Australian Government

Carbon Neutral Program

Public Disclosure Summary

air bp

An Australian Government Initiative

THIS DOCUMENT WILL BE MADE PUBLICLY AVAILABLE

NAME OF CERTIFIED ENTITY:

AIR BP (a related body corporate of BP Australia Pty Ltd)

REPORTING PERIOD:

2017-2018

Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.

Signature P L Hunt	Date 25th March 2019
Name of Signatory: Peter Hunt	
Position of Signatory: Air BP HSSE & Technical Manager ANZ	

Carbon neutral certification category	Service
Date of most recent external verification/audit	NCOS: 8 December 2017 // PAS 2060 Global Air BP 4Q 2018
Auditor	NCOS: EY // ERM
Auditor assurance statement link	

Australian Government
Department of the Environment and Energy

1. Carbon neutral information

1A. Introduction

Air BP in Australia met all the requirements of the Australian Government's National Carbon Offset Standard(NCOS) for Air BP's Australian activities under the Australian Government's Carbon Neutral Program and was certified as carbon neutral on 24 January 2018.

Air BP's commitment to Carbon Neutrality is based on a good understaing of the science of climate change, market research and requests from it's customers in Australia and as support to Air BP's global carbon neutrality.It also provides support to those of our customers achieving or considering similar certification themselves.

The international Air BP business (Air BP Limited®) has achieved carbon neutrality for their Into-Plane services globally under PAS2060 for the periods of 2014 – 2018 with a commitment to remain Carbon Neutral 2019 - 2021. The achievement and commitment to carbon neutrality cover all Air BP Into-Plane services at Airport Fuel Facilities across the global network.

BP Australia Pty Ltd is the legal entity which operates for Air BP in Australia. BP Australia Pty Ltd and Air BP Limited® are all fully owned subsidiaries of BP plc, both are noted on the ABN register.

This Public Disclosure Summary (PDS) includes Australian activities associated with Air BP's certification under the Carbon Neutrality program, and after a gap assessment establishes the equivalence or variance(as noted in the PDS) between National Carbon Offset Standard (NCOS) and PAS2060 requirements. This NCOS PDS should be read in conjunction with Air BP's publically available Qualifying Explanatory Statement under PAS2060 and the Independent Assurance Statement which can both be found in Appendix A on Page 14 and via the following link: https://www.bp.com/en/global/bp-air/about-us/environmental-solutions/air-bp-s-operations-at-250-sites-achieve-carbon-neutrality.html

The information and data below and in the Annual Carbon Account Report filed with the Department of the Environment and Energy under NCOS pertains to the emissions from its Australian operations only.

Air BP is an aviation fuel distribution business that delivers high-quality into-plane services on airfield sites delivering jet fuel and aviation gasoline into aircraft wings to meet the needs of our commercial airlines and general aviation customers. The achievement and commitment for carbon neutrality covers all Air BP Into-Plane services at Airport Fuel Facilities across the network.

Greenhouse Gas emission related to airfield operations denotes the boundary of the subject for the declaration of Carbon Neutrality. The boundary is defined from onsite airport storage facilities to point of sale at wing tip of an aircraft applicable to Air BP operated airport sites where there is direct control of emissions, which is termed as "into plane" services. The GHG emissions reported here follows the operational control where Air BP can implement its own operating policies at the operation.

GHG emissions associated with Air BP's on airport into plane services within the defined boundary from the periods of 1st July 2017 to 30th June 2018 have been quantified in accordance to GHG Protocol and NCOS for Products & Services. The methodology chosen is believed to represent the total carbon footprint inventory of Air BP within the defined boundary.

The first application period was audited by an independent third party certifier, EY, who endorses as being fully compliant with its requirement of NCOS for the substantiation of Air BP's emission when applied

correctly. The next audit is due in the second half of 2020. The list of GHG emmissions to be included is reported in section 3.

