ESD Report

Lanceley Place Data Centre, Artarmon

2-8 Lanceley Place & 14 Campbell Street, Artarmon 2064

Date:	1 May 2024	**Issue:**	A
Reference:	10385220	**Status:**	Final

Prepared by:	Sarath Stanly	**Date:**	1 May 2024
Edited by:	David McKay	**Date:**	1 May 2024
Authorised by:	David McKay	**Date:**	1 May 2024
Issuing office:	Sydney, AUS		

0.0 DOCUMENT CONTROL

Issue	Date	Status	HDR Author ([XX/XX/XX].[Initials])	HDR Approval ([XX/XX/XX].[Initials])	Notes
A	01/05/2024	Final	01/05/2024_SA	01/05/2024_DM	SSD Submission

This page is not numbered

CONTENTS

This page is not numbered.

1.0 EXECUTIVE SUMMARY

This ESD Report has been prepared by HDR to accompany a State Significant Development Application (SSDA) for the construction and ongoing operation of a data centre facility at 2-8 Lanceley Place & 14 Campbell Street, Artarmon in the Willoughby City Council Local Government Area (LGA). The site is legally described as Lot 11, 12, 13, 14 and 15 in DP 233037.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Lanceley Place Data Centre project (SSD-66777221) dated 23 January 2024.

This report outlines the ecologically sustainable design initiatives for consideration beyond energy efficiency for the proposed development.

Greenhouse gas (GHG) emissions, water and energy consumption attributable to the proposed development have been estimated over its lifecycle and measures for reducing the GHG emissions and other environmental impacts have been identified.

This report concludes that the proposed data centre development is suitable and warrants approval.

2.0 INTRODUCTION

A State Significant Development Application (SSDA) has been prepared in support of a proposed data centre at 2-8 Lanceley Place and 14 Campbell Street, Artarmon (Lanceley Place Data Centre, Artarmon). The site comprises 5 individual allotments totalling 14,024m^2 in area, is zoned E4 General Industrial and has road frontages to both Lanceley Place and Campbell Street.

The proposal will include:

- Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing, and bulk earthworks;
- Construction, fit out and operation of a ten-storey, 80MVA data centre with a maximum building height of 51.479m (RL 124.5) ridge height (street wall height of 50m) and total gross floor area of 26,769m^2 comprising:
    - At-grade parking for 39 car parking spaces and 2 accessible car parking spaces
    - Two (2) 12.5m long vehicle loading dock spaces
    - Five (5) levels of technical data hall floor space with four (4) data halls per floor
    - Ancillary office space
    - A lobby, offices and amenities located on the ground floor
- Provision of required utilities, including:
    - Eight (8) 95,000L above-ground diesel storage tanks
    - Four (4) 1,100kL above-ground water tanks
    - Three (3) 33kV switch-rooms on site.
- Vehicle access provided via Campbell Street and Lanceley Place
- Pedestrian access provided via Campbell Street and Lanceley Place
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure
- A floor space ratio of approximately of 1.91:1. Given this exceeds the Willoughby Local Environmental Plan 2012 (WLEP) control, a request to vary the control for the development under Clause 4.6 of the WLEP will be included with the SSDA.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) and accompanying cover letter issued for the Lanceley Place Data Centre project (SSD-66777221) dated 23 January 2024.

Specifically, this report has been prepared to respond to the SEARs requirement issued below:

Table 1

SEARs Items	Secretary's Environmental Assessment Requirements	Section Reference (This Report)
Ecologically Sustainable Development (ESD)	• Identify how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated in the design and ongoing operation of the development.	Sections 4.2, 4.3

	• Demonstrate how the development will meet or exceed the relevant industry recognised building sustainability and environmental performance standards. • Demonstrate how the development minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources.	Sections 4.4, 6.0 Sections 5.0, 6.0

3.0 SITE DESCRIPTION

The site is located on Cammeraygal Land and is in the Artarmon industrial area within the Willoughby Local Government Area (LGA). It is bounded by Campbell Street to the north and Lanceley Place to the east and has immediate frontages with a concrete batching plant to the south-east, and several buildings including the NextDC Data Centre to the west.

Artarmon Industrial Precinct comprises relatively new commercial and industrial developments and has been subject to several separate DAs which have increased the densities in the area. Other notable nearby land uses include the Home HQ shopping centre, the Artarmon Bunnings Warehouse, the Royal North Shore Hospital and the North Shore Private Hospital.

The site comprises 14,024m^2 and consists of five separate lots. It was most recently occupied by film and television studios tenanted by the Australian Broadcasting Corporation (ABC) which sold the site in 2021. The site was subject to a SSDA application in 2023 which proposed an industrial warehouse and distribution centre (SSD-48478458). The site is currently vacant.

