

# PUBLIC DISCLOSURE STATEMENT

NEXTDC LIMITED
ORGANISATION CERTIFICATION
FY2019-20

#### Australian Government

# Climate Active Public Disclosure Statement







NAME OF CERTIFIED ENTITY: NEXTDC Limited

REPORTING PERIOD: 1 July 2019 - 30 June 2020

#### **Declaration**

To the best of my knowledge, the information provided in this Public Disclosure Statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.

20th October 2021

Date

Signature

Alex Teo

Name of Signatory

VP Strategy & Investor Relations

Position of Signatory



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# 1. CARBON NEUTRAL INFORMATION

### **Description of certification**

NEXTDC (ABN 35 143 582 521) is certified Carbon Neutral by Climate Active for its Australian corporate operations under the Climate Active Carbon Neutral Standard for organisations. This certification does not include the electricity consumed by customers in NEXTDC data centre facilities (eg. customer-owned equipment, such as servers).

Based on an operational consolidation approach, the organisational carbon inventory boundary includes NEXTDC's head office in Brisbane and all operational data centres (referred to as facilities); B1 (Brisbane), B2, C1 (Canberra), M1 (Melbourne), M2, P1 (Perth), and S1 (Sydney). Other facilities that came online throughout the reporting period were considered for the timeframe they were in operation during the FY20 reporting period (Facility S2 and P2).

The reporting period for this inventory is 1 July 2019 to 30 June 2020 (FY20). This is the third organisational inventory under the Standard and the baseline has been independently assured (FY18) to support the validity and transparency of the carbon neutral claim.

### Organisation description

NEXTDC Limited ("NEXTDC") is a technology company publicly listed on the Australian Securities Exchange with revenues of \$205.2 million in the financial year 2019/20 (up 14% from FY19), serving 1,364 customers and over 640 partners. At the end of FY20, NEXTDC entered the ASX100.

NEXTDC is Australia's leading independent data centre operator with facilities across five capital cities including Brisbane, Canberra, Melbourne, Perth and Sydney with its headquarters being in Brisbane. It delivers Data Centre-as-a-Service solutions to its partners and customers, including colocation and connectivity solutions along with professional services such as Remote Hands technical assistance, business continuity and infrastructure management

At NEXTDC we feel passionate about building the infrastructure platform that is more reliable, secure and energy efficient to support our future generations for years to come.

Our mission is to help customers harness the power of the digital age to drive better business outcomes that are more sustainable, responsible and energy efficient. We are passionate about protecting our planet and we will achieve our company mission in the most sustainable and ethical way possible.

We are proud to be a part of the Climate Active carbon neutral program, and to have it help achieve our carbon neutral goals.

software. As of 30 June 2019, NEXTDC contracted 70.0 MW power utilisation and supported 13,051



#### interconnections.

With a focus on sustainability, NEXTDC delivers industry leading engineering solutions that champion innovative technologies designed to provide our customers with levels of energy efficiency that have never been achieved in the Australian data centre industry. For further information regarding NEXTDC's Investor Relations activities visit: <a href="https://www.nextdc.com/our-company/investor-centre">https://www.nextdc.com/our-company/investor-centre</a>.

NEXTDC's vision is to improve society through the advancement of technology and it is committed to delivering greater energy efficiencies and sustainable initiatives across its entire footprint. Climate change is one of the most challenging and complex issues facing the planet. NEXTDC recognises the need to continuously work towards building a sustainable environment, building resilience against the impacts of the changing climate and exploring new opportunities that arise as a result, including also supporting its customers' efforts to reduce their own carbon footprint.