1B. Emission sources within certification boundary

All Scope 1 & 2 greenhouse gas within Air BP's operation boundaries as defined in above and emissions from Scope 3 are summarised in Section 3. Where GHG have been estimated, these have been determined based on a conservative approach that precludes underestimation.

GHG emissions associated with Air BP's defined boundary for the period of 1st July 2017 to 30th June 2018 have been quantified according to GHG Protocol, Corporate Accounting and Reporting Standards, which is in line with BP Group GHG Reporting. BP Group's approach to reporting GHG emissions broadly follows the IPIECA/API/IOGP Petroleum Industry Guidelines for Reporting GHG Emissions (the IPIECA guidelines).

Methodology selected for quantification of GHG emissions is systematically applied across a global network and that uncertainties are reduced as far as practicable. The GHG protocol meets the certification requirements of the NCOS for Products & Services.

Quantified Sources : Scope 1 and 2 Emissions

Figure 1 (in Section 1C) Boundaries associated with Air BP Operated Site with GHG Emissions illustrates various types of Into-plane services offered by Air BP Operated sites. There are three main types of into-plane services:

1) Hydrant operation – Aviation fuel is delivered into an aircraft via an underground hydrant with the use of refuelling vehicles known as Hydrant Dispensers.

2) Refueller Operation - Aviation fuel is delivered into aircraft via Refuelling vehicles known as Refuellers. Refuellers operate on airfield carrying bulk fuel on airfields servicing aircrafts.

3) Kerbside Operation – Aviation fuel is dispensed via customer self-serve kerbside dispenser units.

In order to quantify Air BP's carbon footprint, an emission model has been developed which models the carbon footprint for the 3 types of operations.

Carbon footprint for each operation type is determined by sampling energy consumptions at selected sample sites– i.e. diesel and electricity consumption. Samples are selected through systematic sampling from each operational type sample pool. These samples are considered to be a representative carbon emission for sites of that operation type. Subsequently a carbon intensity factor is calculated for each operation type.

To ensure representative samples are taken for each type of operation, the required sample size is calculated and sample sites are selected based on their annual fuel sales. The confidence interval of fuel sales was determined giving an upper and lower fuel sales range where sample sites are selected from. Sites selected that falls within this range will act as good estimate of the total sample pool.

The Carbon Intensity Factor(CIF) or functional unit, is measured in CO2e emitted per Litre of Aviation Fuel sold (kg/L). The carbon footprint for each operation type is then determined by scaling the sales volume with the carbon intensity factor.

Quantified Sources : Scope 3 Emissions- Road Transportation

Air BP in Australia does not manage and outsources all logistics activities delivering fuel into airport storage facilities.

Quantified Sources : Scope 3 Emissions- Business Air Travel

Air BP has elected to include the emission from business Air Travel. It is Air BP policy that all travel should be arranged through BP's travel management. Emissions reported in this declaration are direct output from BP's Travel Agent who tracks and calculate emission data for the application period.

Emission Source	Description	Justification of Exclusion
Purchased Goods and Services (Upstream)	Extraction and production of purchased materials and fuels	Excluded: Emissions from the production of Aviation Fuels are not under direct operational control or within Air BP's boundary as Air BP do not own or operate any refineries that is responsible for the production of Aviation Fuel.
Transport and Distribution (Upstream)	Transportation of purchased materials or goods	Excluded 3rd Party Road contractor activities for all logistics in delivering fuel into airport storage facilities are not managed by Air BP in Australia, not under direct operational control or within Air BP's boundary therefore kilometers travelled and related activities are excluded.
	Employee business travel	Included Business Air travel included as Scope 3 emission
	Employee road travel	Non-quantified: Air BP has employees globally and data is difficult to obtain therefore difficult to assess and subject to change. Road travel is immaterial compared to business air travel emmissions.
	Employees commuting to and from work	Non-quantified: Air BP has employees globally with multiple work arrangements (i.e. part time, Homebase, shared office facilities). It is technically difficult to accurately assess and is subject to change
	Transportation of sold products	Included: Supply into aircraft is via refuelling vehicles is included as Scope 1 & 2 Emissions
	Transportation of waste	Non-quantified: Waste generated from sites is not considered to be material to measure and report therefore transportation of waste is not considered to be material.
Waste from Operation	Waste Disposal	Non-quantified:

		Air BP operates under waste management principles of hierarchy - reduce, re-use and recycle. Waste generated from sites is not considered to be material to measure and report. All Air BP operated sites contains Product Recovery System at airport depot storage and aviation fuels meet strict international product cleanliness requirements therefore minimal wastes are produced and emissions from waste disposal is not material.
Energy related activities	Extraction, production and transportation of fuels consumed in the generation of aviation fuel.	Excluded: Energy consumption from the production of Aviation Fuels is excluded from the Air BP's boundary. Aviation products are sourced from various sources globally, it is not cost effective to quantify generation and loses of electricity
	Generation of electricity is consumed in Transportation &Distribution system	Not Quantified: Scope 3 emissions for Transportation and Distribution (T&D) losses were assessed globally as immaterial[1] and therefore excluded from the global carbon inventory.
	Purchase of electricity that is sold to an end user	Excluded: Energy consumption of from purchased electricity is not applicable to Air BP's into plane operations.
	Employee energy consumption for office based employees	Included : Electricity for office buildings used by regional sales and operations office staff based at Airport offices is included. Excluded: Air BP has employees with flexible working arrangements (i.e. part time, Homebase, shared office facilities). It is not technically feasible, practical to quantify and is subject to change. The BP Australia office is outside Air BP's boundary and influence, not material.
Upstream / Downstream Leased assets, and outsourced activities	Operations of assets leased by or owned by Air BP	Included: Energy consumption of operations where into-plane activities is outsourced at Air BP operated sites has been accounted for as Scope 1 or 2 emissions.
Investment	Operations of Investments (including equity and debt investments and project finance)	Not Quantified: Emissions associated with manufacturing vehicle for replacement activities are excluded as carbon footprint for manufacturing process are not

[1] The highest T&D losses in Air BP's global country portfolio is in Australia with average T&D Losses for Australia (4.78%[1]).

		publically available and believed to vary significantly between Original Equipment Manufacturer (OEM). Without the availability of a clear standard or expertise in manufacturing or verifiable data, it is not viable to measure and offset in the boundary Vehicles also have a lifecycle of greater than 20 years <u>Excluded:</u> Emissions for sites where Air BP is in joint ventures are excluded as due to competition law reasons, data cannot be accessed by Air BP.
Use of Sold products and services (Downstream)	End use of aviation fuels	<u>Excluded:</u> Emissions as a result of aircraft engines resulting from fuel combustions are not accounted for as this is defined as outside the operating boundaries of Air BP. Since end user has control over how they utilise the product, it is not financially viable to measure and report and offset in the boundary. Air BP has an influencing strategy and customer offer to work with IATA and its customers to achieve their publicly stated Carbon Reduction goals.
End of Life Treatment	Waste disposal and treatment of products sold by Air BP at the end of their life	<u>Not Quantified:</u> Waste generated from product is not considered to be material to measure and report. All Air BP operated sites contains Product Recovery System at airport depot storage and aviation fuels meet strict international product cleanliness requirements which ensure minimal wastes are produced.

