



# **PUBLIC DISCLOSURE STATEMENT**


**NEXTDC LIMITED**

**OPT-IN SERVICE CERTIFICATION**

**FY2021-22**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**



NAME OF CERTIFIED ENTITY	NEXTDC Limited
REPORTING PERIOD	1 July 2021 – 30 June 2022 Arrears report
DECLARATION	<p><i>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.</i></p>  <p>Simon Guzowski ESG &amp; Investor Relations Manager 29 November 2023</p>



**Australian Government**  
**Department of Climate Change, Energy,  
the Environment and Water**

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Version March 2023.

# 1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	821 tCO <sub>2</sub> -e
OFFSETS USED	14% ACCUs; 86% CERs
RENEWABLE ELECTRICITY	19.37%
CARBON ACCOUNT	Prepared by: Ndevr Environmental
TECHNICAL ASSESSMENT	12/07/2021 (FY2020) Ndevr Environmental Next technical assessment due: FY2023 report

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## 2. 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 services. NEXTDC's opt-in service certification is for NEXTDC's data centre services to Australian customers.

The reporting period for this service inventory is 1 July 2021 to 30 June 2022 (FY22) and based on an **operational control approach**, the boundary of the inventory includes services provided in all operational data centres (referred to as facilities); B1 (Brisbane), B2, C1 (Canberra), M1 (Melbourne), M2, P1 (Perth), P2, S1 (Sydney), S2 and a new facility SC1 (Sunshine Coast), coming into operation since January 2022.

NEXTDC is also a certified carbon neutral organisation under the Australian Government's Carbon Neutral Initiative since FY2019. We have ensured that the emission boundary for service emissions to our customers does not overlap with emission sources associated with NEXTDC's organisational operations.

### Service description

NEXTDC offers connectivity and colocation solutions to our customers via an as-a-service model, with power, security and connectivity provided to clients. Standard rack rental includes a power allocation provided in kW. Racks are installed in the data halls and connected to redundant power sources ready for the clients to install and operate their equipment with 100% uptime guaranteed.

The data centres and the environment around the servers are under the operational control of NEXTDC, yet the demand for data services is driven by the customers usage. Activity data for electricity can be readily attributed to either corporate operations or specific customers, as racks of servers are allocated to specific customers.

The functional unit for the service certification is calculated on a cradle to grave basis and is tCO<sub>2</sub>-e/kW of server capacity. To establish the emission factor per functional unit, the certification uses FY18 as the baseline year, which was not offset.

NEXTDC carbon neutral service NEXTNeutral was launched in March 2021 and is an opt-in service offered to our customers.

## 3. EMISSIONS BOUNDARY

### Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

**Quantified** emissions have been assessed as 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service, and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

**Non-quantified** emissions have been assessed as attributable and are captured within the emissions boundary but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

