

# National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



An Australian Government Initiative



# 1. Organisation and Product Information

Table 1: Organisation and Product Information.

Organisation Name	Qantas Airways Limited (Qantas Group)	
Name of the subject(s) of certification	Qantas Carbon Offset Program (Fly Carbon Neutral Program)	
Type of certification (tick all applicable)	<input type="checkbox"/> Organisation <input type="checkbox"/> Part of organisation	<input checked="" type="checkbox"/> Product/service <input type="checkbox"/> Event
Reporting year period	From 1/07/2012	To 30/06/2013
Emissions in this reporting year	13,671,015 t CO <sub>2-e</sub>	
Base year period <sup>1</sup>	From 1/07/2012	To 30/06/2013
Emissions in the base year	13,671,015 t CO <sub>2-e</sub>	

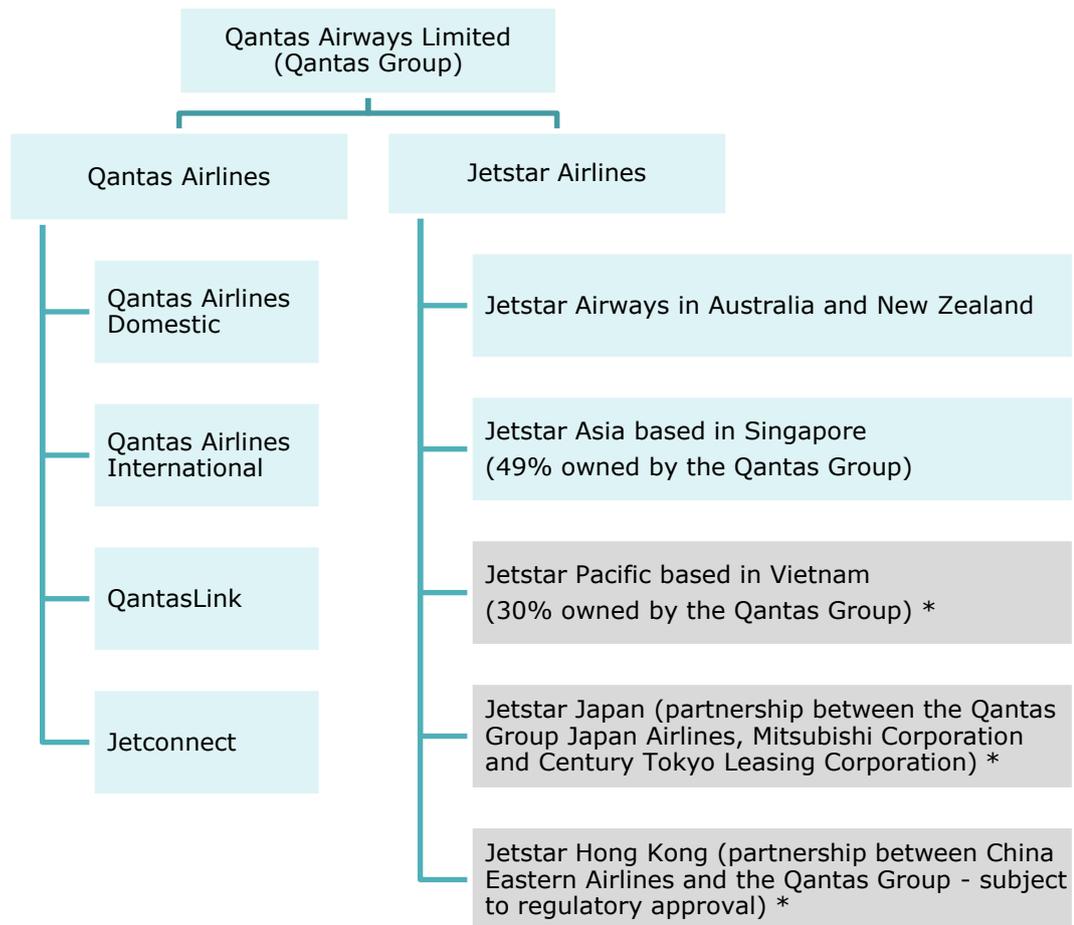
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<sup>1</sup> First year for which the GHG Inventory has been completed – this will be considered to be the base year against which emission reduction activities will be measured.