The closest residential uses include residential flat building on the western side of Pacific Highway (approximately 300m west from the site) and in Artarmon (approximately 500m north of the site).

The site is well serviced by transport, and is within close proximity of the Pacific Highway, M1, M2 and the Lane Cove tunnel with bus services linking the area with North Sydney and the Sydney CBD. St Leonards Station, which provides T9 Northern Line and T1 North Shore and Western Line train services, is within a 1km walk of the site.

The future Crows Nest Metro station is located approximately 1.4km from the site which will deliver high frequency metro services across Sydney and is expected to be opened in 2024.

Figure 1 – Site Aerial (Source: Urbis)

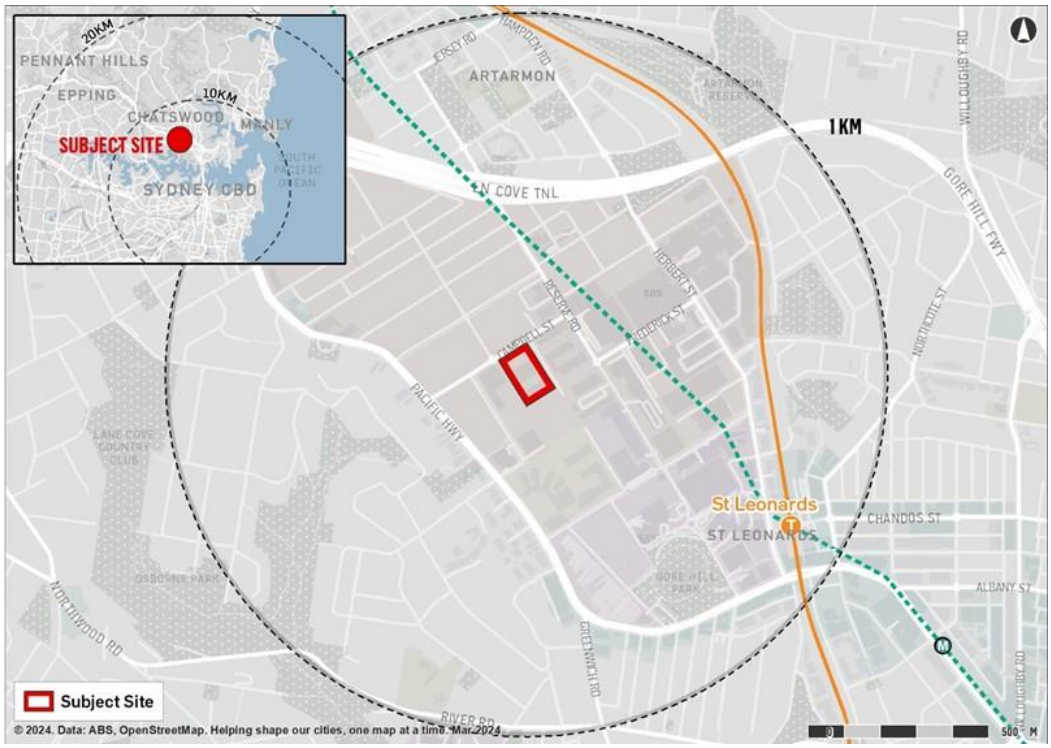

Figure 2 – Site Plan (Source: Urbis)

