NCOS CARBON NEUTRAL PROGRAM

PUBLIC DISCLOSURE SUMMARY

QANTAS AIRWAYS LIMITED

1. ORGANISATION AND PRODUCT INFORMATION

Organisation Name: Qantas Airways Limited (Qantas Group)

Disclosure Period: From: 1 July 2011 to: 30 June 2012

Date of most recent verification: September 2012

Carbon Neutral Disclosure Type:

a. Organisation ☐
b. Product ☒

Product Overview (delete if not applicable):

Product Name: Qantas Group Carbon Offset Program

Product Overview

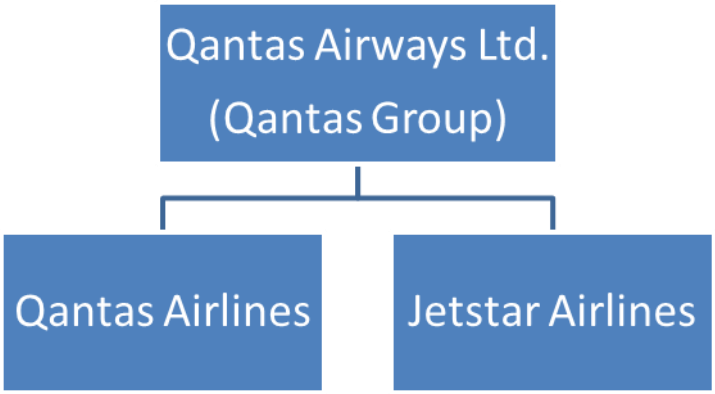
Product 1: Qantas Airlines Carbon Offset Program

Product 2: Jetstar Airlines Carbon Offset Program

Brief Description

The Qantas Group is a leading airline group committed to environmental sustainability.

The Qantas Group (Qantas Airlines and Jetstar Airlines) launched voluntary carbon offset programs in September 2007. These programs give customers the option to fly carbon neutral whenever they book their flights through qantas.com.au and jetstar.com.au or at any time via qantas.com.au/flycarbonneutral



To lead the way and demonstrate a commitment to this initiative, the Qantas Group carbon offsets all its employee staff 'duty travel' flights and ground vehicle tailpipe emissions and has done so since the launch of the program.

The Qantas Group voluntarily pays for all administrative costs associated with the program so that 100% off all customer contributions can be passed on to purchase Australian Government NCOS eligible offset units.

The Qantas Group does not directly profit from this program.

We seek to have the world's best airline carbon offset program in order to benefit all stakeholders, and are in a process of continuous improvement in this regard.

We welcome feedback: environment@qantas.com.au

For more information visit qantas.com/environment

Join Us. We're here for the long haul.

2. PRODUCT DESCRIPTION

The provision of carbon neutral passenger services by Qantas and Jetstar.

To accurately calculate the volume of emissions of a passenger flying a sector (from one airport to another), both Qantas Airlines and Jetstar Airlines (consisting of Jetstar Australia, Jetstar New Zealand, Jetstar Asia and Jetstar Pacific, but not Jetstar Japan at this time) have undertaken comprehensive life cycle studies of energy usage in flight, such as jet fuel, and on the ground – in catering centres, engineering facilities, airport terminals, offices and our ground transport vehicles. The assessments also include the 'embodied energy' during the manufacture of the aircraft flown by the airlines.

The Life Cycle Assessments (LCAs) are updated each financial year. Jetstar have selected emission factors that are geographically specific to the emission sources accounted for in the product LCAs. There are no geographic limitations to the scope of the LCA as Qantas Airlines, Jetstar Airlines and codeshare partners operate globally. The goal of each LCA is to assess the global warming potential attributable to passengers/freight-tonnes on a Qantas Airlines, Jetstar Airlines or codeshare flight in sufficient detail to support an emissions footprint for carbon neutral certification under the NCOS-CN program.