## 2. Description of Organisation Activities

The following organisational diagram represents the reporting structure for the purpose of NCOS accreditation and does not reflect the legal corporate structure of the Qantas Group:

Figure 1: Organisational diagram representing the reporting structure for the purpose of NCOS accreditation.



\* These organisation activities have been excluded (see section 3).

Qantas Airlines is a domestic and international airline including regional airlines QantasLink and international airline Jetconnect. Qantas Airlines' main Australian hubs are Sydney Kingsford Smith Airport, Melbourne Airport, Brisbane Airport and Perth Airport, with a strong presence in Adelaide, Cairns and Canberra Airports. Major international hubs include Singapore Changi Airport, Los Angeles International Airport, Hong Kong, Dallas, Bangkok and London Heathrow Airport.

Jetstar Airlines is a network of value based carriers providing low fares across Australia, New Zealand and the Asia Pacific region, with headquarters in Melbourne. Jetstar Airlines consists of:

- Jetstar Airways in Australia and New Zealand (wholly owned by the Qantas Group);

- Jetstar Asia based in Singapore. The company is managed by Newstar Holdings, majority owned by Singapore company Westbrook Investments (51 per cent), with the Qantas Group holding the remaining 49 per cent;
- Jetstar Pacific based in Vietnam (majority owned by Vietnam Airlines with the Qantas Group holding 30 per cent);
- Jetstar Japan, a partnership between the Qantas Group Japan Airlines, Mitsubishi Corporation and Century Tokyo Leasing Corporation; and
- Jetstar Hong Kong, a partnership between China Eastern Airlines and the Qantas Group (subject to regulatory approval).

Jetstar Airlines targets the leisure and value based markets whilst Qantas Airlines targets the premium and business markets.

### 3. Organisational & Geographic Boundary / Scope & System Boundary

#### Qantas Airlines

##### **Scope**

A life cycle assessment (LCA) has been prepared to fulfil the requirements for Qantas Airlines to continue to be an NCOS-CN certified provider for Qantas Airlines and Qantas Airlines codeshare flights. Codeshare flights are those with a Qantas Airlines flight number but operated by another airline. The LCA has been prepared in accordance with the NCOS-CN Guidelines and in accordance with international standards ISO 14040:2006 and ISO 14044:2006.

The purpose of the LCA is to define the required scope and boundaries of the proposed NCOS-CN service and to inform the development of the associated Emission Monitoring Plan (EMP). To this end, the life cycle inventory has been developed containing greenhouse gas emissions required for certification under the NCOS-CN program. This assessment has been performed in order to determine the materiality or relevance of different inputs to the Qantas Airlines service and determine streams or inventory items that need to be monitored in detail through the EMP.

##### **Limitations to Scope**

Qantas Airlines have selected emission factors that are geographically specific to the emission sources accounted for in the product LCAs. Australian greenhouse emission factors have been used where possible; however, where Australian factors were not available, additional sources have been used.

##### **System Boundary**

The life cycle stages in the transport of passengers are shown in Figure 2. Care has been taken to ensure that all inputs to, and outputs from, the service are included.

## Jetstar Airlines

### **Scope**

A LCA has been prepared to fulfil the requirements for Jetstar Airlines to continue to be an NCOS-CN certified provider for Jetstar Airlines and Jetstar Airlines codeshare flights. Codeshare flights are those with a Jetstar Airlines flight number but operated by another airline. The LCA has been prepared in accordance with the NCOS-CN Guidelines and in accordance with international standards ISO 14040:2006 and ISO 14044:2006.

The purpose of the LCA is to define the required scope and boundaries of the proposed NCOS-CN service and to inform the development of the associated EMP. To this end, a life cycle inventory has been developed containing greenhouse gas emissions as required for certification under the NCOS-CN program. This assessment has been performed in order to determine the materiality or relevance of different inputs to the Jetstar Airlines service and determine streams or inventory items that need to be monitored in detail through the EMP.

### **Limitations to Scope**

Jetstar Airlines have selected emission factors that are geographically specific to the emission sources accounted for in the product LCAs. Australian greenhouse emission factors have been used where possible; however, where Australian factors were not available, additional sources have been used.