For NEXTDC, Environmental Sustainability is about ensuring it focuses attention on measurable objectives to reduce the environmental impact of its data centres, including but not limited to:

- Design, commission and tune Mechanical and Electrical Plant (MEP) to maximise energy efficiency
- · Reduce the risk of an environmental incident
- Minimise carbon emissions
- Minimise landfill contribution
- Minimise water usage
- Ethical treatment, recycling and/or disposal of industrial waste

NEXTDC acknowledges that our customers and data centres have increasing power requirements year-on-year. NEXTDC controls the non-IT power usage portion of the data centre environment, whereas customers control the IT power usage. The efficiency of NEXTDC's power usage is measured through Power Usage Effectiveness (PUE), an internationally accepted industry-standard metric used to rate the efficiency of data centres. This represents the ratio of total power consumption divided by the usable power delivered to customer IT equipment. A low ratio represents effective reuse and recycling of heat in a data centre facility. In FY20, the total power consumed by all NEXTDC facilities nationwide reached 250,344 MWh with the average PUE across all data centres being 1.30. It compares very favourably with an Australian industry average of approximately 1.7 and is well below our own internal target of 1.40. Targeted adjustments in MEP operation improve our operational efficiency and also enable us to gain higher NABERS ratings for our facilities.



# 2. EMISSION BOUNDARY

### Diagram of the certification boundary

#### **Quantified**

- Business travel, accommodation
- Business travel, flights
- Business travel, public transport
- Business travel, taxi, car share, car hire
- Diesel, stationary energy, NEXTDC load
- Diesel, transport combustion, company vehicles
- · Electricity, solar generation
- Electricity, purchased from the grid, non-customer consumption
- Employee commuting
- · Food and catering
- Freight downstream
- IT hardware rack housing
- Packaging server racks, cardboard
- Packaging server racks, plastic
- Petrol, transport combustion, company vehicles
- Refrigerant fugitives, NEXTDC server cooling
- Waste, cardboard recycling
- Waste, co-mingled recycling
- Waste, electrical (WEEE)
- Waste, landfill
- Water

#### Non-quantified

- Electricity, purchased from the grid, customer server cooling
- Refrigerant fugitives, customer server cooling

#### **Excluded**

- Diesel, stationary energy, customer load\*
- Electricity, purchased from the grid, customer server usage\*
- Freight upstream\*
- IT hardware servers and switches\*

\*These emission sources are included in NEXTDC's Climate Active Service Certification.



### Non-quantified sources

The following items have been included in the inventory boundary and not quantified:

- Electricity used to cool customer servers\*
- Refrigerants used to cool customers servers\*

#### Data management plan

As all items have been quantified a data management plan is not required.

#### **Excluded sources (outside of certification boundary)**

The following sources have been excluded as they do not meet two or more criteria of the relevance test and are deemed irrelevant:

- Diesel, stationary energy, customer load\*\*
- Electricity, purchased from the grid, customer server usage\*\*
- Freight upstream<sup>†</sup>
- IT hardware servers and switches<sup>†</sup>

\*\*Additional notes: Emissions associated with consumption of servers (electricity and stationary energy) are fully considered outside of NEXTDC's control and therefore not considered relevant as per the determinations of the Climate Active Standard. NEXTDC does not prescribe customers' set up, customers select and install their own IT equipment, including model and load, which directly determines electricity consumption (and associated heat production driving cooling demand). NEXTDC customers also control whether they switch on their equipment or not, and how much equipment they switch on. NEXTDC has no control over this. Customers contract with NEXTDC for the right to determine what they plug in, how much they plug in and when they choose to do so. The scenario is directly comparable to the electricity network providers. Up to the capacity limit of the infrastructure, actual power usage is entirely in the control of the end-customer, not the power network. Clients pay NEXTDC for their metered power usage. As such, these emission sources are deemed outside the certification boundary. As mentioned previously, NEXTDC will be offering its customers the opportunity to purchase a carbon neutral data centre service, which will be certified against the Climate Active Carbon Neutral Standard for service.

<sup>†</sup>These emission sources are included in NEXTDC's Climate Active Service Certification.