Using data over 12 months and 'full fuel cycle' emissions factors published by the Australian Government (National Greenhouse Accounts), the emissions released by aircraft on each flight sector are divided between passengers and freight by weight, are added to the related emissions from ground activities and then divided by the number of passengers/freight-tonnes carried on the sector. This method of calculation provides an estimation of the share of emissions attributable to each passenger on a flight sector.

For customers flying on a Qantas Airlines and Jetstar Airlines codeshare flight, emissions are calculated using the average emissions per kilometre, based on an average of all flights across the Qantas Airlines and Jetstar Airlines networks respectively.

3. PURCHASE OF GREENPOWER™ OR NCOS CARBON NEUTRAL PRODUCTS AND/OR CANCELLATION OF GREENPOWER™ ELIGIBLE RENEWABLE ENERGY CERTIFICATES (RECS)

Not applicable.

4. TOTAL CARBON FOOTPRINT OF PRODUCT SOLD

The total product sold is as follows:

Financial Year 2012 – Full Year Results	**Tonnes C02-e**
Qantas, Jetstar and the Group Commitment	**239,585**

The total product sold is inclusive of Qantas Group's commitment to offset the tailgate emissions of Qantas Group's ground fleet and all duty travel performed by Qantas employees.

5. EMISSION REDUCTION MEASURES

Emissions Reduction Strategy

The Qantas Group is focused on reducing its carbon emissions. The Group's comprehensive climate change strategy focuses on improving fuel efficiency through the fleet renewal program, advanced navigational capability, a dedicated fuel optimisation program and commercialising a low-carbon sustainable biofuel for aviation.

Short term Strategy

The Qantas Group has set a fuel efficiency target of 16.5% by 2020 (on 2005 baseline) and is on track to achieve an average fuel efficiency improvement of 1.5% per annum to 2020 which is aligned with the goal set by International Air Transport Association (IATA) for the aviation industry.

Long term Strategy

As a member of IATA, the Qantas Group has endorsed the IATA's stated vision to achieve "carbon neutral growth" by 2020 and to see the airline industry operating with a 50% reduction in annual net emissions by 2050 (on 2005 baseline).

The Qantas Group participates in the Carbon Disclosure Project (CDP), an independent not-for-profit organization working to drive greenhouse gas emissions reduction and sustainable water by surveying emissions performance of major companies across the globe. The three opportunities in the table below are sourced from Qantas' 2012 CDP response.

Emission Reduction Measures
Fleet Renewal Fleet renewal is the foundation for the Qantas Group's fuel optimisation program. Similar to typical new cars compared to old cars, new generation aircraft are more fuel efficient than old generation aircraft. The Qantas Group has $11 billion committed in highly fuel-efficient next generation aircraft (at list prices), such as the Airbus A380 and Boeing 787. The Qantas Group has ten A380s in service, with a further 10 to come, and 50 B787s on order. During the year, the Group brought 24 new aircraft into service: • Qantas and QantasLink – four A380s, one A330-200, five B737-800s, one Bombardier Q400s • Jetstar, including Jetstar Asia – two A330-200, ten A320-200s • The Group retired three aircraft – one B747-400 and two B737-300s. More than 235 new aircraft are planned for delivery over the next twelve years. This will enable the retirement of many older aircraft with some types being progressively phased out.
Mobile PCA Units Reduction in usage of Auxiliary Power Units (APUs) through connecting aircraft to Ground Power Units

(GPUs) that use more efficient and less expensive alternative energy sources to aircraft fuel.
Aircraft Weight reduction Optimising food, drink & catering equipment; carrying lighter equipment on-board; replacing freight containers with lightweight options and improving aircraft weight estimates.
Flight Planning Optimisation Improving flight planning accuracy to reduce inefficient flight paths, including system and technology optimisation, flight plan delivery and zero fuel weight optimisation, and fuel carriage optimisation.
Advanced Navigational Technology Continued implementation of advanced navigational on-board technology, enabling procedures such as Required Navigation Performance (RNP), Automatic Dependent Surveillance -- Broadcast (ADS-B), Dynamic Aircraft Route Planning (DARP), tailored arrivals, Constant Descent Arrivals (CDAs) and Electronic Flight Bag (EFB), as well as cruise flight level optimisation.