### Outside the emissions boundary

**Non-attributable** emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further details are available at Appendix D.

## Inside emissions boundary

### Quantified

Climate Active carbon neutral products

Diesel, stationary energy, customer load

Electricity, purchased from the grid, customer server cooling

Electricity, purchased from the grid, customer server usage

Electricity, solar generation

Freight - upstream

Freight - downstream

IT hardware - rack housing

IT hardware - servers and switches

Packaging - server racks, cardboard

Packaging - server racks, plastic

Refrigerant fugitives, customer server cooling

Waste, cardboard recycling, customer load

Waste, co-mingled recycling, customer load

Waste, electrical (WEEE), customer load

Waste, landfill, customer load

Water, customer server cooling

### Non-quantified

N/A

## Outside emission boundary

### Non-attributable

Business travel, accommodation\*

Business travel, flights\*

Business travel, public transport\*

Business travel, services\*

Business travel, taxi, car share, car hire\*

Diesel, stationary energy, NEXTDC load \*

Diesel, transport combustion, company vehicles \*

Electricity, purchased from the grid, non-customer consumption\*

Employee commuting\*

Food and catering\*

Refrigerant fugitives, NEXTDC server cooling\*

Waste, cardboard recycling, NEXTDC load\*

Waste, co-mingled recycling, NEXTDC load\*

Waste, electrical (WEEE), NEXTDC load\*

Waste, landfill, NEXTDC load\*

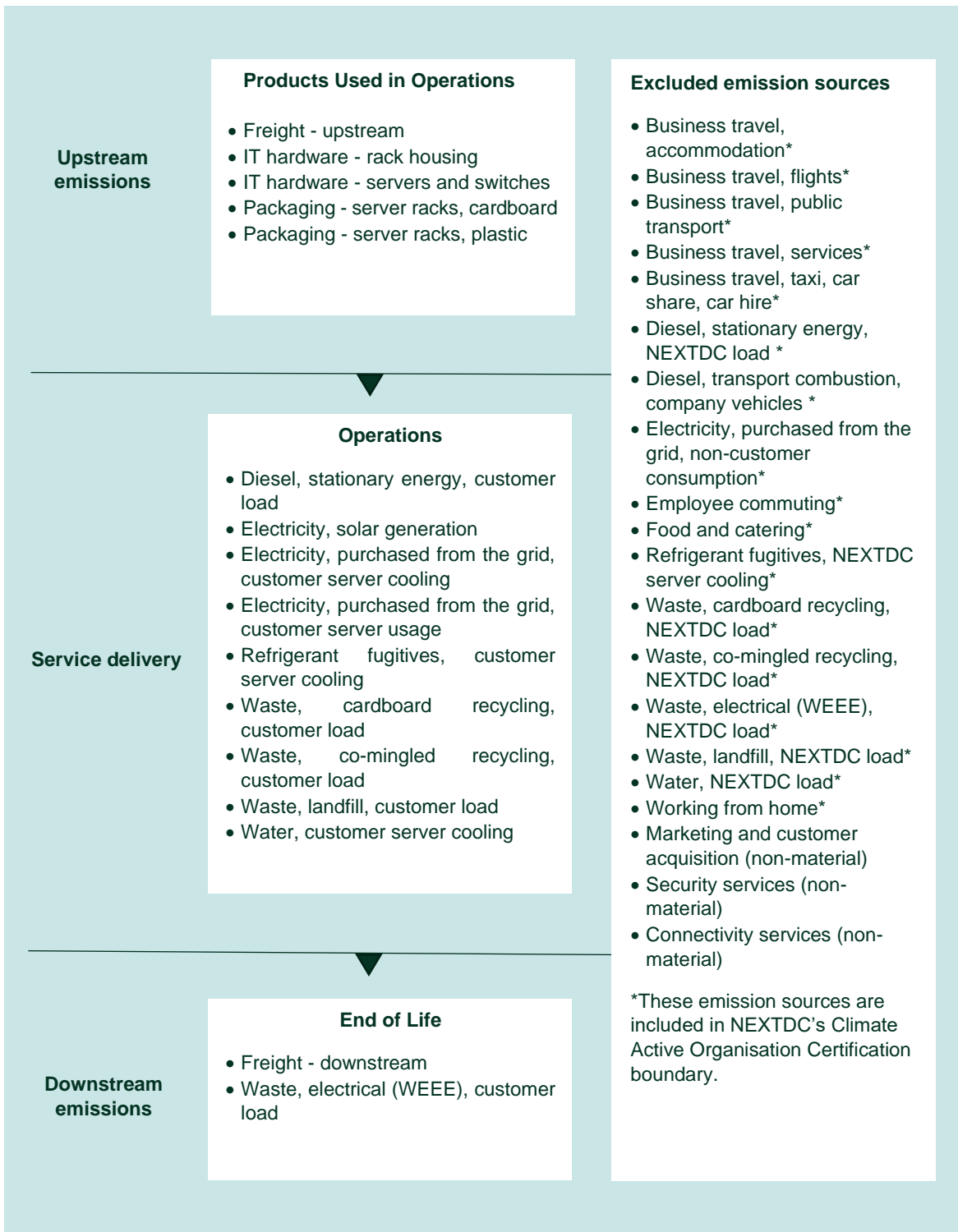
Water, NEXTDC load\*

Working from home\*

*\*These emission sources are included in NEXTDC's Climate Active organisation certification boundary.*

## Service process diagram

The below diagram is a cradle-to-grave boundary.