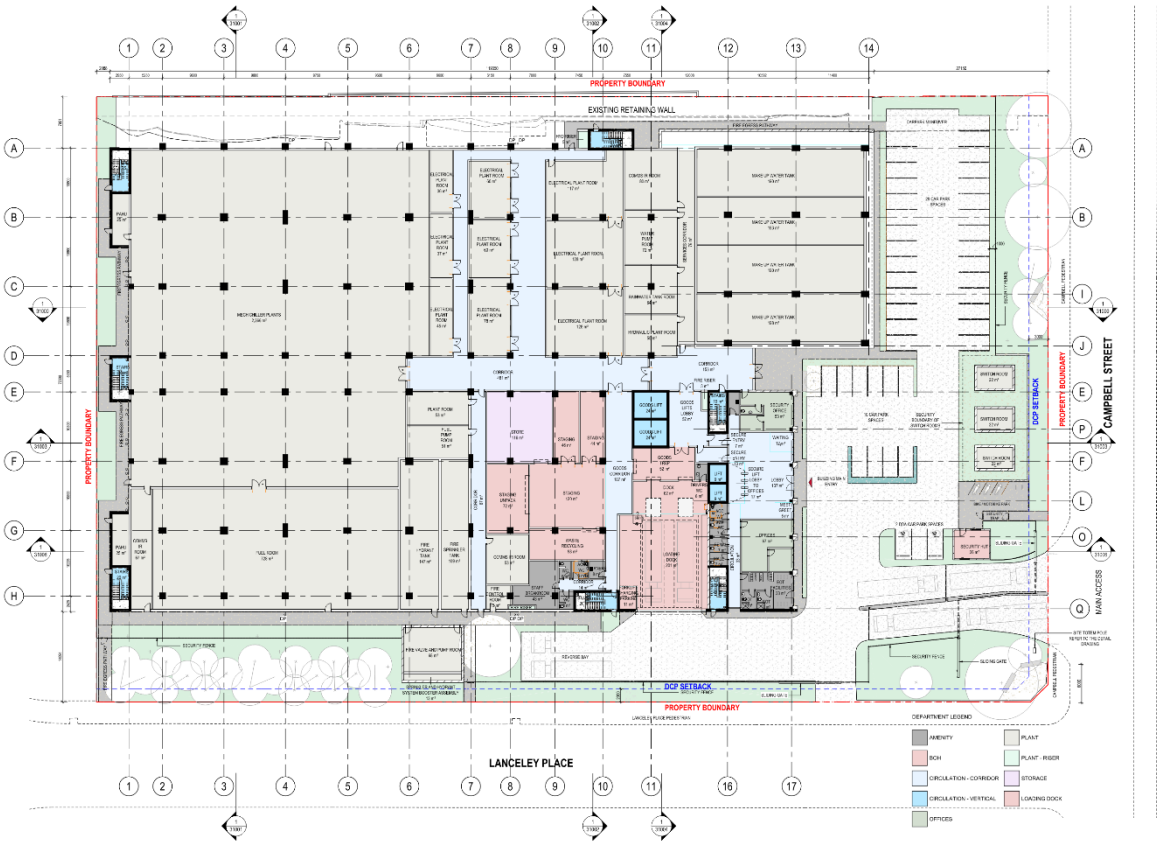

Figure 3 – Site Plan (Source: HDR)

4.0 ESD INTRODUCTION

This report has been produced to identify how the design, construction and ongoing operation of the proposed data centre development located on 2-8 Lanceley Place and 14 Campbell Street, Artarmon, will meet requirements relevant to ecologically sustainable development (ESD).

The proposed Development would allow for new data storage capacity on-site, improving the overall operational efficiencies which are to be explored and provided to customers and the wider locality. This report supports the State Significant Development Application (SSDA) submitted to the Department of Planning, Infrastructure and Environment (DPIE).

4.1 Proposed Development Description

The proposed Data Centre would operate on a 24/7 basis over ten (10) storey building plus ground floor, include 20 no. data halls, electrical switchrooms and substations to house 3 no. 33 to 11kV power transformers and 33 no. 11 to 415V distribution transformers for distribution of power within the premises, 8 no. diesel fuel bulk storage tanks, plant and equipment.

The Data Centre Building would be a maximum height of 50 m with approximate 26,769m^2 Gross Floor Area (GFA) across the Site.

The data centre building will also accommodate approximately 1,732m^2 GFA of potential office space.

Additionally, the Proposal includes provisions for internal access roads providing safe ingress and egress throughout the Site, including appropriate directional access and vehicular movement across the Site.

41 car parking spaces have been provided for the proposed development including two (2) accessible spaces. 5% of the spaces will be fitted with EV charging, with 20% to accommodate future EV charging, achieving requirements of Section J of the National Construction Code (NCC).

4.2 ESD Approach

Greenhouse gas (GHG) emissions attributable to the Project have been estimated over its lifecycle taking into account decarbonisation of the grid. Adoption of a formal ESD rating or assessment tool is not proposed for the project. However, sustainability and resilience has been considered throughout the design process.

The following ESD initiatives are detailed in this report:

- Indoor Air Quality
- Biodiversity
- Waste
- Transport
- Energy
- Water
- Materials

4.3 SEARs Ecologically Sustainable Development (ESD) Principles

Ecologically sustainable development (ESD) principles (as defined in Clause 193 of the Environmental Planning and Assessment Regulation 2021) will be incorporated into the design, construction and ongoing operation of the development.

The principles defined in the Regulation include the following:

- The precautionary principle
- Inter-generational equity
- Conservation of biological diversity and ecological integrity
- Improved valuation, pricing and incentive mechanisms

The following table outlines on how each specific principle has been incorporated in the design and ongoing operation of the proposed development.