# 3. EMISSIONS SUMMARY

### **Emissions reduction strategy**

Emission reduction actions are continually reviewed. The following environmental objectives were established for FY20:

- Design, commission and tune MEP to maximise energy efficiency
- Minimise carbon emissions
- Minimise landfill contribution
- Minimise water usage
- · Ethical treatment, recycling and/or disposal of industrial waste

NEXTDC is dedicated to the continuous monitoring and improvement of the management of its data centres. It is committed to:

- Delivering the highest levels of energy efficiency
- · Minimising its impact on the environment and natural resources, and
- Meeting and exceeding the minimum environmental legislative requirements.

NEXTDC's Energy and Environmental Policy has been established to achieve the above by setting meaningful and achievable objectives and targets, overseen by NEXTDC management.

NEXTDC customers and data centres will have increasing IT power requirements year-on-year. NEXTDC controls the non-IT power usage portion of the data centre environment. The performance of this is measured through the Power Usage Effectiveness (PUE) rating metric for each of its data centres. In FY20 NEXTDC's average PUE across all data centres was 1.30. This exceeds NEXTDC's internal target PUE rating of below 1.40 in every data centre. For further information regarding NEXTDC's Environmental Sustainability policy and activities visit: <a href="https://www.nextdc.com/about-us/environmental-sustainability">https://www.nextdc.com/about-us/environmental-sustainability</a>.



# **Emissions summary (inventory)**

#### Table 2

Emission source category	tonnes CO <sub>2</sub> -e
Business travel, accommodation	50.25
Business travel, flights	387.60
Business travel, public transport	0.10
Business travel, taxi, car share, car hire	5.02
Diesel, stationary energy, NEXTDC load	1.73
Diesel, transport combustion, company vehicles	0.22
Electricity, solar generation	-
Electricity, purchased from the grid, non-customer consumption	6,610.34
Employee commuting	157.80
Food and catering	100.28
Freight - downstream	73.63
Freight - upstream	51.86
Petrol, transport combustion, company vehicles	3.37
Refrigerant fugitives, NEXTDC server cooling	1.25
Waste, cardboard recycling	-
Waste, co-mingled recycling	-
Waste, electrical (WEEE)	0.00
Waste, landfill	26.84
Water	0.97
Total Net Emission	s 7,471 tonnes CO2-e

# **Uplift factors**

### Table 3

Reason for uplift factor	tonnes CO <sub>2</sub> -e
None required	
Total footprint to offset (uplift factors + net emissions)	



### **Carbon neutral products**

This account has been prepared by Ndevr Environmental who provide Climate Active certified carbon neutral services.

### **Electricity summary**

Electricity was calculated using a location-based approach.

The Climate Active team are consulting on the use of a market vs location-based approach for electricity accounting with a view to finalising a policy decision for the carbon neutral certification by July 2020. Given a decision is still pending on the accounting way forward, a summary of emissions using both measures has been provided for full disclosure and to ensure year on year comparisons can be made.

#### Market-based approach electricity summary

Table 4

Electricity inventory items	kWh	Emissions (tonnes CO2e)
Electricity Renewables	2,085,738	0.00
Electricity Carbon Neutral Power	0	0.00
Electricity Remaining	5,565,561	6,016.93
Renewable electricity percentage	27%	
Net emissions (Market based approach)		6,017

#### **Location-based summary**

Table 5

State/ Territory	Electricity Inventory items	kWh	Full Emission factor (Scope 2 +3)	Emissions (tonnes CO2e)
ACT/NSW	Electricity Renewables	-	-0.90	0.00
ACT/NSW	Electricity Carbon Neutral Power	-	-0.90	0.00
ACT/NSW	Netted off (exported on-site generation)	-	-0.81	0.00
ACT/NSW	Electricity Total	3,283,731	0.90	2,955,357.78
Vic	Electricity Renewables	814,000	-1.12	-911,680.00
Vic	Electricity Carbon Neutral Power	-	-1.12	0.00
Vic	Netted off (exported on-site generation)	-	-1.02	0.00
Vic	Electricity Total		1.12	3,510,094.82
Qld	Electricity Renewables	-	-0.93	0.00
Qld	Electricity Carbon Neutral Power	-	-0.93	0.00
Qld	Netted off (exported on-site generation)	-	-0.81	0.00
Qld	Electricity Total	756,507	0.93	703,551.39
NT	Electricity Renewables	-	-0.71	0.00