## 4. EMISSIONS REDUCTIONS

### Emissions reduction strategy

NEXTDC intends to continue leading, listening, and acting on sustainable business operations and actively investing in environmental and social and governance (ESG) areas. While we always aspire to our vision of being the leading customer-centric data centre services company, we also acknowledge our responsibility to do this sustainably and responsibly and we are constantly looking for new ways to minimise our environmental footprint.

NEXTDC is dedicated to devising and monitoring the best methods of managing data centres, to ensure energy efficiency and minimise impact on the environment and our natural resources. Our facilities are designed, engineered, and operated to optimise their energy efficiency. NEXTDC has invested significantly in improving energy efficiencies by focusing on its environmental objectives, operational efficiencies and best in class data centre designs. NEXTDC is committed to each data centre having a target Power Usage Effectiveness (PUE) rating to be as energy efficient as possible. In FY22, we achieved a national average PUE of 1.38 which is better than NEXTDC's target PUE of 1.4 and compares very favourably with the Australian and Global industry average of 1.7.

Our organisation continues to prioritise sourcing of renewable energy including solar installations at our data centres and engaging with our customers and energy providers on renewable opportunities. **NEXTDC is committed to the target of reaching 100% renewable energy in our operations by 2030** whilst we continue to expand our operations. Our public statement is available in [NEXTDC 2022 Annual report](#).

Considering our projected organic growth, emissions may rise during the following reporting periods, hence NEXTDC will track its emissions performance using an emissions intensity reduction target (kW capacity). **NEXTDC commits to reduce all service emissions intensity of 0.323 tCO<sub>2</sub>-e/kW capacity in 2020-21 by 20% by 2030.** NEXTDC has selected 2020-21 as the base year for target setting.

For further information regarding NEXTDC's Environmental Sustainability policy and emission reduction actions visit: <https://www.nextdc.com/about-us/environmental-sustainability>.

Whilst working on this plan to reduce emissions, we are proactively offsetting our impacts through the purchase of carbon credits. The emission reduction strategy for the organisational and service operations will include the following actions (but are not limited to):



Emission source	Scope	Opportunity Description	Target year	Potential abatement
Electricity	2	<ul style="list-style-type: none"> <li>• Energy Management: <ul style="list-style-type: none"> <li>- Ensure each NEXTDC data centre is operated to the lowest seasonal Power Usage Effectiveness (PUE) ratio, ensuring optimal energy efficiency when delivering services.</li> <li>- Optimise existing equipment and/or replace equipment with more energy-efficient equipment.</li> <li>- Ensure that cooling equipment is not over-powered for the task.</li> <li>- Increase allowable temperature and humidity ranges and avoid strict temperature control where possible.</li> <li>- Airflow assessment and planning (prevent blocked air ducts and poor airflow design).</li> <li>- Ensure new buildings are designed and built in line with best practice.</li> </ul> </li> <li>• Procurement of renewable energy: <ul style="list-style-type: none"> <li>- NEXTDC is actively engaged in directly procuring and investing in renewable energy, committing to the target of reaching 100% renewable energy in our operations by 2030.</li> </ul> </li> </ul>	2030	100%
Water	3	<ul style="list-style-type: none"> <li>• Water Management: <ul style="list-style-type: none"> <li>- Ensure each NEXTDC data centre reports on and works toward minimal water usage, tracking the Water Usage Effectiveness (WUE) ratio per facility.</li> </ul> </li> <li>• Other reduction actions may include: <ul style="list-style-type: none"> <li>- Improvements in mechanical and electrical plant.</li> <li>- Increase allowable temperature and humidity ranges and avoid strict temperature control where possible.</li> <li>- Ensure new buildings are designed and built in line with best practice (i.e., efficient water rating).</li> <li>- Install efficient cooling systems.</li> <li>- Purchase water efficient products.</li> <li>- Rainwater harvesting.</li> </ul> </li> </ul>	2028	20%
Waste	3	<ul style="list-style-type: none"> <li>• General waste: <ul style="list-style-type: none"> <li>- Implement a Zero Waste program, targeting 90% waste diversion from landfill at all Hyperscale, Metro and Regional data centres.</li> <li>- Implement solid waste audits and develop a waste management action plan.</li> <li>- Implement a recycling education program (e.g., improve the graphics and signage on bins, standardize all recycling bins, use digital apps).</li> </ul> </li> <li>• Electronic waste <ul style="list-style-type: none"> <li>- NEXTDC has an eWaste management system.</li> </ul> </li> <li>• Paper and cardboard (not recycled): <ul style="list-style-type: none"> <li>- Promote a paper-conscious usage policy.</li> <li>- Promote the procurement of products that have been recycled.</li> </ul> </li> </ul>	2030	80%