Table 2

ESD Principles	Project Response
The precautionary principle	The project seeks to recognise potential environmental risks and mitigate any dangers of significant or irreversible harm to the environment by following the Environmental Impact Statement process. A risk-based approach was adopted by treating issues for which risk could not be determined as requiring further detailed assessment. Risks posed by construction have been addressed through the development of required management plans to identify potential hazards and aspects on the site and detail appropriate control measures to eliminate or reduce potential risks. Environmental risk factors were identified in an ecological assessment, to identify any landscape features and native fauna and flora, assess their extent, type and presence of any threatened species, and to make recommendations on measure to avoid and minimise impacts on biodiversity on the site. The operation of a datacentre has no inherent risk to the environment. However, datacentres do consume large amounts of electricity. Various sustainability measures covering aspects from energy and water consumption, and impact on environment will be targeted, including the optimisation of mechanical services design and procurement of energy efficient datacentre equipment, which would minimise the impact of the development on the environment in the long term.
Inter-generational equity	The proposed development aims to reduce energy and water usage whilst minimising waste. The building systems are optimised so that energy and water consumption is minimised through efficiency measures described in Section 6.6 and 6.7. The building has been designed to achieve the requirements of Section J of the National Construction Code. Waste produced during the construction and operational phases will be diverted from landfill to be recycled.

	The measures outlined above ensures that the development minimises its impact on the health, diversity and productivity of the environment, thus maintaining it for the benefit of future generations.
Conservation of biological diversity and ecological integrity	An ecological inspection was conducted by SLR to assess the biodiversity impacts of the proposed development application. A Biodiversity Development Assessment Report (BDAR) waiver request has been submitted to the DPHI to waive the requirement for a BDAR. It was concluded that the project will not have "a significant impact" on biodiversity values and that the site's biodiversity values are negligible or of limited value.
Improved valuation, pricing and incentive mechanisms	A Waste Management Plan will be implemented to establish recycling and landfill waste streams during the construction and demolition phase of the proposed development. In addition, measures to reduce water and electricity consumption including procuring high-efficiency cooling systems, energy-efficient IT equipment, rainwater capture and water reuse in the proposed design reduces consumption of resources by the development. The project's environmental objectives are by first implemented via passive design measures in the building fabric, including high-performance glazing, wall insulation, and roof insulation. Subsequently, more cost-effective building systems are also considered.

4.4 ESD Provisions in Willoughby Development Control Plan 2023

The design, construction and ongoing operation of the proposed development seeks to achieve the controls and objectives set out in the following Parts and Sections of the Development Control Plan:

- Part E – Industrial Development (Section 4.13 – Sustainable development)
    - The building has been designed to achieve the requirements of Section J of the NCC, ensuring the development results in an environmentally sustainable building and creating energy efficient operations.
    - The Green Travel Plan submitted by Ason Group provides site-specific measures to promote and maximise the use of sustainable travel modes to site, including walking, cycling, public transport and car sharing.
    - A NABERS commitment agreement has been submitted to demonstrate that the development is able to achieve a 5.5-star NABERS energy rating and 3-star NABERS water rating.
- Part J – Building Sustainability (Section 3 – Major Developments)
    - The design, construction and operation of the proposed development aims to align to the best practice design principles and initiatives outlined in Attachment 2 of Part J.
    - A NABERS commitment agreement has been submitted to demonstrate that the development is able to achieve a 5.5-star NABERS energy rating and 3-star NABERS water rating. The NABERS Commitment Agreement shall be used to satisfy the 'performance solution' provisions under Section J of the NCC.

5.0 GHG EMISSIONS ESTIMATE

5.1 Emissions Scope and Coverage

For this assessment, the following emissions scope has been assessed:

- Scope 1 related to direct emissions from sources within the boundary of the Project.
- Scope 2 related to the emissions resulting from the consumption of imported electricity from the local electricity grid; and
- Scope 3 related to the indirect emissions attributable to losses through the electricity transmission and distribution network.

Sources of emissions estimated in this assessment include the following:

- Imported electricity consumed in the operation of the facility; and
- On-site diesel fuel consumption consumed in the monthly testing of backup diesel generators.

Emissions have been estimated on an annual basis under assumption of full and ultimate operational capacity over a 50-year period.

5.2 Input Data

Data used for the estimation of GHG emissions has been taken from the *National Greenhouse Accounts Factors* (August 2023), published by the Australian Government Department of the Environment and Energy. At the time of writing, this was the latest revision of these accounts factors, and it is assumed that they are applicable to the estimates at commencement of operation.

Emissions factors associated with relevant sources for the Project are outlined in Table 3.

