dioxide from liquid fuels other than petroleum based oils or greases
Other: Gasoline (Stationary)	2.29482	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A
Other: Gasoline (Transport)	2.38032	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2B
Other: Diesel oil (Stationary)	2.6827	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A
Other: Diesel oil (Transport)	2.69814	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2B
Other: iquefied petroleum gas (Stationary)	1.53943	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: iquefied petroleum gas (Transport)	1.59296	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2B
Other: Solvents if mineral turpentine or white spirits	2.38117	kg CO2e per liter	NGER (Measurement) Technical Guidelines July 2013 - Table 2.4.2A
Other: Purchased electricity (ACT, NSW)	860	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (VIC)	1180	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (QLD)	810	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (SA)	610	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (WA)	760	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (TAS)	200	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Purchased electricity (NT)	680	kg CO2e per MWh	NGER (Measurement) Technical Guidelines July 2013 - Table 7.2
Other: Generated electricity (NSW) – dedicated trigeneration plant	530	kg CO2e per MWh	Provided by supplier

Further Information

In response to CC7.1 Scope 2 (market-based), the location-based result has been used as a proxy since a market-based result cannot be calculated.

Page: CC8. Emissions Data - (1 Jul 2014 - 30 Jun 2015)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

11707405

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?
Yes

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
174918	157342	Qantas use electricity generated by a tri-generation system at their Mascot facilities. The market based Scope 2 emission figure has been calculated using a supplier specific emission factor for the tri-generation system and state based grid average emission factors for all other electricity use.

CC8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Other: Accrual methods	Carbon emissions from aviation are directly related to aircraft fuel consumption. Accrual data is only used where invoices have not been received from suppliers. In these cases accrual is estimated using known aircraft fuel burn rates.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Other: Accrual methods	Estimation of data is required when the timeliness of data is required. It is common for utility invoices to be supplied for a three month period. The accrual period is regularly reviewed for accuracy against actual data once available.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Other: Accrual methods	Estimation of data is required when the timeliness of data is required. It is common for utility invoices to be supplied for a three month period. The accrual period is regularly reviewed for accuracy against actual data once available.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC8.6a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report –Passenger (Section 1 – pages 3-4)	ASAE3000	85
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC8.6a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report –Freight (Section 1 – pages 3-4)	ASAE3000	15

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Market-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC8.7a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report - Passenger (Section 1 – pages 3-4)	ASAE3000	94
Market-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC8.7a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report –Freight (Section 1 – pages 3-4)	ASAE3000	6

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Product footprint verification	The Qantas Group carbon footprint is assessed as part of the National Carbon Offset Standard (NCOS) verification of the Qantas Group Fly Carbon Neutral program.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jul 2014 - 30 Jun 2015)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Australia	4457930
Rest of world	7249475

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	11585896
CH4	1904
N2O	119606

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jul 2014 - 30 Jun 2015)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Australia	173402	155826	138199	82819
New Zealand	1385	1385	10366	0
United Kingdom	132	132	285	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
ACT	2121	2121
NSW	78597	61021
NT	613	613
QLD	30993	30993
SA	1330	1330
TAS	278	278
VIC	49933	49933
WA	9537	9537
NZ	1385	1385
UK	132	132

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 30% but less than or equal to 35%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	19018
Steam	0
Cooling	10542

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year
47586319

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Jet kerosene	47387772
Diesel/Gas oil	77288
Natural gas	82680
Other: Disel oil stationary	575
White spirit/ SBP	4860
Liquefied petroleum gas (LPG)	6566
Other: Petroleum based oils	12998
Other: Petroleum based greases	2277
Motor gasoline	3559
Other: Natural Gas (transport)	5153
Other: Liquid Petroleum Gas(transport)	119
Kerosene	2472

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
Off-grid energy consumption from an onsite installation or through a direct line to an off-site generator	82819	Qantas Mascot campus receives electricity, heating and cooling from an onsite trigeneration system which is owned and operated by a third party. No instruments are created from this system.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
202110	202110	0	0	0	Qantas purchase all of its electricity. A portion of this electricity is produced on site using a tri-generation system by a third party.

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	2.2	Decrease	Qantas implemented emission reduction projects, increased its purchase of renewable energy from the tri-generation system and updated its fleet with newer more efficient aircraft. These projects combined resulted in savings of 266,042 t CO2-e. Based on total emissions in FY14 of 12,122,325 t C02-e –these savings represent an emission reduction of 2.2%.
Divestment	0	No change	Qantas had no divestments in 2015.
Acquisitions	0	No change	The Qantas Group had no acquisitions of a controlled entity during 2014/2015. This does not represent the acquisition of new aircraft.

