Controlling Corporation
NATIONAL AUSTRALIA BANK LIMITED
ABN 12 004 044 937

more than money

nab

2018

NATIONAL CARBON OFFSET STANDARD

PUBLIC DISCLOSURE SUMMARY

Australian Region
1 July 2017 – 30 June 2018

Carbon neutral certification type: Organisation

Subject of certification: Organisational Inventory

Date of most recent verification: 26 October 2018

An Australian Government Initiative

INTRODUCTION

National Australia Bank Limited and its controlled entities (together, NAB Group) is a financial services organisation that provides a comprehensive and integrated range of banking and financial products and services, including wealth management. NAB Group[1] has operations in Australia, New Zealand, the United Kingdom, the United States (US) and parts of Asia. This Public Disclosure Summary principally reports on the carbon neutral reporting and activities for the Australian-based business of NAB Group.

NAB[2] was the first Australian bank to be certified carbon neutral under the National Carbon Offset Standard (NCOS) Carbon Neutral Program[3]. Understanding and managing our carbon footprint and operating on a carbon neutral basis, for our defined carbon inventory, is part of NAB's response to the issue of climate change, and our broader Environmental Agenda (which can be accessed at nab.com.au/environment).

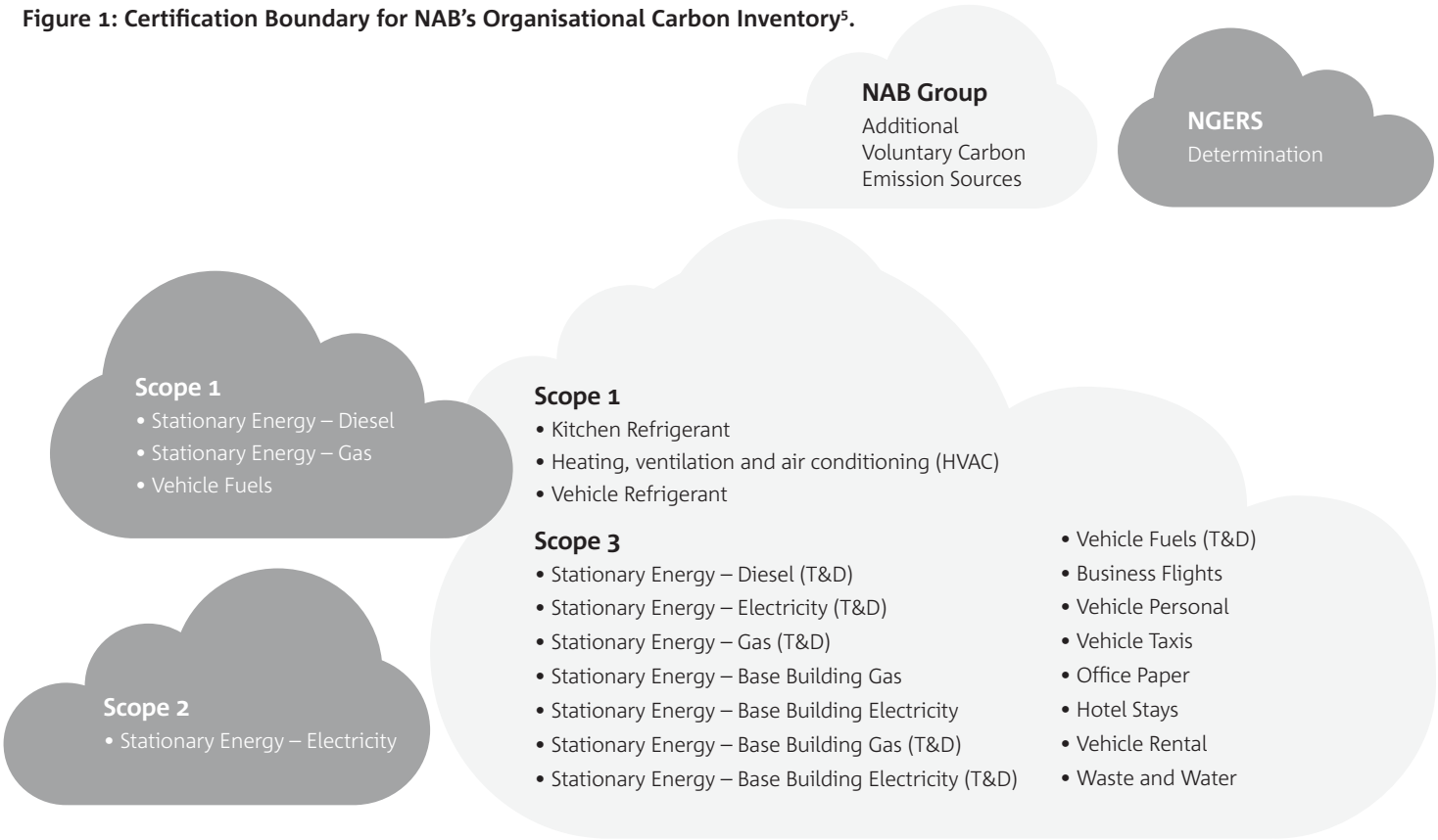
This report provides an overview of NAB's approach to maintaining our NCOS carbon neutral certification and achievements in managing our carbon emissions[4]. The NCOS requirements for periodic auditing of the NAB Group carbon footprint have been met and a copy of the the most recent independent assurance report is available on the **NAB website** at www.nab.com.au/environment. The next independent assurance is due in 2020.