Table 3 – National Greenhouse Accounts Factors (2023) inputs used to estimate GHG emissions

Source	Emissions Factors
Grid Electricity (for NSW)	Scope 2: 0.68 kg CO2-e/kWh
	Scope 3: 0.05 kg CO2-e/kWh
Diesel Fuel	Scope 1: CO2: 69.9 kg CO2-e/GJ CH4: 0.1 kg CO2-e/GJ N2O: 0.2 kg CO2-e/GJ
Biodiesel Fuel (assumed for use 2050)	Scope 1: CO2: 0.0 kg CO2-e/GJ CH4: 0.08 kg CO2-e/GJ N2O: 0.2 kg CO2-e/GJ

With respect to estimating emissions of an assumed facility life of 50 years, the decarbonisation of the electricity grid has been estimated based on linear interpolation and extrapolation of publicly announced government commitments related to renewable energy targets. Emission for the generation of electricity is projected to decline with increased renewable energy supply while emissions for distribution losses are held constant (as a conservative assumption, although likely also to decline) up to the net zero carbon target of 2050. The proposed generators are capable of using biodiesel when a suitable supply becomes available in Sydney. Therefore, conservatively estimated the changeover from diesel to biodiesel to be 2050. Figure 4 illustrates the assumed changes to these factors notionally between 2026 and 2076.

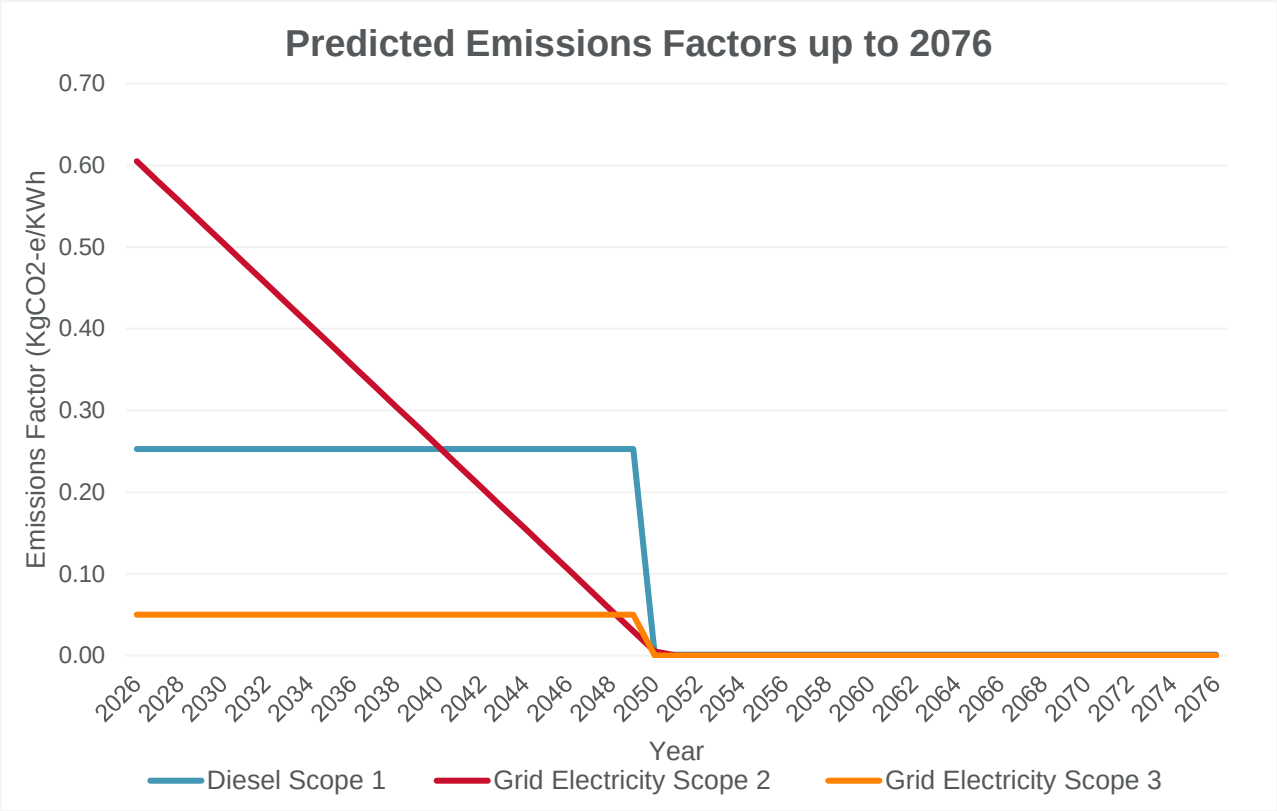

Figure 4 - Projected emissions factor for grid electricity and diesel for the life of the asset