6. OFFSET PURCHASE / CANCELLATION

Quarter For Offset	Offset Type	Date Retired	Project Name	Registry	Serial Numbers	Offset Quantity (Tonnes CO_2-e)
Q1	VCS-VCU	30/01/2012	Coc Dam Hydropower Project	Markit	1299-56325571-56326170-VCU-010-MER-VN-1-580-10062008-31122008-0	600
Q1	VCS-VCU	30/01/2012	Coc Dam Hydropower Project	Markit	1300-56336810-56339095-VCU-010-MER-VN-1-580-01012009-31122009-0	2,286
Q1	VCS-VCU	30/01/2012	Protection of a Tasmanian native forest – Project 1 – REDD Forests Pilot	Markit	1614-67434685-67435934-VCU-006-MER-AU-14-605-13032009-12032011-0	1,250
Q1	VCS-VCU	30/01/2012	Protection of a Tasmanian native forest – Project 1 – REDD Forests Pilot	Markit	1614-67439794-67440354-VCU-006-MER-AU-14-605-1303009-12032011-0	561
Q1	VCS-VCU	30/01/2012	Protection of a Tasmanian native forest – Project 1 – REDD Forests Pilot	Markit	1614-67442199-67444702-VCU-006-MER-AU-14-605-13032009-12032011-0	2,504
Q1	VCS-VCU	30/01/2012	Redd Forests Grouped Project: Protection of Tasmanian Native Rainforest	Markit	1613-67401677-67401950-VCU-006-MER-AU-14-641-01042010-30062011-0	274

Q1	VCS-VCU	30/01/2012	Siam Cement Biomass Project	Markit	1088-48145469-48145469-48145987-VCU-008-MER-TH-4-403-01012009-30062009-0	519
Q1	VCS-VCU	30/01/2012	Siam Cement Biomass Project	Markit	1401-60637807-60644209-VCU-008-MER-TH-4-403-01012009-30062009-0	6,403
Q1	VCS-VCU	30/01/2012	Siam Cement Biomass Project	Markit	1452-61662411-61670878-VCU-008-MER-TH-4-403-01012009-30062009-0	8,468
Q1	VCS-VCU	31/01/2012	Fuel-Wood Saving with Improved Cookstoves In Cambodia	APX	1462-61941642-61944573-VCU-008-CDC-KH-3-181-01012010-31122010-0	2,932
Q1	VCS-VCU	31/01/2012	Fuel-Wood Saving with Improved Cookstoves In Cambodia	APX	1462-62047280-62052042-VCU-008-CDC-KH-3-181-01012010-31122010-0	4,763
Q1	VCS-VCU	31/01/2012	Protection of a Tasmanian native forest – Project 1 – REDD Forests Pilot	Markit	1614-67440355-67440574-VCU-006-MER-AU-14-605-13032009-12032011-0	220
Q1	VCS-VCU	31/01/2012	Xinjiang Dabancheng Sanchang Phase ¢ó Wind Power Project	APX	879-41848430-41849429-VCU-003-APX-CN-1-470-01012009-31122009-0	1,000

Q1	VCS-VCU	31/01/2012	Xinjiang Dabancheng Sanchang Phase ¢ó Wind Power Project	APX	879-41946807-41955424-VCU-003-APX-CN-1-470-01012009-31122009-0	8,618
Q1	VCS-VCU	01/02/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75913446-75934450-VCU-001-MER-CN-1-697-01012010-25112010-0	21,005
Q2	VCS-VCU	28/06/2012	Fuel-Wood Saving with Improved Cookstoves In Cambodia	APX	1462-61945618-61951494-VCU-008-CDC-KH-3-181-01012010-31122010-0	5,877
Q2	VCS-VCU	28/06/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75934451-75942231-VCU-001-MER-CN-1-697-01012010-25112010-0	7,781
Q2	VCS-VCU	28/06/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75953353-75975336-VCU-001-MER-CN-1-697-01012010-25112010-0	21,984
Q2	VCS-VCU	28/06/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75975337-75979309-VCU-001-MER-CN-697-01012010-25112010-0	3,973
Q2	VCS-VCU	28/06/2012	Nam Ngan Hydropower Project	Markit	2174-88253977-88259853-VCU-009-MER-VN-1-811-01012010-12122010-0	5,877