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Mergers	0	No change	The Qantas Group had no mergers during 2014/2015.
Change in output	0	No change	No change in output.
Change in methodology	0	No change	There was no change in the methodology used to calculate emissions in 2014/15.
Change in boundary	0	No change	The increased change in boundary for 2014/15 is below the reporting threshold (emissions data for Qantas' UK and NZ operations have been included for the first time. These operations represent a small portion of Qantas total emissions, 0.001%).
Change in physical operating conditions	0	No change	The Qantas Group operates in a number of destinations. Changes to destinations are dynamic and driven by commercial decisions. However, the physical operating conditions remain the same disregarding to what destinations we fly. From an emissions perspective, emission changes would derive from change in the frequency, length of the flights, aircraft type and fuel requirements for these; which would be most appropriately measured under the "change in output" reason.
Unidentified	0	No change	No unidentified factors.
Other	0	No change	No other factors.

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?
Market-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.00077	metric tonnes CO2e	15816000000	Market-based	2.12	Decrease	Revenues increased, and emissions decreased resulting in an overall decrease in the emissions intensity as a function of revenue.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
414	metric tonnes CO2e	full time equivalent (FTE) employee	28622	Market-based	5.5	Increase	The Qantas Group's FTEs decreased by 7 per cent primarily driven by transformation initiatives in Qantas.
0.098	metric tonnes CO2e	Other: Other:100 Revenue tonne km	121022163	Market-based	3.5	Decrease	Emissions decreased, but revenue tonne kilometres increased creating a decrease in emissions intensity/100 RTK.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, but we anticipate doing so in the next 2 years

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Our strategy is based on continual improvement of the efficiency of the Group’s operations by improving energy efficiency through fleet and operational optimization, as well as integration of carbon compliance at the most relevant levels of the business to improve the speed and veracity of Qantas carbon compliance.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Biomass energy	2759-119527828-119538237-VCU-008-MER-TH-4-403-01012010-31122010-0	VCS (Verified Carbon Standard)	10410	10410	Yes	Voluntary Offsetting
Credit purchase	Forests	3092-136944214-136945254-VCU-006-MER-PR-14-868-01012010-31122012-0	VCS (Verified Carbon Standard)	1041	1041	Yes	Voluntary Offsetting
Credit purchase	Forests	2657-116654816-116656550-VCU-016-MER-AU-14-587-01032011-29022012-0	VCS (Verified Carbon Standard)	1735	1735	Yes	Voluntary Offsetting
Credit purchase	Energy efficiency: industry	2285-95261616-95264044-VCU-008-MER-KH-3-181-01012011-31122011-0	VCS (Verified Carbon Standard)	2429	2429	Yes	Voluntary Offsetting
Credit purchase	Forests	3641-160366361-160373994-VCU-016-APX-PG-14-1122-22052009-31122012-0	VCS (Verified Carbon Standard)	7634	7634	Yes	Voluntary Offsetting
Credit purchase	Wind	3633-160285937-160297389-VCU-010-APX-CN-1-970-30062011-31122011-0	VCS (Verified Carbon Standard)	11453	11453	Yes	Voluntary Offsetting
Credit purchase	Wind	3633-160297390-160306860-VCU-010-APX-CN-1-970-30062011-31122011-0	VCS (Verified Carbon Standard)	9471	9471	Yes	Voluntary Offsetting
Credit purchase	Biomass energy	2759-119538239-119547729-VCU-008-MER-TH-4-403-01012010-31122010-0	VCS (Verified Carbon Standard)	9491	9491	Yes	Voluntary Offsetting

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Wind	3634-160306861-160307830-VCU-010-APX-CN-1-970-01012012-30062012-0	VCS (Verified Carbon Standard)	970	970	Yes	Voluntary Offsetting
Credit purchase	Biomass energy	2759-119538238-119538238-VCU-008-MER-TH-4-403-01012010-31122010-0	VCS (Verified Carbon Standard)	1	1	Yes	Voluntary Offsetting
Credit purchase	Forests	3813-165719383-165726343-VCU-016-APX-PG-14-1122-22052009-31122012-0	VCS (Verified Carbon Standard)	6961	6961	Yes	Voluntary Offsetting
Credit purchase	Energy efficiency: industry	2285-95264150-95266364-VCU-008-MER-KH-3-181-01012011-31122011-0	VCS (Verified Carbon Standard)	2215	2215	Yes	Voluntary Offsetting
Credit purchase	Forests	2646-115070017-115071598-VCU-016-MER-AU-14-641-01072011-15042012-0	VCS (Verified Carbon Standard)	1582	1582	Yes	Voluntary Offsetting
Credit purchase	Agriculture	3352-150154132-150154531-VCU-006-MER-PE-14-868-01012010-31122012-0	VCS (Verified Carbon Standard)	400	400	Yes	Voluntary Offsetting
Credit purchase	Agriculture	3563-158189499-158189790-VCU-006-MER-PR-14-868-01012010-31122012-0	VCS (Verified Carbon Standard)	292	292	Yes	Voluntary Offsetting
Credit purchase	Agriculture	3092-136945255-136945511-VCU-006-MER-PE-14-868-01012010-31122012-0	VCS (Verified Carbon Standard)	257	257	Yes	Voluntary Offsetting
Credit purchase	Wind	Serial Numbers: 514596712 - 514619082	CDM (Clean Development Mechanism)	22370	22370	Yes	Voluntary Offsetting
Credit purchase	Biomass energy	2759-119562152-119576796-VCU-008-MER-TH-4-403-01012010-31122010-0	VCS (Verified Carbon Standard)	14645	14645	Yes	Voluntary Offsetting
Credit purchase	Biomass energy	2759-119547730-119553421-VCU-008-MER-TH-4-403-01012010-31122010-0	VCS (Verified Carbon Standard)	5692	5692	Yes	Voluntary Offsetting