5.3 GHG Emission Estimation Methods

Emissions arising from diesel fuel consumption

Source of Scope 1 emissions within the facility are the diesel generators which provide a backup source of electricity for the facility. In total, 35 x 3100kW/3850 kVA generators will produce Scope 1 emissions as a result of monthly generator testing. Generators are tested for operational readiness for 20 minutes each per month (total 11 hours and 40 minutes per month) at an assumed load of 0% (no load on the generators). Each generator fuel consumption at no load is 50kg/hr (or 59 L/hr) resulting in 8.25 kL diesel fuel consumption used for testing annually.

In the first year of operation, based on the predicted 2026 emissions factors, diesel consumption will result in 0.0805 tonnes of CO_2.

Emissions arising from consumption of imported grid electricity

Scope 2 and 3 emissions are produced through the consumption of imported electricity from the national grid. Electrical energy consumption estimate is based on the maximum power usage for the facility operating at 100%, 365 days a year. The annual energy consumption calculation:

- Maximum Site IT Load / Power Consumption: 52MW.
- Average annualized Site PUE: 1.28.
- Maximum Total Site Load / Power Consumption: 66.56MW.
- Maximum Annual Energy Consumption for IT Load: 52 x 24 x 365.25 = 455.83GWhr.
- Maximum Annual Energy Consumption for Total Site Load: 66.56 x 24 x 365.25 = 583.46GWhr.

In the first year of operation based on the predicted 2026 emissions factors, Electricity consumption will result in 382,116 tonnes of CO_2.

5.4 GHG Emissions Over Life of Asset

Figure 5 shows the total annual emissions for the predicted 50-year life of the asset, using the predicted emissions factors shown in Figure 4.

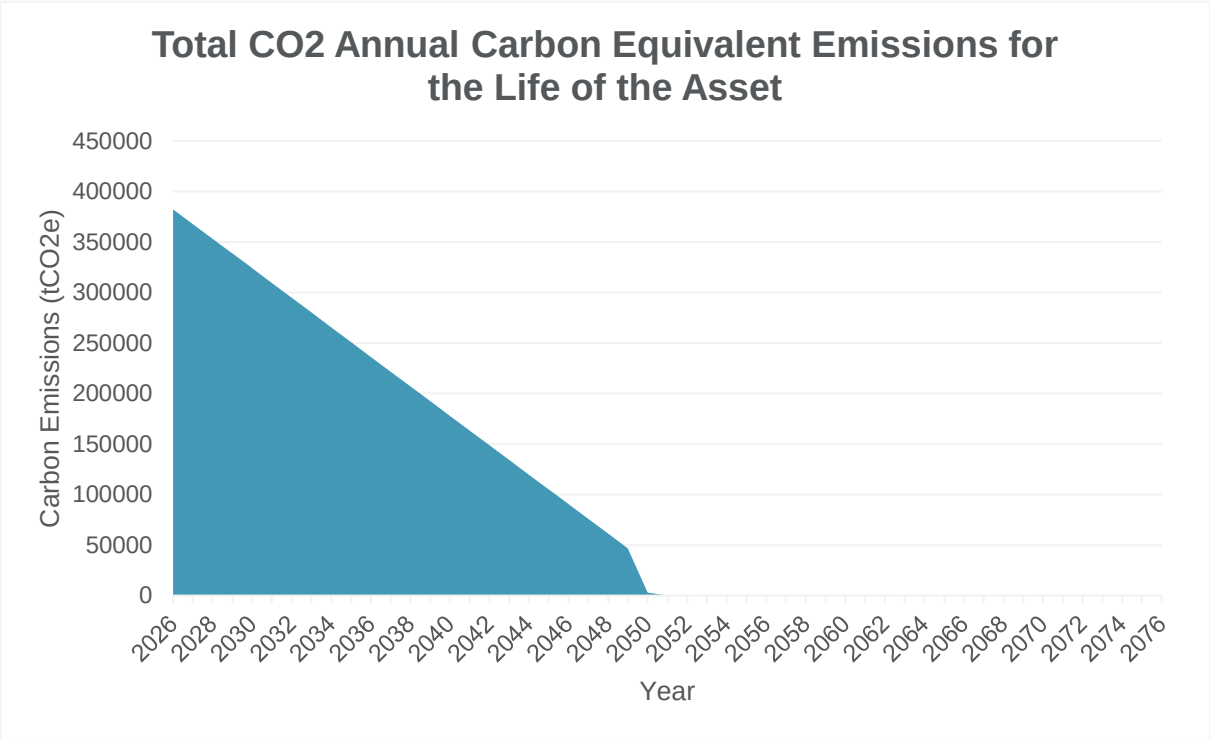

Figure 5 – Annual CO2 emissions. over the life of the asset

The total GHG emissions for life of the asset is predicted to be **5,149,036** tonnes CO_2 equivalent.