Q2	VCS-VCU	28/06/2012	Protection of a Tasmanian Native Rainforest (Project 3: Peter Downie)	Markit	1610-67296385-6700303-VCU-006-MER-AU-14-587-01032010-28022011-0	3,919
Q2	VCS-VCU	28/06/2012	Siam Cement Biomass Project	Markit	1206-53753823-53754930-VCU-008-MER-TH-4-403-01012009-30062009-0	1,108
Q2	VCS-VCU	28/06/2012	Siam Cement Biomass Project	Markit	1696-69941205-69946736-VCU-008-MER-TH-4-403-01012009-30062009-0	5,532
Q2	VCS-VCU	28/06/2012	Siam Cement Biomass Project	Markit	1931-77925826-77925939-VCU-008-MER-TH-4-403-01012010-31122010-0	114
Q2	VCS-VCU	28/06/2012	Siam Cement Biomass Project	Markit	2021-81778065-81783064-VC U-008-MER-TH-4-403-01012010-31122010-0	5,000
Q3	VCS-VCU	12/10/2012	Fuel-Wood Saving with Improved Cookstoves In Cambodia	Markit	1462-61762225-61768799-VCU-008-CDC-KH-3-181-01012010-31122010-0	6,575
Q3	VCS-VCU	12/10/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75942232-75943445-VCU-001-MER-CN-1-697-01012010-25112010-0	1,214

Q3	VCS-VCU	12/10/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75979310-75983352-VCU-001-MER-CN-1-697-01012010-25112010-0	4,043
Q3	VCS-VCU	12/10/2012	Protection of a Tasmanian Native Rainforest (Project 3: Peter Downie)	Markit	1201-56355554-56357553-VCU-006-MER-AU-14-587-01032010-28022011-0	2,000
Q3	VCS-VCU	12/10/2012	Protection of a Tasmanian Native Rainforest (Project 3: Peter Downie)	Markit	1636-68235367-68237750-VCU-006-MER-AU-14-587-01032010-28022011-0	2,384
Q3	VCS-VCU	12/10/2012	Siam Cement Biomass Project	Markit	2466-105866646-105879795-VCU-008-MER-TH-4-403-01012010-31122010-0	13,150
Q3	VCS-VCU	12/10/2012	Coc Dam Hydropower Project	Markit	1300-56348740-56339776-VCU-010-MER-VN-1-580-01012009-31122009-0	37
Q3	VCS-VCU	12/10/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-75983353-76004201-VCU-001-MER-CN-1-697-01012010-25112010-0	20,849
Q3	VCS-VCU	12/10/2012	Nam Ngan Hydropower Project	Markit	2174-88259977-88266514-VCU-009-MER-VN-1-811-01012010-12122010-0	6,538