NT	Electricity Carbon Neutral Power	-	-0.71	0.00
NT	Netted off (exported on-site generation)	-	-0.63	0.00
NT	Electricity Total	-	0.71	0.00
WA	Electricity Renewables	-	-0.74	0.00
WA	Electricity Carbon Neutral Power	-	-0.74	0.00
WA	Netted off (exported on-site generation)	-	-0.69	0.00
WA	Electricity Total	477,048	0.74	353,015.52
				·
Tas	Electricity Renewables	-	-0.17	0.00
Tas Tas	Electricity Renewables Electricity Carbon Neutral Power	-	-0.17 -0.17	0.00
	•	-		
Tas	Electricity Carbon Neutral Power	- - -	-0.17	0.00



# 4. CARBON OFFSETS

### Offset purchasing strategy: in arrears for FY20

Offset purchasing will be done in arrears. NEXTDC has ongoing arrangements in place to purchase offsets for the purpose of Climate Active Organisation certification through the Qantas Future Planet program.

Offsets will be purchased and retired annually.

# Offsets summary

#### Table 6

1. Total offsets required for this	1. Total offsets required for this report			7,471					
2. Offsets retired in previous reports and used in this report		0							
3. Net offsets required for this re	port			7,471					
Project description	Eligible offset units type	Registry unit retired in	Date retired	Serial number (including hyperlink to registry transaction record)	Vintage	Quantity (tonnes CO2-e)	Quantity used for previous report	Quantity to be banked for future years	Quantity to be used this report
West Arnhem Land Fire Abatement (WALFA) Project	ACCU	ANREU	25 February 2021	3,785,506,633 3,785,506,705 (See Appendix 3 for registry retirement information)	2018-19	73	0	0	73
West Arnhem Land Fire Abatement (WALFA) Project	ACCU	ANREU	25 February 2021	3,785,500,563 3,785,500,594 (See Appendix 3 for registry retirement information)	2018-19	32	0	0	32
Reef Restoration Project – Great Barrier Reef	ACCU	ANREU	25 February 2021	3,799,164,290 3,799,165,789 (See Appendix 3 for registry retirement information)	2019-20	1,500	0	0	1,500
44 MW Bundled Wind Power Project in Maharashtra managed by Enercon India Limited	VCU	VERRA	25 February 2021	5194-215469525-215473940- VCU-050-APX-IN-1-489- 01042016-31122016-0	2016	4,416	0	0	4,416



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West Arnhem Land Fire Abatement (WALFA) Project	ACCU	ANREU	13 May 2021	3,756,820,166 3,756,820,552 (See Appendix 3 for registry retirement information)	2016-17	387	0	0	387
44 MW Bundled Wind Power Project in Maharashtra managed by Enercon India Limited	VCU	VERRA	13 May 2021	5194-215474268-215475330- VCU-050-APX-IN-1-489- 01042016-31122016-0	2016	1,063	0	0	1,063
				Total offsets retired this re	port and used in	this report			7,471
Total offsets retired this report and banked for future reports					ure reports			0	



#### Co-benefits

EXTRAORDINARY IMPACT

### OFFSET PROJECT CATEGORY OVERVIEW

Arnhem Land in the Northern Territory is prone to extreme, devastating wildfires that affect the landscape, people, plants and animals. These projects are owned exclusively by Aboriginal people with custodial responsibility for those parts of Arnhem Land under active bushfire management. Local rangers conduct controlled burns early in the dry season to reduce fuel on the ground and establish a mosaic of natural firebreaks, preventing bigger, hotter and uncontrolled wildfires later in the season.