### **System Boundary**

The life cycle stages in the transport of passengers are shown in Figure 2. Care has been taken to ensure that all inputs to, and outputs from, the service are included.

## 4. Diagram of the Boundary of the Subject of Certification

Figure 2: Qantas Airlines and Jetstar Airlines LCA source of emission boundaries.



## 5. Purchase of GreenPower and Retirement of GreenPower Eligible Large-Scale Generation Certificates (LGCS)

The Qantas Group does not currently purchase, nor do they have plans to purchase, GreenPower or LGCS. However, the Qantas Group has constructed Australia's largest commercial scale tri-generation operation in Australia with an installed capacity of approximately 12 megawatts.

## 6. Purchase of NCOS Carbon Neutral Products

The Qantas Group does not currently purchase any NCOS carbon neutral products.

## 7. Total Carbon Footprint

Table 2: Emission sources, scopes and quantities – Qantas Airlines.

Scope	Emission source	t CO <sub>2</sub> -e
1 & 3	Fuel Burn – Qantas Airlines	9,848,830
2 & 3	Ground Services – Infrastructure Electricity	240,537
1	Ground Services – Natural Gas (Stationary)	13,559
3	Ground Services – Natural Gas (Stationary)	1,943
1	Ground Services – LPG (Stationary)	1,076
3	Ground Services – LPG (Stationary)	90
1	Ground Services – HFCs from chiller leakage	1,194
1	Ground Fuel – Natural Gas	0
3	Ground Fuel – Natural Gas	0
1	Ground Fuel - LPG	413
3	Ground Fuel - LPG	34
1	Ground Fuel – Gasoline	1,719
3	Ground Fuel – Gasoline	131
1	Ground Fuel – Diesel Oil	20,406
3	Ground Fuel – Diesel Oil	1,547
3	Waste – Catering	24,069
3	Waste – All Other Waste	8,272
1	Taxis	647

2 & 3	Accommodation	26
2 & 3	Magazines	1,186
2 & 3	Embodied Energy	5,291
Total carbon footprint in tonnes CO <sub>2-e</sub>		10,170,970

Table 3: Emission sources, scopes and quantities – Jetstar Airlines.

Scope	Emission source	t CO <sub>2-e</sub>
1 & 3	Fuel Burn – Jetstar Airlines	3,482,799
3	Ground Services – Infrastructure Electricity	2,664
3	Ground Services – Flight Simulator Use	12,528
1	Waste	41
1	Taxis	109
2 & 3	Accommodation	323
2 & 3	Embodied Energy	1,581
Total carbon footprint in tonnes CO <sub>2-e</sub>		3,500,045

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## 8. Carbon Offset Purchases and Retirement for this Reporting Period

The Qantas Group does not and has no plans to purchase and hold carbon credits under NCOS-CN. For this reporting year, carbon credits were purchased and retired through Qantas' carbon credit supplier CO2 Australia in the same process. The details of the credit retirement are provided in Table 4 below.

Table 4: Offset Cancellations.

Offset type	Registry	Serial number	Quantity (t CO <sub>2</sub> -e)
VCU	Markit	2956-130626220-130640725-VCU-008-MER-CN-1-976-01012011-31122011-0	14,506
VCU	Markit	2957-130640726-130659244-VCU-008-MER-CN-1-976-01012012-25082012-0	18,519
VCU	APX VCS Regsitry	3052-133590951-133602887-VCU-008-APX-CN-1-1001-01072009-31122009-0	11,937
VCU	Markit	1754-72279156-72312876-VCU-008-MER-TH-4-403-01012007-30062007-0	33,721
VCU	APX VCS Regsitry	2173-88238331-88241830-VCU-009-MER-VN-1-811-13062009-31122009-0	3,500
VCU	APX VCS Regsitry	2173-88242831-88244950-VCU-009-MER-VN-1-811-13062009-31122009-0	2,120
VCU	Markit	3093-136945851-136955850-VCU-006-MER-PE-14-868-01012010-31122012-0	10,000
VCU	Markit	3092-136935851-136937090-VCU-006-MER-PE-14-868-01012010-31122012-0	1,240
VCU	APX VCS Regsitry	1462-61802351-61807970-VCU-008-CDC-KH-3-181-01012010-31122010-0	5,620