CARBON NEUTRAL INFORMATION

NAB's certification under the NCOS is for a defined inventory of carbon emissions resulting from the activities of its Australian-based business. NAB generally uses an operational control approach consistent with that required under the National Greenhouse and Energy Reporting Act 2007 (Cth) (NGER Act). Full details regarding our quantified Australian carbon emissions sources can be found here **cr.nab.com.au/what-we-do/how-we-calculated-our-carbon-inventory**.

Figure 1 below illustrates the certification boundary for NAB's organisational carbon inventory.

Figure 1: Certification Boundary for NAB's Organisational Carbon Inventory[5].



1 NAB Group has a very small subsidiary operating in Canada, which is excluded from NAB Group's carbon inventory as it is not material as a proportion of NAB Group's carbon emissions.

2 For the remainder of this document the word "NAB" refers to the Australian operations of National Australia Bank Limited and its controlled entities.

3 NAB achieved this milestone in 2010.

4 The term 'carbon emissions' covers greenhouse gas emissions from all relevant Kyoto Protocol gases and some CFCs and HCFCs under the Montreal Protocol.

5 Air travel related carbon emissions are calculated to include an uplift (7.6%) to compensate for employees booking air travel outside of company travel service provider. As per the DBEIS guidelines, we do not include uplift for radiative forcing.

OUR GLOBAL CARBON EMISSIONS

NAB Group's global carbon emissions (net of UK certified renewable electricity, and carbon neutral paper purchased in Australia and New Zealand) for the 2018 environmental reporting year (1 July 2017 - 30 June 2018) were 180,950 tCO_2-e of which our Australian carbon emissions account for around 92%, or 166,695 tCO_2-e. See Figure 2 below.

Figure 2: Regional Distribution of NAB Group 2018 Carbon Inventory*

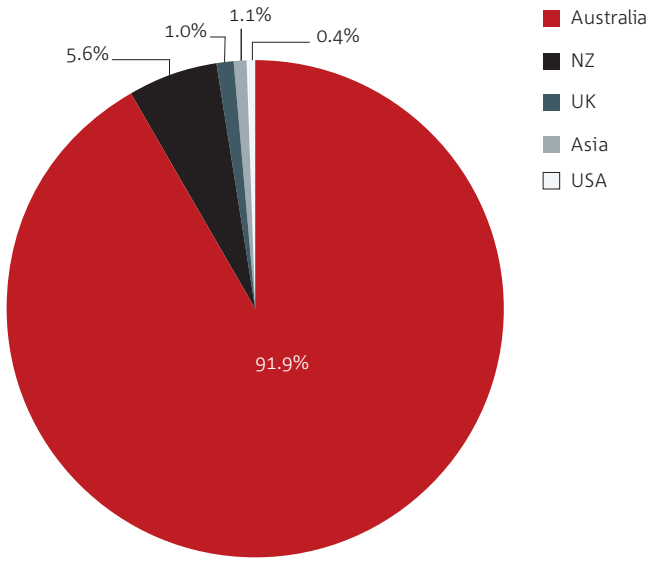


*Figure 2 is based on NAB Group's carbon emissions (net of UK certified renewable electricity and carbon neutral paper purchased in Australia and New Zealand).