The projects provide employment and training opportunities for local rangers while supporting Aboriginal people in returning to, remaining on and managing their country. Communities are supported in the preservation and transfer of knowledge, the maintenance of Aboriginal languages and the wellbeing of traditional custodians.

The project meets the following Sustainable Development Goals















EXTRADRDINARY IMPACT

### OFFSET PROJECT CATEGORY OVERVIEW

The Great Barrier Reef's water quality is under serious threat by landbased activities such as farming along the coastline. Water running off farms flushes fertilisers, pesticides and soil into rivers and onto the reef, with dire consequences for corals, sea grasses and marine wildlife.

These projects deliver the revegetation and protection of native forest, wetlands and woodlands throughout the catchments of the Great Barrier Reef. The investments have flow-on impacts for reducing nutrient runoff, one of the contributing factors to the crown-of-thorn starfish

The projects also help to restore habitat for native plants and animals, while providing alternative sources of income for residents of rural

The projects meet the following Sustainable Development Goals



















EXTRAORDINARY IMPACT

### OFFSET PROJECT CATEGORY OVERVIEW

Across India, wind farms introduce clean energy to the grid which would otherwise be generated by coal-fired power stations. Wind power is clean in two ways: it produces no emissions and also avoids the local air pollutants associated with fossil fuels. Electricity availability in the regions have been improved, reducing the occurrence of blackouts

The projects support national energy security and strengthen rural electrification coverage. In constructing the turbines new roads were built, improving accessibility for locals. The boost in local employment by people engaged as engineers, maintenance technicians, 24-hour on-site operators and security guards also boosts local economies and village services.

The projects meet the following Sustainable Development Goals

















# 5. USE OF TRADE MARK

#### Table 7

Logo type
Certified Organisation

# 6. ADDITIONAL INFORMATION

#### WEB CONTENT

https://www.nextdc.com/data-centres/environmental-sustainability

https://www.nextdc.com/blog/staying-focused-data-centre-sustainability

https://www.nextdc.com/blog/australias-first-data-centre-100-carbon-neutral-corporate-operations

https://www.nextdc.com/news/australias-first-nabers-5-star-rated-data-centre

https://www.nextdc.com/news/nextdc-s1-sydney-achieves-nabers-5-star-rating

https://www.nextdc.com/news/harnessing-wind-power-cloud

#### **VIDEOS**

https://www.youtube.com/watch?v=yb-cllTneLY

https://www.youtube.com/watch?v=V9PsXWijAI0



# **APPENDIX 1**

### **Excluded emissions**

To be deemed relevant an emission must meet two of the five relevance criteria. Excluded emissions are detailed below against each of the five criteria.

Table 8

Relevance test					
Excluded emission sources	The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions	The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.	Key stakeholders deem the emissions from a particular source are relevant.	The responsible entity has the potential to influence the reduction of emissions from a particular source.	The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.
Diesel, stationary energy, customer load	No	No	No	No	No
Electricity, purchased from the grid, customer server usage	Yes	No	No	No	No
Freight - upstream	No	No	No	No	No



# **APPENDIX 2**

## Non-quantified emissions for organisations

Please advise which of the reasons applies to each of your non-quantified emissions. You may add rows if required.

Table 10

Non-quantification	n test							
Relevant-non- quantified emission sources	Immaterial <1% for individual items and no more than 5% collectively	Quantification is not cost effective relative to the size of the emission but uplift applied.	Data unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.	Initial emissions non-quantified but repairs and replacements quantified				
Electricity,	These emissions ar	These emissions are deemed non-quantifiable under agreement with Climate						
purchased from	Active until FY23. F	rom FY24 onwards, th	nese emissions will be	e quantified.				
the grid, customer								
server cooling								
Refrigerant	These emissions ar	e deemed non-quanti	fiable under agreeme	nt with Climate				
fugitives,	Active until FY23. F	Active until FY23. From FY24 onwards, these emissions will be quantified.						
customer server								
cooling								



## **APPENDIX 3**