## Emissions reduction actions

The following are some actions undertaken during the reporting period FY22:

### ***Energy Management***

In FY22, NEXTDC maintained its commitment to delivering some of the highest levels of operational energy efficiency in the market, an outcome enabled by innovative design, engineering, and operational excellence.

Our data centres are certified to globally acknowledged environmental standards. Our M1 Melbourne and S1 Sydney data centres have become the first and remain the only colocation data centres in Australia to achieve a National Australian Built Environment Rating System (NABERS) 5-Star rating for energy efficiency. NEXTDC owns and operates its own solar array on the roof of its M1 data centre and has also been a Principal Partner to the Melbourne Renewable Energy Project (MREP) since its inception in 2014. S2 Sydney is delivering long-term energy efficiency benchmarks and now that the building is approaching stabilisation it is undergoing a detailed review to identify further energy efficiency gains. S2 is approaching full capacity, and we are transitioning further demand across to S3, which is scheduled to come online in FY23.

Power usage effectiveness (PUE) is a metric used to determine the energy efficiency of a data centre. PUE is expressed as a ratio, with overall efficiency improving as the quotient decreases toward 1.0. Our average Power Usage Effectiveness (PUE) performance across the national fleet during FY22 was 1.38, a decrease of 1% in comparison with the average in FY21. These are outstanding energy efficiency results, ahead of Australian industry's average of around 1.7, and are a testament to our drive for continual improvement in energy efficiency.

All our facilities are compliant with the industry leading ISO 14001 standard for Environmental Management Systems. Our new Sunshine Coast facility (SC1) is not yet certified ISO 14001 compliant, however the process will be undertaken during FY23. We maintain our Uptime Institute (UI) Tier III certification for our first-generation facilities, and Tier IV certification for the design, construction, and operations for our second-generation sites. The design certifications verify that NEXTDC data centres are built to operate in line with globally recognised standards, demonstrating the operational excellence of our national footprint.

Additionally, in FY22 M1 data centre rooftop solar array produced 417MWh in renewable energy. The array produced around 1% of the electricity used by NEXTDC's customers at M1, reduces our peak demand from the grid and continues to support the work of the City of Melbourne in achieving its sustainability and clean energy goals.

During FY22, we saw a 188% growth in the number of new customers opting in to NEXTNeutral, a solution that enables our customers to offset carbon emissions from their IT footprint in our facilities.

### ***Environmentally Aware Building Materials***

Environmentally friendly concrete mixes have been used for our M2 Stage 5 and M3 Phase 1 projects to lessen carbon emissions produced during manufacture. We set out to reduce the amount of natural sand, replacing it with manufactured sand and replacing potable water with reclaimed water. Generally, sand replacement ranged from 0% through to 50%, whilst water replacement ranged from 50% to 100% for these applications. At this stage we have not calculated the reduction in emissions from the manufactured sand or water replacement, however this would also contribute a significant, further reduction in emissions. NEXTDC is looking to use lower carbon and more environmentally friendly concrete mixes in future builds where possible.

### ***Waste Management***

The following reduction activities have continued to be carried out in FY22 in all our facilities:

- Implementation of our Zero Waste program which aims to achieve a greater than 90% landfill waste diversion rate from all our hyperscale, metro and regional data centres.
- Clearly marked bins for separate recycling streams such as 'cardboard and packaging materials' are made available for all customers and staff in all NEXTDC facilities.
- NEXTDC does not permit disposal of e-waste in our general waste bins.
- Implementation of e-waste (computers, phones, etc.) disposal options for customers.