SUMMARY OF CHANGES TO THE CALCULATION METHODOLOGY

No material changes have been made to carbon emissions sources and methodologies applied to NAB's Australian carbon inventory (GHG inventory) since NAB's initial NCOS certification in 2010, except for the inclusion of refrigerants in 2011 and water in 2016.

SUMMARY OF CHANGES TO THE CARBON INVENTORY

Overall total Scope 1, 2 and 3 GHG carbon emissions relating to energy from our Australian-based business decreased by 6% in comparison to the previous environmental reporting year (1 July 2017 - 30 June 2017).

The most significant change to NAB's carbon emissions in the 2018 environmental reporting year was a 6% reduction in Scope 2 carbon emissions related to electricity use in our buildings. This was primarily due a 4% reduction in grid sourced electricity used at our data centre as a result of the on-site solar PV array commencing generation of electricity in October 2017.

Scope 1 carbon emissions from stationary energy relating to our Australian-based business have remained constant from the prior year (0.3% decrease). A reduction in diesel use in 2018, due to high generator use in 2017, was offset by a small increase in carbon emissions from natural gas.

In addition, Scope 2 carbon emissions across the building portfolio decreased due to continued rollout of solar across our portfolio and improved energy efficiency within our buildings.

Scope 3 carbon emissions decreased by 1% when compared with the prior reporting year. This was primarily due to a decrease in emissions relating to base building energy which was offset by an increase in business travel[6], specifically air travel occurring in international long haul and business/ first class trips which carry a substantially higher carbon emissions footprint.

Our 2017 Scope 3 carbon emissions total has been restated due to a recalculation of 2017 base building electricity within Australia. To account for this, we have amended the volume of carbon offsets retired and allocated to the 2017 reporting period, and reported the amendment in this PDS and our 2018 Sustainability Report. Carbon emissions from base building electricity and the associated transmission and distribution losses have been amended from 18,893 tCO2-e to 20,421 tCO2-e. We have adjusted our allocation of retired offsets to reflect this change. Retired offsets for the NAB Group allocated to 2017 now total 186,872 tCO2-e (Refer Table 4).

EMISSIONS OVER TIME

Over time, the reduction in NAB's carbon emissions has largely been due to improvements in the energy efficiency of our buildings. Refer to Table 1 below.

Table 1. NAB's Australian emissions since base year

	NCOS BASE YEAR (2010)	2015	2016[7]	2017	2018
Scope 1	11,858	12,291	11,774	15,052	15,205
Scope 2	148,666	130,096	115,454	100,316	94,526
Scope 3	94,630	74,092	69,661	57,532	56,965
Total (tCO_2-e)	255,154	216,479	196,890	172,901	166,695

6 Business travel related carbon emissions include carbon emissions from air, employee vehicles for work purpose claims, hotel stays, rental cars, taxi use and work-use vehicles fleet.
7 Carbon emissions (tCO2-e) following renewable energy purchase

CARBON EMISSION REDUCTION MEASURES

NAB has a well-established governance framework to ensure oversight of our environmental performance, including our carbon neutral commitment. This includes detailed review at a business unit level, in addition to review by Group Compliance and an independent assurance provider. Executive level oversight is provided by NAB's Group Regulatory, Compliance and Operational Risk Committee.