The total GHG emissions for the first year of operations is predicted to be 382,166 tonnes CO_2 equivalent.

The total GHG emissions for the last year of operations is predicted to be **0** tonnes CO_2 equivalent.

The average annual GHG emissions for the life of the asset is precited to be 102,981 CO_2 equivalent.

5.5 State and territory greenhouse gas inventories

The State and territory greenhouse gas inventories emissions show that New South Wales total GHG emissions for 2019 were 136.6 Mt CO2-e. Emissions have declined 17.2% on 2005 levels, mainly due to reductions in emissions from stationary energy (mostly electricity) and the land sector.

The proposed development is predicted to contribute 382,166 tonnes CO2 equivalent to the 2026/2027 State and territory greenhouse gas inventories. As shown above the predicted GHG emissions will fall year on year in line with the decarbonisation of grid electricity. The proposed generators are capable of using biodiesel when a suitable supply becomes available in Sydney, therefore conservatively estimated the changeover from

diesel to biodiesel to be 2050. Through the combination of a decarbonised grid and the use of biodiesel the proposed development is predicted to have 0 GHG contributions by 2050.

Digital infrastructure assets have a central role to play in the transition to a low-carbon economy and sustainable cities and can improve the states GHG emissions per GDP.

6.0 ESD INITIATIVES

The following provides a summary of project ESD initiatives.

6.1 Indoor Air Quality

Ductwork will be protected during construction to minimise contamination with debris and moisture prior to occupation. In order to minimise indoor air contamination and promote occupant health, preference will be given to paints, adhesives, sealants and floor coverings which have low Volatile Organic Compound (VOC) emissions and engineered wood products with low formaldehyde emissions.

6.2 Biodiversity

An ecological inspection was conducted by SLR to assess the biodiversity impacts of the proposed development application.

A separate biodiversity development assessment report (BDAR) waiver request has been submitted as part of the planning application. A carefully selected landscape setting will be chosen for the site, comprising a mix of native and endemic plant species, shrubs, trees and grasses, enhancing the biodiversity of the site.

Further details are addressed in the Landscape Plan and Report prepared by Cola as part of the planning application.

6.3 Management Practices

Construction contractors will be required to operate to Australian Environmental Standards. Building commissioning and tuning undertaken against internationally recognised standards such as ASHRAE.

An Operational Management Plan will be submitted separately as part of the planning application.

6.4 Waste

A Waste Management Plan has been prepared by SLR and submitted as part of the planning application.

The principal objective of the Waste Management Plan is to identify all construction and demolition waste likely to be generated at the Development site, including a description of how waste would be handled, processed and disposed of, or re-used or recycled, in accordance with the SEARs and guided by Council's requirements.

It is the responsibility of all tenants and staff of the organisation to implement practices set out by the Waste Management Plan, which includes waste avoidance measures, re-use and recycling opportunities. For example, reducing materials needed and responsibly sourcing materials for operations, product packaging and increasing the use of recycled and recyclable content, reducing hazardous substances, and eliminating construction waste.

6.5 Transport

The site is within close proximity to transport infrastructure routes (predominantly the bus and rail networks). 39 car parking spaces have been provided for the proposed Development including three (2) accessible spaces. The Site is located within close

proximity to active transport links, such as bicycle routes. Up to 6 cycle spaces are proposed for the site.

A separate Transport Impact Assessment has been prepared by Ason Group and submitted as part of the planning application. The assessment highlights a Preliminary Green Travel Plan (GTP) to develop a package of site-specific measures to promote and maximise the use of sustainable travel modes to site, including walking, cycling, public transport and car sharing, thereby assisting the Council in achieving its goal to improve sustainability.

6.6 Energy

Data centres consume significant amounts of power, and energy efficiency is generally considered to be the single most important sustainability feature of any data centre design.

The National Australian Built Environment Rating System (NABERS) provide a star rating system for energy usage within data centres. Three type of rating systems are available – IT Equipment, Infrastructure and Whole Facility. The infrastructure rating is used within this report. The two other rating types take IT equipment efficiency, which will be part of end customer fit-out and is unknown into account and hence is not appropriate for this assessment. The rating ranges from 4 star to 6 stars. For comparison purpose, the NABERS key principle indicates that an average facility would perform equivalent to 2 to 3 energy stars level.