1C. Diagram of the certification boundary

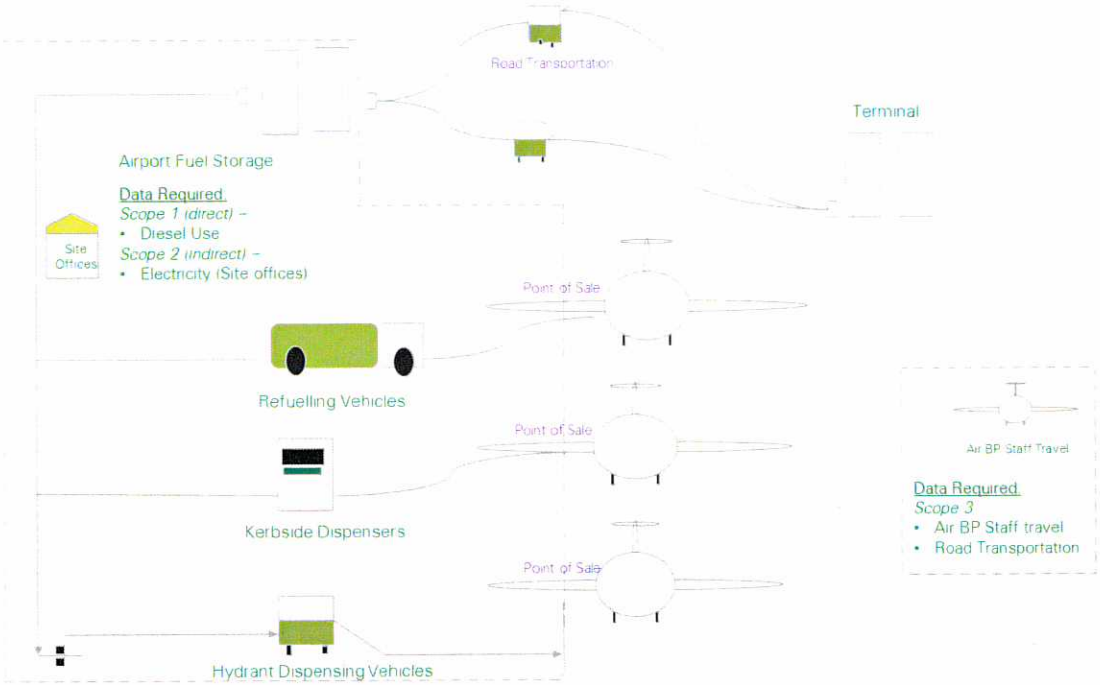


Figure 1 Boundaries associated with Air BP Operated Site with GHG Emissions

Note : Some sites will not have certain activities captured if they are outside the organisation's operational control boundary (i.e. Brisbane Airport Hydrant is not operated by Air BP and therefore the electricity consumed from storage to Hydrant is not captured, Sydney Airport Depot is not operated by Air BP so the electricity consumed for fueller loading from storage is not captured). Air BP's operating boundary may change from time to time as a result of changes in operated activity and new sites, the commitment from Air BP is to introduce NCOS Carbon Neutral to those sites and activities as these changes occur.