As per our *Environmental Reporting and Offset Management Policy*, the NAB Group defines carbon neutrality as a process involving five steps:

- defining and measuring our carbon (GHG) inventory or footprint;
- reducing our carbon emissions through energy efficiency and demand management (employee behavioural change);
- avoiding carbon emissions by increasing the amount of energy we purchase from renewable sources where practicable (and where we are allowed by Government rules or standards to apply a zero emissions factor to the renewable electricity purchased);
- offsetting remaining carbon emissions by purchasing quality accredited carbon offsets; and
- verifying and reporting on our progress by:
  - regularly assessing our progress towards meeting our commitment and targets;
  - obtaining external assurance over our carbon accounts (inventory and offsets) underlying our carbon neutral commitment; and
  - reporting regularly to key internal stakeholders and annually to external stakeholders.

Reducing our carbon emissions and achieving our resource efficiency targets are key elements that support delivery of our Environmental Agenda. Table 2 below outlines carbon emission reduction measures implemented in the 2018 environmental reporting period. Further information regarding our performance towards our targets can be found in our 2018 Sustainability Report.

Table 2. Carbon Emission Reduction Measures Implemented in the 2018 Reporting Period (1 July 2017 to 30 June 2018)

EMISSION REDUCTION ACTIVITY TYPE	REDUCTION MEASURE*	EMISSION SOURCE AND SCOPE	STATUS	EXPECTED ANNUAL REDUCTION tCO_2-e
Energy efficiency: Building services	Decommissioning old commercial sites and entry into new energy efficiency purpose built building	Gas & Electricity consumption **Scope 1, 2 & 3**	Implemented	560
Low carbon energy installation	Installing solar panel on our branches and data centre	Electricity consumption **Scope 2 & 3**	Implemented	915
Energy efficiency: Building services	Improving energy efficiency across our buildings, including improvements to HVAC, lighting, and rezoning of after hours air conditioning	Electricity consumption **Scope 2 & 3**	Implemented	909
Energy efficiency: Building services	Upgrading and optimising assets within our buildings, including chiller upgrades, condenser replacements and dishwasher upgrades.	Electricity consumption **Scope 2 & 3**	Implemented	397
Total emission reductions implemented in this reporting period				**2,781**
Total expected emission reductions in future reporting periods from currently identified opportunities				**7,452**

*Data in this table has been calculated by direct metering, invoiced data and extrapolation.

In 2018 we registered our on site solar PV array located at our data centre as a renewable energy power system with the Clean Energy Regulator. We have been accredited to create Large Generation Certificates (LGC's) from this system since April 2018. While LGC's were created in 2018 they have not yet been surrendered. This will be reflected in our 2019 NCOS reporting.

In addition to the emission reduction measures implemented in the 2018 environmental reporting year, we continue to purchase an NCOS Carbon Neutral product – Australian Paper's Reflex 100% Recycled Carbon Neutral A3 and A4 office paper. If this purchase did not occur, our carbon footprint for 2018 would have increased by 689 tCO2-e.

CARBON EMISSIONS SUMMARY

NAB's 2018 Australian carbon inventory is summarised in Table 3. A more detailed breakdown of our Group carbon emissions sources and activity data is provided in our 2018 Sustainability Report available online at **www.nab.com.au/environment**.

Table 3. Australian Carbon Inventory

SCOPE	EMISSION SOURCE	tCO_2-e
1	Building-based refrigerants - HVAC, refrigerators	1,409
1	Business travel - Work-use vehicles fleet: diesel, petrol, ethanol	4,876
1	Stationary energy - combustion of fuel: diesel, gas, propane	8,792
1	Work-use vehicle fleet - air conditioning refrigerant	127
2	Stationary energy - electricity	94,526
Total Scope 1 and Scope 2 emissions		**109,731**
3	A4 and A3 paper purchased - non carbon neutral	10
3	A4 and A3 paper purchased - carbon neutral (454 tonnes)	0
3	Base-building energy - combustion of fuel: diesel, gas	2,230
3	Base-building energy - electricity	16,794
3	Business travel - air	17,207
3	Business travel - employee vehicle: work purpose claims	1,454
3	Business travel - hotel stays	2,254
3	Business travel - rental cars	104
3	Business travel - taxi use	537
3	Business travel - Work-use vehicles fleet: diesel, petrol, ethanol (T&D losses)	254
3	Transmission Losses - base-building energy: diesel, gas, electricity	2,243
3	Transmission Losses - stationary energy: diesel, gas, electricity	11,235
3	Waste to Landfill	2,202
3	Water	439
Total Gross Emissions (Scope 1, 2 & 3)		**166,695**
GreenPower or LGC Reductions (tCO2-e)		**0**
Total Net Emissions		**166,695**