Q4	VCS-VCU	14/10/2012	Fuel-Wood Saving with Improved Cookstoves In Cambodia	Markit	1462-61768800-61774429-VCU-008-CDC-KH-3-181-01012010-31122010-0	5,630
Q4	VCS-VCU	14/10/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-76004202-76013352-VCU-001-MER-CN-1-697-01012010-25112010-0	9,151
Q4	VCS-VCU	14/10/2012	Heibei Kangbao Sanxiatian Wind Farm Project	Markit	1835-76013353-76038091-VCU-001-MER-CN-1-697-01012010-25112010-0	24,739
Q4	VCS-VCU	14/10/2012	Nam Ngan Hydropower Project	Markit	2174-88259854-88259976-VCU-009-MER-VN-1-811-01012010-12122010-0	123
Q4	VCS-VCU	14/10/2012	Nam Ngan Hydropower Project	Markit	2174-88266515-88272021-VCU-009-MER-VN-1-811-01012010-12122010-0	5,507
Q4	VCS-VCU	14/10/2012	Redd Forests Grouped Project: Protection of Tasmanian Native Rainforest	Markit	1613-67370148-67371849-VCU-006-MER-AU-14-641-01042010-30062011-0	1,702
Q4	VCS-VCU	14/10/2012	Redd Forests Grouped Project: Protection of Tasmanian Native Rainforest	Markit	1613-67376850-673777093-VCU-006-MER-AU-14-641-01042010-3006211-0	244

Q4	VCS-VCU	14/10/2012	Redd Forests Grouped Project: Protection of Tasmanian Native Rainforest	Markit	1613-67432603-67434473-VCU-006-MER-AU-14-641-01042010-30062011-0	1,871
Q4	VCS-VCU	14/10/2012	Siam Cement Biomass Project	Markit	1913-77926826-77930825-VCU-008-MER-TH-4-403-01012010-31122010-0	4,000
Q4	VCS-VCU	14/10/2012	Siam Cement Biomass Project	Markit	2466-105879796-105887055-VCU-008-MER-TH-4-403-01012010-34122010-0	7,260

How we choose our FY2012 carbon offsets

Each of our FY12 carbon offset projects has been screened through a multi-stage 'filter' selection process using standards that have been independently developed with the aim to ensure that Qantas and our customers can be confident in their integrity.

Our Carbon Offset Program Commitment

Our commitment is to direct the customer's contribution towards funding carbon offset projects that are deemed to:

- Be *additional* to business as usual
- *Permanently* reduce or avoid greenhouse gas emissions
- Not be *double-counted* or used to by Qantas to reduce its liability under any carbon compliance regime
- Contribute to sustainable development and provide social *co-benefits* wherever possible
- Be *independently verified* against a transparent high quality internationally recognised standard
- Have a *real time impact* by closely matching the timing of emissions reduction to the actual emissions you're offsetting

Current Offset Projects

Outlined in the table below are some of the FY2012 carbon offset projects that Qantas Group carbon offset program funds helped enable:

Project Name	Project Description
Siam Cement Biomass Project	• Introduces renewable biomass as an alternative to fossil-fuels • Improves air quality by reducing fossil-fuel processing and extraction • Meets the Australian Government's National Carbon Offset Standard • Stimulates local job economy
Cook Stoves in Cambodia Reduce Greenhouse Gas Emissions	• Reduces carbon emissions by introducing more fuel efficient cook stoves • Combats deforestation with new stoves that use 22% less fuel wood • Meets the Australian Government's National Carbon Offset Standard • Generates local jobs by manufacturing in Cambodia
Mobuya 'Run-of-River' Hydropower in oSulawesi, Indonesia	• Introduces a lower-emissions electricity source to the grid • Reduces reliance on fossil-fuel based electricity • Meets the Australian Government's National Carbon Offset Standard • Avoids the negative environmental and social impacts associated with large dams
Coc Dam Hydropower in Lao Cai province, Vietnam	• Avoids GHG emissions by introducing lower emissions electricity sources to the grid • Reduces air pollution by requiring the burning of fewer fossil fuels • Reduces environmental impacts of fossil fuel extraction and processing • Creates local employment and skills development • Meets the Australian Government's National Carbon Offset Standard
Xinjian Tanfeng Wind Power in China	• Reduces carbon emissions by reducing reliance on fossil-fuel derived power • Introduces a renewable source of energy • Meets the Australian Government's National Carbon Offset Standard • Improves local air quality by reducing reliance on coal

More information regarding current carbon offset projects can be found at

www.qantas.com/flycarbonneutral

7. OTHER INFORMATION

For more information please visit www.qantas.com/environment

Or contact us at environment@qantas.com.au