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Forests	4111-175132218-175147131-VCU-016-APX-PG-14-1122-22052009-31122-12-0	VCS (Verified Carbon Standard)	14914	14914	Yes	Voluntary Offsetting
Credit purchase	Forests	2657-116656726-116656933-VCU-016-MER-AU-14-587-01032011-29022012-0	VCS (Verified Carbon Standard)	208	208	Yes	Voluntary Offsetting
Credit purchase	Forests	2646-115079401-115079850-VCU0016-MER-AU-14-641-01072011-15042012-0	VCS (Verified Carbon Standard)	450	450	Yes	Voluntary Offsetting
Credit purchase	Forests	2657-116650403-116650731-VCU-016-MER-AU-14-587-01032011-29022012-0	VCS (Verified Carbon Standard)	329	329	Yes	Voluntary Offsetting
Credit purchase	Forests	2646-115072899-115073516-VCU-016-MER-AU-14-641-01072011-15042012-0	VCS (Verified Carbon Standard)	618	618	Yes	Voluntary Offsetting
Credit purchase	Forests	3291-148261678-148263461-VCU-016-MER-AU-14-641-16042012-15042013-0	VCS (Verified Carbon Standard)	1784	1784	Yes	Voluntary Offsetting
Credit purchase	Energy efficiency: industry	1462-61850101-61853100-VCU-008-CDC-KH-3-181-01012010-31122010-0	VCS (Verified Carbon Standard)	3000	3000	Yes	Voluntary Offsetting
Credit purchase	Energy efficiency: industry	2285-95267487-95269231-VCU-008-MER-KH-3-181-01012011-31122011-0	VCS (Verified Carbon Standard)	1745	1745	Yes	Voluntary Offsetting
Credit purchase	Agriculture	3352-150215679-15017712-VCU-006-MER-PE-14-868-01012010-31122012-0	VCS (Verified Carbon Standard)	2034	2034	Yes	Voluntary Offsetting

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided	0		0.00%	Given the size of the Qantas Groups' scope 1 emissions footprint are immaterial.
Capital goods	Relevant, calculated	31428	National Carbon Offset Standard (NCOS) methodology using a life cycle approach to determine Qantas emissions on a passenger basis	100.00%	Approach followed to quantified the scope 3 emissions as a result of the construction of the Qantas Group's entire fleet during the financial year 2014/15 (taking into account changes of fleet due to retirements or purchases of planes). Embodied energy for aircraft creation based on 38 tonnes CO2e / tonnes of aluminium. This approach takes the conservative position of assuming all planes are fully constructed in France, but 100% of the aluminium is sourced from China. This is divided by 20 (20 years being the average life of fleet).
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	789912	National Greenhouse Accounts (NGA) Factors July 2013 - Table 37, 40 and 41.	100.00%	The scope 3 emissions as a result of the total fuel and energy related activities by the Qantas Group during the financial year 2014/15 were calculated using the NGA scope 3 emissions factors.
Upstream transportation and distribution	Not relevant, explanation provided				As an integrated transport business, all material upstream transportation and distribution emissions are captured in Scope 1 and 2 emissions.
Waste generated in operations	Relevant, calculated	28298	National Carbon Offset Standard (NCOS) methodology. Food related waste: National Greenhouse Accounts Factors - July 2014 - Table 42: Waste mix methane conversion factors. Commercial and industrial waste:	100.00%	Generation of waste is monitored at a business area level, where all waste originated from the Catering business was deemed "food" waste therefore subject to the "food" waste emission factor. All waste generated