## 5. EMISSIONS SUMMARY

### Emissions over time

Emissions since base year		Total tCO <sub>2</sub> -e	Emissions intensity of the functional unit
Base year:	2017–18	N/A	0.493
Year 1:	2020–21	127	0.323
Year 2:	2021-22	821	0.353

The total emissions intensity per functional unit has increased by around 9.3% compared to the previous reporting period (FY21). This is primarily due to the service operation of a new data centre in FY22, SC1 (Sunshine Coast) and commissioning of new customer data halls that were still in the process of reaching customer loads large enough to support efficient operation.

### Significant changes in emissions

Emission source	Previous year emissions (t CO <sub>2</sub> -e)	Current year emissions (t CO <sub>2</sub> -e)	Reason for change
Electricity (market-based method, scopes 2 and 3)	287,863,658.0	327,464,177.2	Business growth and new facility operating partially in FY22.

Even with an increase in electricity emissions, NEXTDC's average PUE across all data centres was 1.38 in FY22, which is in-line with NEXTDC's target PUE of 1.4 and compares very favourably with an Australian industry average of approximately 1.7.

### Use of Climate Active carbon neutral products and services

N/A

## Emissions summary

Life Cycle Stage	tCO <sub>2</sub> -e
Products used in Operations	2,514.6
Operations	331,933.6
End of Life	0.03

No uplift factor was used for NEXTDC's service inventory.

<b>Emissions intensity per functional unit (tCO<sub>2</sub>-e/kW capacity)</b>	0.353
<b>Number of functional units to be offset (kW capacity)</b>	2,322
<b>Total emissions to be offset (tCO<sub>2</sub>-e)</b>	<b>821</b>

# 6. CARBON OFFSETS

## Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emissions to offset are 821 tCO<sub>2</sub>-e. The total number of eligible offsets used in this report is 821 tCO<sub>2</sub>-e. Of the total eligible offsets used, 0 tCO<sub>2</sub>-e were previously banked, and 2,233 tCO<sub>2</sub>-e were newly purchased and retired for the FY23 certification. 1,412 tCO<sub>2</sub>-e are remaining and have been banked for future use.

## 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 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 across the area.

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




## Eligible offsets retirement summary

Offsets retired for Climate Active certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO <sub>2</sub> -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Central Arnhem Land Fire Abatement (CALFA) Project	ACCU	ANREU	30 June 2023	3,800,798,625 - 3,800,798,699	2019-20	-	75	0	0	75	9.1%
Central Arnhem Land Fire Abatement (CALFA) Project	ACCU	ANREU	29 June 2023	3,785,079,697 - 3,785,079,733	2018-19	-	37	0	0	37	4.5%
Enercon Wind Farms in Karnataka Bundled Project - 73.60 MW	CER	ANREU	30 June 2023	269,034,198 - 269,035,622	CP2	-	1,425	0	1,412	13	1.6%
Enercon Wind Farms in Karnataka Bundled Project - 73.60 MW	CER	ANREU	29 June 2023	269,091,763 - 269,092,230	CP2	-	468	0	0	468	57.0%
Enercon Wind Farms in Karnataka Bundled Project - 73.60 MW	CER	ANREU	29 June 2023	269,010,161 - 269,010,388	CP2	-	228	0	0	228	27.8%
<b>Total offsets retired this report and used in this report</b>										<b>821</b>	
<b>Total offsets retired this report and banked for future reports</b>									<b>1,412</b>		

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Credit Units (ACCU)	112	14%
Certified Emission Reductions (CERs)	709	86%



## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

### Renewable Energy Certificate (REC) Summary

N/A

# APPENDIX A: ADDITIONAL INFORMATION

Serial number 3,800,798,625 -3,800,798,699:

**Australian National Registry of Emissions Units**

Transaction ID: AU28244  
 Current Status: Completed (4)  
 Status Date: 30/06/2023 12:23:03 (AEST)  
 30/06/2023 02:23:03 (GMT)  
 Transaction Type: Cancellation (4)  
 Transaction Initiator: Grant, Andrew William Thorold  
 Transaction Approver: Grant, Andrew William Thorold  
 Comment: Retired on behalf of NEXTDC Limited for its NEXTneutral product to meet its Service obligations under the Climate Active certification for the period FY2021/22.