CARBON OFFSETS

At NAB, we manage our offsets on a consolidated group basis. Our *Environmental Reporting and Offset Management Policy* provides guidance on the purchase of quality offsets to ensure that any purchase of offsets meets the objective of our group carbon neutral commitment and any related carbon neutral accreditation or certification processes.

We apply a forward purchasing model to meet our carbon neutral commitment. This means that in 2018 we calculated our forecast carbon emissions for the 2019 environmental reporting year using the actual carbon emissions reported in our 2018 carbon inventory. We then have purchased and retired[8] carbon offsets in advance of the 2019 environmental reporting year estimated carbon emissions occurring (refer to Table 6).

This also means at the end of each environmental reporting year, we need to reconcile the forecast carbon emissions and retired offsets and ensure this reconciles with the actual position. If there is any shortfall of offsets at this time, we retire additional offsets to neutralise our actual carbon emissions for the relevant environmental reporting period. In 2017, we retired 185,344 offsets in advance to cover forecast global carbon emissions for the 2018 environmental reporting year. Following reconciliation of actual carbon emissions for the 2018 environmental reporting year, only 180,950 offsets needed to be retired (refer to Table 5).

The offsets we retired last year in excess of our actual 2018 global carbon emissions have been banked for use in future years. This enables us to have retired offsets available should our reconciliation process identify carbon emissions volumes which vary from our forecasts. This avoids us having to access the market at short notice and therefore limits our exposure to supply risk or the price implications of this (refer to Table 7). Given we restated our 2017 global carbon emissions, increasing the total by 1,528 tCO2-e, we have now allocated 1,528 tCO2-e offsets from our banked supply of offsets to the 2017 reporting year (refer to Table 4).

8 The term "retire" is used throughout, including where the offset has been cancelled or surrendered.

Table 4. Retired Carbon Offsets for Actual 2017 Group Carbon Emissions

OFFSET TYPE	REGISTRY	SERIAL NUMBER	QUANTITY (tCO_2-e)
Total unchanged offsets as per 2017 NCOS PDS			185,344
Adjusted project - RE – Wind	APX VCU Registry	3848-166214321-166216850-VCU-048-APX-IN-1-1352-01012012-31122012-0[9]	1,528
Total			**186,872**

Table 5. Retired Carbon Offsets for Actual 2018 Group Carbon Emissions[10]

OFFSET TYPE	REGISTRY	SERIAL NUMBER	QUANTITY (tCO_2-e)
RE – Geothermal	Markit	3371-151605751-151640750-VCU-010-MER-ID-1-144-01012012-31072012-0	35,000
RE – Geothermal	Markit	3371-151640751-151655750-VCU-010-MER-ID-1-144-01012012-31072012-0	15,000
RE – Biogas Utilisation	ANREU	4,578,479 – 4,627,415	48,937
RE – Run of River Hydropower	VCS Project Database	4499-188383512-188403814-VCU-037-MER-CN-1-166-01012012-31122012-0	20,303
RE – Run of River Hydropower	VCS Project Database	4499-188403815-188420225-VCU-037-MER-CN-1-166-01012013-14112013-0	16,411
RE – Run of River Hydropower	APX VCU Registry	3207-145120519-145128518-VCU-008-APX-IN-1-1114-01012012-31102012-0	8,000
RE – Solar	Markit	GS1-1-CN-GS3344-1-2015-4417-422 to 20250	19,829
RE – Wind	APX VCU Registry	3850-166224518-166236517-VCU-048-APX-IN-1-1352-01012012-31122012-0	12,000
RE – Wind	APX VCU Registry	3848-166216851-166217320-VCU-048-APX-IN-1-1352-01012012-31122012-0	470
Savanna Burning	ANREU	3,758,445,376-3,758,450,375	5,000
Total			**180,950**