2. Emissions reduction measures

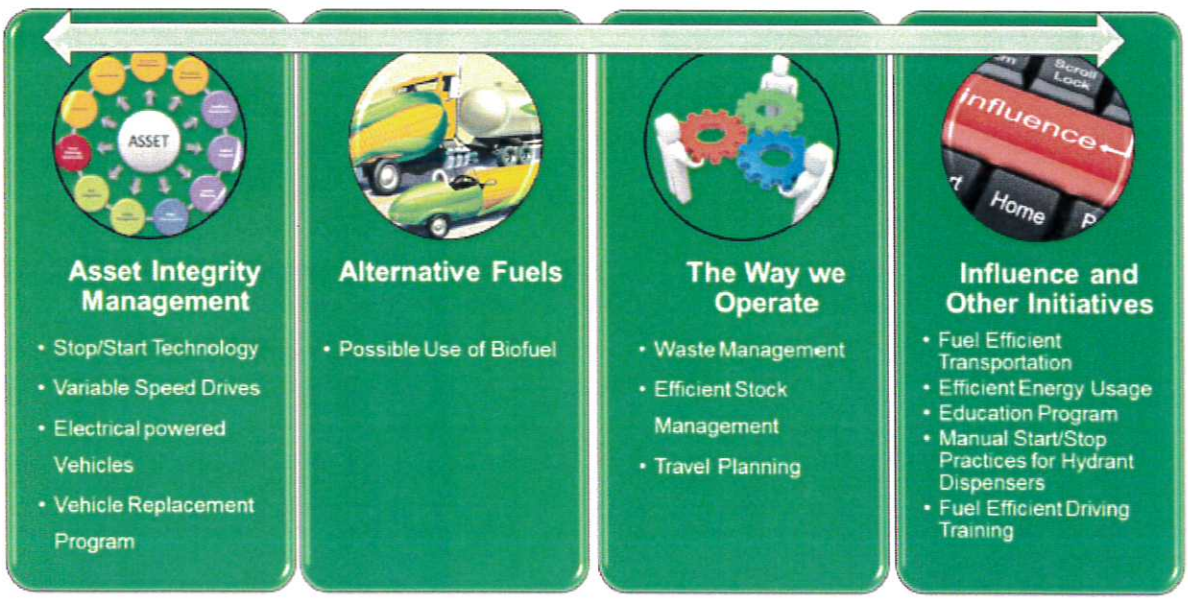
2A. Emissions over time

Table 1. Emissions since last year

	Year 1: 2016-17	Current year Year 2: 2017-18
Scope 1	1111	1011
Scope 2	1460	1992
Scope 3	248	167
Total	2820	3170

2B. Emissions reduction strategy

Air BP is committed to achieving carbon neutrality for the global business for the 2nd application period of 1st July 2018 to 30th June 2020 in accordance with PAS2060:2010.
Air BP aims to reduce the Total Carbon Footprint Intensity by 5% over 10 years (commencing 2016).
Air BP is committed to continually look for opportunities to reduce its carbon footprint through with industry and technology. The carbon management plan is presented at Air BP's annual leadership meeting in third quarter each year where the progress of carbon reduction and energy efficiency are the operation is reviewed along with energy reduction options and intiatives.
Air BP's strategy for achieving carbon reduction is divided into four main themes – 1) Asset Integrity Management, 2) Alternative Fuels, 3) The Way we Operate and 4) Influence and other Initiatives.
A series of key projects under each theme are being set up with the aim of driving the business towards carbon reduction across the network as well as communicate the importance of carbon reduction to relevant stakeholders.



2C. Emissions reduction actions

Vehicle Start Stop Technology
Air BP has initiated a series of feasibility studies and design options to start/stop technology installed on aircraft refuelling vehicles. The studies reviewed the start/stop technology can reduce idling from vehicle anywhere between 10 – 40% depending on the airport which gives an expected emission reduction (Scope 1) would be between 3 – 15%.
Trial technology of start/stop technology has been implemented at several locations and savings have been delivered with a diesel reduction of up to 35%.
Air BP is continuously working towards a global implementation of start/stop technology into our fleet of refuelling vehicles which allows automatic switching on/off of the vehicle's engine when the vehicle is not in motion.

Vehicle Replacement Programme
Air BP's technical working group have worked to update vehicle specifications and consider effects of emissions of our vehicles. A newly established global vehicle replacement programme helps the replacement of inefficient vehicles with new and more efficient lower emission vehicles with Euro 4/5/6 standard engines via global vehicle replacement plan.
Air BP has initiated a global effort lead by Vehicle Technical Authorities from all regions to review vehicle efficiency. 68 orders placed in over the next 2 years with accredited manufacturers and new vehicle deliveries are now progressively arriving in our operations.

Ongoing Emissions Reduction Plan
Other projects in Air BP's work plan to reduce emissions for the commitment period are:

- Implementation of Variable Speed Drives for electric motors – In Air BP's Airside Operations, one of the most energy intensive pieces of equipment is the motor associated with operating fuel hydrant pumps. A variable speed drive is a piece of equipment that regulates the output of an electrical motor by controlling the power based on demand.
- Biofuel - Air BP has plans to explore options of using biodiesel for its fleet of fuelling vehicles.
- Energy Efficiency Assessment – Continuous Improvement is an important for Air BP to drive efficiency in our operations. Air BP plan to roll out an energy efficiency assessment to help identify efficiency opportunities at operational sites through different technological options and practices to put in place to reduce carbon emission intensity.