**Transferring Account**  
 Account Number: AU-2734  
 Account Name: Tasman Environmental Markets Pty Ltd  
 Account Holder: Tasman Environmental Markets Pty Ltd

**Acquiring Account**  
 Account Number: AU-1088  
 Account Name: Australia Voluntary Cancellation Account  
 Account Holder: Commonwealth of Australia

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
AU	KACCU	Voluntary ACCU Cancellation			<a href="#">EOP100947</a>					2019-20		3,800,798,625 - 3,800,798,699	75

Serial number 3,785,079,697 -3,785,079,733:

**Australian National Registry of Emissions Units**

Transaction ID: AU28191  
 Current Status: Completed (4)  
 Status Date: 29/06/2023 10:50:09 (AEST)  
 29/06/2023 00:50:09 (GMT)  
 Transaction Type: Cancellation (4)  
 Transaction Initiator: Grant, Andrew William Thorold  
 Transaction Approver: Grant, Andrew William Thorold  
 Comment: Retired on behalf of NEXTDC Limited for its NEXTneutral product to meet its Service obligations under the Climate Active certification for the period FY2021/22.

**Transferring Account**  
 Account Number: AU-2734  
 Account Name: Tasman Environmental Markets Pty Ltd  
 Account Holder: Tasman Environmental Markets Pty Ltd

**Acquiring Account**  
 Account Number: AU-1088  
 Account Name: Australia Voluntary Cancellation Account  
 Account Holder: Commonwealth of Australia

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
AU	KACCU	Voluntary ACCU Cancellation			<a href="#">EOP100947</a>					2018-19		3,785,079,697 - 3,785,079,733	37



Serial number 269,034,198 - 269,035,622:

**Australian National Registry of Emissions Units**

Transaction ID: AU28245  
 Current Status: Sending (91)  
 Status Date: 30/06/2023 12:26:07 (AEST)  
 30/06/2023 02:26:07 (GMT)  
 Transaction Type: Cancellation (4)  
 Transaction Initiator: Grant, Andrew William Thorold  
 Transaction Approver: Grant, Andrew William Thorold  
 Comment: Retired on behalf of NEXTDC Limited for its NEXTneutral product to meet its Service obligations under the Climate Active certification for the period FY2021/22.

**Transferring Account**  
 Account Number: AU-2734  
 Account Name: Tasman Environmental Markets Pty Ltd  
 Account Holder: Tasman Environmental Markets Pty Ltd

**Acquiring Account**  
 Account Number: AU-2764  
 Account Name: Voluntary Cancellation - CP2  
 Account Holder: Commonwealth of Australia

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
IN	CER	Kyoto Voluntary Cancellation	2	2					IN-1286			269,034,198 - 269,035,622	1,425

Serial number 269,091,763 -269,092,230 and 269,010,161 -269,010,388:

**Australian National Registry of Emissions Units**

Transaction ID: AU28192  
 Current Status: Sending (91)  
 Status Date: 29/09/2023 11:03:40 (AEST)  
 29/09/2023 01:03:40 (GMT)  
 Transaction Type: Cancellation (4)  
 Transaction Initiator: Grant, Andrew William Thorold  
 Transaction Approver: Grant, Andrew William Thorold  
 Comment: Retired on behalf of NEXTDC Limited for its NEXTneutral product to meet its Service obligations under the Climate Active certification for the period FY2021/22.

**Transferring Account**  
 Account Number: AU-2734  
 Account Name: Tasman Environmental Markets Pty Ltd  
 Account Holder: Tasman Environmental Markets Pty Ltd

**Acquiring Account**  
 Account Number: AU-2764  
 Account Name: Voluntary Cancellation - CP2  
 Account Holder: Commonwealth of Australia

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
IN	CER	Kyoto Voluntary Cancellation	2	2					IN-1286			269,091,763 - 269,092,230	468
IN	CER	Kyoto Voluntary Cancellation	2	2					IN-1286			269,010,161 - 269,010,388	228

## APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

### Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

### Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

**For this certification, electricity emissions have been set by using the market-based approach.** The summary tables in the pages below reflect the total service electricity consumption, not the quantity of electricity consumed by customers opting in to NEXTNeutral.