VCU	Markit	1636-68237751-68248990-VCU-006-MER-AU-14-587-01032010-28022011-0	11,240
VCU	APX VCS Regsitry	3052-133602888-133604709-VCU-008-APX-CN-1-1001-01072009-31122009-0	1,822
VCU	APX VCS Regsitry	3053-133635934-133653215-VCU-008-APX-CN-1-1001-01012010-24112010-0	17,282
VCU	APX VCS Regsitry	3053-133606232-133618651-VCU-008-APX-CN-1-1001-01012010-24112010-0	12,420
VCU	APX VCS Regsitry	3053-133618652-133635933-VCU-008-APX-CN-1-1001-01012010-24112010-0	17,282
VCU	APX VCS Regsitry	2944-129981881-129982677-VCU-008-APX-CN-1-1001-01012010-24112010-0	797
VCU	Markit	Serial No.: 2657-116697885-116700293-VCU-016-MER-AU-14-587-01032011-29022012-0	2,409
VCU	Markit	Serial No.: 2656-116625172-116625988-VCU-016-MER-AU-14-605-13032011-12032012-0	817
VCU	Markit	Serial No.: 2656-116621885-116622690-VCU-016-MER-AU-14-605-13032011-12032012-0	806
VCU	Markit	Serial No.: 2210-91537029-91556222-VCU-003-MER-CN-1-808-01012011-31052011-0	19,194
VCU	Markit	Serial No.: 2209-91532905-91537028-VCU-003-MER-CN-1-808-16122010-31122010-0	4,124
VCU	Markit	Serial No.: 1932-77934307-77934500-VCU-008-MER-TH-4-403-01012011-28022011-0	194
VCU	Markit	Serial No.: 2466-105887056-105891548-VCU-008-MER-TH-4-403-01012010-31122010-0	4,493
VCU	Markit	Serial No.: 1932-77930826-77932306-VCU-008-MER-TH-4-403-01012011-28022011-0	1,481
VCU	Markit	Serial No.: 2275-94899495-94905423-VCU-008-MER-TH-4-403-01012011-	5,929

VCU	Markit	28022011-0 Serial No.: 2174-88272022-88278070-VCU-009-MER-VN-1-811-01012010-12122010-0	6,049
VCU	Markit	Serial No.: 1462-61774430-61774724-VCU-008-CDC-KH-3-181-01012010-31122010-0	295
VCU	Markit	Serial No.: 2285-95243051-95248700-VCU-008-MER-KH-3-181-01012011-31122011-0	5,650
VCU	Markit	Serial No.: 1462-61787577-61787680-VCU-008-CDC-KH-3-181-01012010-31122010-0	104
<b>Total</b>			<b>213,551</b>

## 9. Emission Reduction Measures

The Qantas Group is targeting an average improvement in fuel efficiency of 1.5 per cent per annum to 2020 measured as litres of fuel per revenue tonne kilometre (RTK). This goal is consistent with that set by the International Air Transport Association (IATA) for the industry. In addition, the Qantas Group has committed to achieve carbon neutral growth by 2020 and to achieve a 50 per cent reduction in carbon emissions by 2050, relative to 2005 levels. The Qantas Group believes this goal is achievable by embracing technological innovation in efficiency and by securing commercially viable alternative fuel sources that are genuinely sustainable.

The Qantas Group's long-term energy strategy is based on:

- Robust measurement and transparent reporting of our environmental footprint.
- Investment in advanced technologies and fuel efficient aircraft.
- Leading fuel optimisation and airspace management activities that represent best practice and leadership.
- Early adoption and persistence in innovative fuel and carbon management.

Fuel efficiency and fleet renewal offer the greatest opportunities to decrease aviation fuel use. For the first time in approximately 20 years the Qantas Group's average passenger fleet age is below eight years.

The Qantas group annually reports on identified emissions reduction measures through the Australian Government's Energy Efficiency Reporting Program. This information is publically available.

## 10. Other Information [Optional]

N/A

## 11. Declaration

To the best of my knowledge and having implemented the quality controls and standards required under the NCOS Carbon Neutral Program and made all appropriate inquiries, the information provided in this Public Disclosure Summary is true and correct.

Megan Flynn



Name of Signatory

Signature

Qantas Group Manager- Carbon Strategy

Position / Title of Signatory

27/02/2014

Date