Emissions summary

Table 2. Emissions Summary		
Scope	Emission source	t CO_2-e
1	*Direct GHG emission from Diesel consumption of refueling vehicles used service aircraft*	1011
2	*GHG Emissions arising from Electricity consumption emissions arising from consumption of electricity on premises*	1992
3	*Other indirect emissions; Combustion of jet fuel arising from Air Travel business air travel of employee*	167
Total Gross Emissions		3170
GreenPower or retired LGCs		0
Total Net Emissions		3170

3. Carbon offsets

4A. Offsets summary

Carbon credits for the period of 2017 - 2018 were purchased as a global offset program on behalf of Air BP Limited ®. A total of 15 526tCO_2e was purchased by Air BP Limited® to offset the total emissions from global operations of which 3170 tCO_2e was retired for Air BP's Australian operations. Details of retirement can be found Carbon Offset Credit in the PAS2060 QES Annex C.

Table 3. Offsets Summary

Date of cancellation	Offset project, unit type and registry	Serial numbers	Vintage	Quantity
13 Dec 2018	Lower Zambezi REDD+ Project	5109-212551188-212555266-VCU-006-APX-ZM-14-1202-01012016-31122016-0	2016	4079
Total offsets cancelled				4079
Total net emissions for Australian AirBP operations				3170
Net emissions after offsetting				0
Total offsets banked for use future years/Air BP Operations outside of Australia: (if any)				909

** The total amount of offsets retired by AirBP relates to emissions arising from global services, which has been offset in accordance with PAS 2060.*

4B. Offsets purchasing and retirement strategy

Air BP Limited ® has a partnership with BP Target Neutral (BPTN) who manages the procurement and retirement of offsetting on behalf of Air BP Limited®. The standard, methodology and type of credits employed for achieving carbon offset are managed by BP Target Neutral and the principles shall meet requirements of NCOS and PAS2060. All credits shall be from sources which guarantee that:

- The offset purchased represent genuine, additional GHG emissions reductions; and
- Project involved in delivering offset meet the criteria of additionality, permanence, leakage and double counting

BPTN has a rigorous assessment process: Experts visit each project site to seek evidence from project owners and local stakeholders of project claims and to assess technical risks. All projects are also reviewed and approved by the BPTN Independent Advisory and Assurance Panel. Details are set out in the PAS2060 QES under Carbon Offset Program. For more information on BP Target Neutral visit www.bptargetneutral.com.

4C. Offset projects (Co-benefits)

Carbon Credits purchased for offsetting Air BP's emissions contributes towards the following Offset Projects:

- Lower Zambezi REDD+ Project

4. Use of trade mark

Table 4. Trade mark register	
Where used	Logo type
Not used to date	

5. Have you done more?

Newly built vehicles entering service: 9 consisting of 6 x Aircraft refueling tankers and 3 x aircraft refueling dispensers.

One of these one was to Euro 6 and the remainder Euro 5.

These vehicles:

1. Support increase business level or
2. Replace older, less efficient vehicles that are retired
3. Enable older, less efficient vehicles to be relocated to less busy locations or activities. Eg back up service.

Variable speed drive and PLC control system were for the main fuel transfer pump rather than old technology electric motor starters and flow control switches were incorporated for the two Jet A-1 pumps to ensure reduced electrical energy consumption, reduce pump run times and enhance control system efficiency for lower carbon intensity. This technology is incorporated into future designs as well.

Appendix A - PAS 2060 Qualifying Explanatory Statement(QES) and Independent Assurance Statement.

QES 2016-2018.pdf

Air BP Assurance Letter 2016-2018_Sic