## Market Based Approach Summary

Market Based Approach	Activity data (kWh)	Emissions (kgCO <sub>2</sub> -e)	Renewable percentage of total
Behind the meter consumption of electricity generated	403,937	0	0%
<b>Total non-grid electricity</b>	<b>403,937</b>	<b>0</b>	<b>0%</b>
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	0	0	0%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	2,864,431	0	1%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	654,094	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	75,155,050	0	18%
Residual Electricity	329,121,712	327,464,177	0%
<b>Total grid electricity</b>	<b>407,795,287</b>	<b>327,464,177</b>	<b>19%</b>
<b>Total Electricity Consumed (grid + non grid)</b>	<b>408,199,224</b>	<b>327,464,177</b>	<b>19%</b>
Electricity renewables	79,077,512	0	
Residual Electricity	329,121,712	327,464,177	
<b>Exported on-site generated electricity</b>	<b>0</b>	<b>0</b>	
Emissions (kgCO <sub>2</sub> -e)	403,937	327,464,177	

<b>Total renewables (grid and non-grid)</b>	<b>19.37%</b>
<b>Mandatory</b>	<b>19.27%</b>
<b>Voluntary</b>	<b>0.00%</b>
<b>Behind the meter</b>	<b>0.10%</b>
<b>Residual electricity emissions footprint (tCO<sub>2</sub>-e)</b>	<b>327,464</b>
<i>Figures may not sum due to rounding. Renewable percentage can be above 100%</i>	
<i>Voluntary includes LGCs retired by the ACT (MWh):</i>	2,864

## Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO <sub>2</sub> e)	Scope 3 Emissions (kgCO <sub>2</sub> e)
ACT	3,518,525	2,744,450	246,297
NSW	244,812,887	190,954,052	17,136,902
SA	0	0	0
VIC	111,735,878	101,679,649	11,173,588
QLD	24,326,802	19,461,442	2,919,216
NT	0	0	0
WA	23,401,195	15,678,801	234,012
TAS	0	0	0
<b>Grid electricity (scope 2 and 3)</b>	<b>407,795,287</b>	<b>330,518,393</b>	<b>31,710,015</b>
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
VIC	403,937	0	0
QLD	0	0	0
NT	0	0	0
WA	0	0	0
TAS	0	0	0
<b>Non-grid electricity (Behind the meter)</b>	<b>403,937</b>	<b>0</b>	<b>0</b>
<b>Total Electricity consumed</b>	<b>408,199,224</b>	<b>330,518,393</b>	<b>31,710,015</b>
<b>Emissions footprint (tCO<sub>2</sub>-e)</b>	<b>362,228</b>		
<i>Scope 2 emissions (tCO<sub>2</sub>-e)</i>	330,518		
<i>Scope 3 emissions (tCO<sub>2</sub>-e)</i>	31,710		
<b>Carbon Neutral electricity offset by Climate Active Product</b>	<b>Activity Data (kWh)</b>	<b>Emissions (kgCO<sub>2</sub>e)</b>	
N/A	0	0	
<i>Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their product certification.</i>			

# APPENDIX C: INSIDE EMISSIONS BOUNDARY

## Non-quantified emission sources

The following emissions sources have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
N/A	

## Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**.

	No actual data	No projected data	Immaterial
N/A			

## Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

## APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.
2. **Influence** The responsible entity could influence emissions reduction from a particular source.
3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.



## Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Diesel, stationary energy, NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Diesel, transport combustion, company vehicles	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Refrigerant fugitives, NEXTDC server cooling	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Electricity, purchased from the grid, non-customer consumption	Y	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Business travel, accommodation*	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Business travel, public transport*	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Business travel, services*	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Business travel, flights*	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Business travel, taxi, car share, car hire	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Employee commuting	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Food and catering	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Marketing and customer acquisition (non-material)	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Security services (non-material)	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Connectivity services (non-material)	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Waste, cardboard recycling, NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Waste, co-mingled recycling, NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Waste, electrical (WEEE), NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Waste, landfill, NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Water, NEXTDC load	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary
Working from home	N	N	N	N	N	Outside the scope of NextDC service boundary. Included in the NextDC organisational boundary



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