Table 6. Carbon Offsets Retired in Advance for Forecast 2019 Group Carbon Emissions

OFFSET TYPE	REGISTRY	SERIAL NUMBER	QUANTITY (tCO_2-e)
RE – Geothermal	APX VCU Registry	5010-209176585-209240965-VCU-005-APX-ID-1-144-01042014-31122014-0	64,381
RE – Geothermal	APX VCU Registry	5011-209240966-209246584-VCU-005-APX-ID-1-144-01012015-31122015-0	5,619
Forestry	NZ Emissions Unit Register	50053032267-50053033271	1,005
RE – Biogas Utilisation	ANREU	4,627,416 – 4,628,478	1,063
RE – Solar	EU Climate Registry	CN-5-1014652231-2-2-0-9291-CN-5-1014699375-2-2-0-929 1	47,145
RE – Wind	Markit	GS1-1-TW-GS472-12-2014-4605-75828 to 137621	61,794
Total			**181,007[11]**

9 Note serial numbers refer to the total parcel of retired offsets from this project allocated to 2017 (2,530 t), not the re-allocated volume only.

10 The offsets used to meet the Australian operations' NCOS obligation (180,950 tCO2-e) are those presented in Table 5 and do not contain any non NCOS units.

11 The offsets used to meet the Australian operations' forecast 2019 NCOS obligation (181,007 tCO2-2) are those presented in Table 6 from sources other than the NZUs (1,005 tCO2-e).

Table 7. Retired Carbon Offsets Banked for Future Use

OFFSET TYPE	REGISTRY	SERIAL NUMBER	QUANTITY (tCO_2-e)
RE – Geothermal	APX VCU Registry	5734-257275298-257345297-VCU-005-APX-ID-1-144-01012015-31122015-0	70,000
RE – Solar	EU Climate Registry	CN-5-1014700549-2-2-0-9291-CN-5-1014718403-2-2-0-9291	17,855
RE – Wind	Markit	GS1-1-TW-GS472-12-2015-5121-92411 to 124195	31,785
RE – Wind	Markit	GS1-1-TW-GS472-12-2015-4604-56136 to 68392	12,257
RE – Wind	Markit	GS1-1-TW-GS472-12-2016-5120-2430 to 28387	25,958
RE – Wind	Markit	GS1-1-TW-GS472-12-2014-4605-137622 to 145121	7,500
RE – Biomass	Markit	GS1-1-CN-GS2503-9-2015-6012-45543 to 69860	24,318
RE – Biomass	Markit	GS1-1-CN-GS2503-9-2016-6011-41759 to 87440	45,682
RE – Run of River Hydropwer	Markit	5708-256005601-256011043-VCU-034-APX-IN-1-483-01092015-31122015-0	5,443
RE – Run of River Hydropwer	Markit	5706-255982354-256004975-VCU-034-APX-IN-1-483-01012016-31122016-0	22,622
RE – Run of River Hydropwer	Markit	5709-256011044-256041213-VCU-034-APX-IN-1-483-01012017-31122017-0	30,170
RE – Run of River Hydropwer	Markit	5707-256004976-256005600-VCU-034-APX-IN-1-483-01012018-31012018-0	625
Savanna burning	ANREU	3769835480-3769843835	8,356
Total			**302,571**

USE OF TRADE MARK

Table 8. Trade mark register

WHERE USED	LOGO TYPE
NCOS PDS 2018	Certified organisation
NAB Sustainability Report 2018	Certified organisation
NAB website https://www.nab.com.au/about-us/corporate-responsibility/shareholders/environmental-performance	Certified organisation

VERIFICATION

Annual Independent Assurance of global carbon neutral GHG and offset data

Name of assurer: KPMG

Period covered: 1 July 2017 - 30 June 2018

Date of assurance: 26 October 2018

NCOS Verification

Name of verifier: KPMG

Period covered: July 2016 - 30 June 2017

Date of verification: 31st October 2017

Next verification due: September 2020

DECLARATION

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

Patrick Wright

Chief Technology and Operations Officer

14 February 2019