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			National Greenhouse Accounts Factors - July 2014 - Table 44: Waste emission factors for total waste disposed to landfill by broad waste stream category.		from the rest of the business was deemed "commercial and industrial waste" to which the corresponding emission factor was applied.
Business travel	Relevant, calculated	11365	The emissions associated with ground transport and accommodation have been calculated using an estimate of electricity use per night (71 kWh) multiplied by 1.34 tonne CO2-e/MWh and the total number of nights accommodation used for business travel by the Group. Taxi data was estimated based on taxi expenditure - average cost/km and the Victorian EPA's methodology from the EPA Greenhouse Gas Inventory Management Plan 2010-11. Taxi emissions = (distance travelled by taxis) x (average fuel (LPG) consumption by taxis per distance travelled) x (LPG emission factor).	100.00%	Accommodation and ground transport only have been calculated as the majority of business travel for Qantas Group employees is on Qantas Group aircraft and the emissions for these flights area already accounted for in Scope 1 emissions.
Employee commuting	Relevant, calculated	45890	GHG protocol for emissions factors; Australian Bureau of Statistics for transport usage. Assumed average car or bus journey 20km and average train journey 10km.	100.00%	
Upstream leased assets	Not relevant, explanation provided				All emissions as a result of leased aircraft are included as part of Scope 1 emissions.
Downstream transportation and distribution	Not relevant, explanation provided				As an integrated transport company, all downstream transportation and distribution activities such as our ground freight activities are already accounted for under our Scope 1 emissions.
Processing of sold products	Not relevant, explanation provided				The Qantas group sold products are in the form of airfares and resulting emissions are captured as part of the Scope 1 emissions
Use of sold products	Not relevant, explanation provided				The Qantas Group sold products are the form of airfares and resulting emissions are captured as part of the Scope 1 emissions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
End of life treatment of sold products	Not relevant, explanation provided				The Qantas Group sold products are in the form of airfares and resulting emissions are captured as part of the scope 1 emissions.
Downstream leased assets	Not relevant, explanation provided				The Qantas Group has no downstream leased assets
Franchises	Not relevant, explanation provided				The Qantas Group has no franchises
Investments	Relevant, calculated	283230	National Carbon Offset Standard (NCOS): The Qantas Group holds 49 per cent of Jetstar Asia based in Singapore (managed by Newstar Holdings, majority owned by Singapore company Westbrook Investments; 51 per cent). Scope 1 emissions from Jetstar Asia, which has a 49 per cent minority shareholding	100.00%	Scope 1 emissions associated with Jetstar Asia operations. Note that the relevant emissions have been pro – rated down to represent Qantas 49% share holding.
Other (upstream)	Not relevant, explanation provided				As an integrated transport business, all material upstream transportation and distribution emissions are captured in Scope 1 and 2 emissions.
Other (downstream)	Not relevant, explanation provided				As an integrated transport business, all material upstream transportation and distribution emissions are captured in Scope 1 and 2 emissions.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC14.2a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report - Passenger(Section 1 – pages 3-4)	ASAE3000	84
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/41/15341/Climate Change 2016/Shared Documents/Attachments/CC14.2a/NCOS.pdf	National Carbon Offset Standard Carbon Neutral Program Independent Audit Report - Passenger(Section 1 – pages 3-4)	ASAE3000	16

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Capital goods	Change in methodology	367	Increase	The new methodology for calculating the embodied energy of the aircraft assumed all aluminium was produced in China rather than France. The emission factor for China is higher than for France and this resulted in an increase in the estimated emissions.

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	18	Decrease	Emission reduction activities including weight reduction projects, improved loading factors and the use of low carbon electricity have resulted in a decrease in the amount of fuel used and the resulting Scope 3 emissions.
Waste generated in operations	Emissions reduction activities	10	Decrease	The Qantas Group has waste reduction programs in place to reduce waste to landfill and increase recycling.
Business travel	Change in methodology	100	Increase	The Qantas Group has reported Scope 3 emissions associated with accommodation and ground transport for the first time this year. In the past, Qantas Group only commented on air travel as these emissions are reported under Scope 1.
Employee commuting	Change in output	7	Decrease	Emissions from employee commuting decreased this year as the number of FTE decreased by 7%.
Investments	Change in methodology	39	Decrease	Only 49% of Scope 1 emissions from Jetstar Asia have been reported this year to represent Qantas minority investment in the airline. In last years' submission – all Scope 1 emissions from jet fuel were reported as Qantas Scope 3 emissions.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

The Qantas Group engages with our customers through our carbon offset program Fly Carbon Neutral. This program enables individual and business customers to offset their share of flight emissions each time they fly with the Qantas Group. This program was launched in 2007 and since then it has offset over 2.0 million tonnes of carbon. This program has historically had a focus on retail customers, however during Financial Year 2013/2014 the Group shifted this focus to prioritising engagement with our corporate customers. Through this engagement we are aiming to increase offsetting amongst our corporate customer base as it represents a significant offsetting opportunity which will deliver multiple environmental, social and economic benefits. Success will be measured through number of corporate offsetting contracts secured and the volume of offsets purchased.

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Tino La Spina	Chief Financial Officer	Chief Financial Officer (CFO)

Further Information