The NABERS Data Centres Infrastructure rating assesses the efficiency by comparing the followings:

- Infrastructure Energy Consumption (i.e., exclusive of IT Equipment)
- IT Energy

HDR has converted the above to Power Usage Efficiency (PUE) and tabulated the maximum permissible PUE with respect to each NABERS energy star rating as follows:

Table 4 – NABERS energy stars with permissible PUE

NABERS Energy Stars	Maximum PUE
3	1.88
4	1.61
4.5	1.48
5	**1.34**
5.5	**1.2**
6	1.07

The Climate Neutral Data Centre Pact (CNDCP) has the following PUE target: By January 1, 2025, new data centres operating at full capacity in cool climates will meet an annual PUE target of 1.3 and 1.4 for new data centres operating at full capacity in warm climates.

The proposed design is highly energy efficient. A maximum PUE of 1.28 (using ASHRAE Recommended conditions) is expected, which place the proposed development at NABERS Energy Stars rating between 5 and 5.5 stars and meeting the CNDCP's target of 1.3.

This high efficiency design is achieved through a combination of the following:

- High efficiency chilled water-cooling system.
- VSD drives will be used on fans and pumps allowing turndown and energy savings at part load.
- High efficiency electrical drives will be used on the various systems.

- All lighting to be LED.
- Sub-metering throughout the facility to help monitor and interpret energy consumption in operation and enable optimisation year-on-year.

6.7 Water

Water Usage Efficiency (WUE) is a measure of water efficiency for a data centre and can be defined at a high level as:

$$WUE = \frac{\text{Annual Site Water Usage}}{\text{IT Equipment Energy}}$$

WUE, a site-based metric that is an assessment of the water used on-site for operation of the data centre. This includes water used for humidification and water evaporated on-site for energy production or cooling of the data centre and its support systems (similar to carbon Scope 1).

The lower the WUE the more water efficient a data centre is. However, it is important to consider WUE in the context of PUE, for example an air sourced cooling system would have a WUE of zero but could be less energy efficient resulting in a higher PUE.

The WUE has been calculated in accordance with "*The Green Grid, Water Usage Effectiveness (WUEtm): A green Grid Data Centre Sustainability Metric" to be 1.79 L/kWhr.*

There are no recognised WUE benchmarks or targets set as yet, however it is considered current best practice for data centres to calculate and consider the WUE when designing a data centre. It is anticipated that the data centre operators are to confirm a WUE target from 2022.

The estimated annual water used on-site for operation of the new data centre is 720,000m^3 as per Table 5 below.

Table 5 - Calculated water usage

Building	Estimated Annual water usage (m^3)
Lanceley Place Data Centre, Artarmon	720,000

The proposed design will utilise open circuit cooling towers for heat rejection. This cooling system is highly efficient, contributing to the low PUE value noted above, but will consume significant volume of water. In order to minimise water consumption, the cooling towers will be selected and controlled as follows:

- Towers will be selected to provide no more than 0.002% drift coefficient.
- The system will be controlled to operate with no less than 6 cycles of concentration.

The above is in line with Green Building Council of Australia (GBCA) good practice for water efficiency and in accordance with AS/NZS3666.1 – Air Handling and Water Systems of buildings – Microbial Control.

The proposed water-cooled heat rejection system benefits from free cooling and is more energy and GHG efficient than an air-cooled chiller system. Air-cooled systems still use some water albeit, off site, as part of the cooling required for fossil fuel powered electricity generation.

As grid electricity becomes decarbonised there will become a point where an air-cooled system could result in low GHG emissions and low water consumption however the most effective option at present from an energy consumption and GHG emissions perspective is the proposed system.

Whilst most of the water used on site will be for the operation of the data centre some will be used for the welfare area. To minimise the potable water usage in the welfare area all sanitary wares will achieve a minimum WELS – 5-star rating.

6.8 Materials

Below summarises measures which can be taken to reduce construction-related emissions:

- Considering the asset's lifespan during the design phase, especially concerning decommissioning. Ensure that the design facilitates material recovery and reuse in construction processes.
- Analyse and enhance the design to pinpoint areas where material quantities can be reduced without compromising design performance.
- Identify materials that can serve as replacements for lower embodied carbon options.
- Preference will be given to materials responsibly sourced as per the table below:

Table 6 – Material responsible sourcing label preference

Material	Responsible sourcing label
Fabricated structural Steelwork	Environmental Sustainability charter of the Australian Steel Institute (ASI)
Steel	ISO 14001 / World Steel Associates Climate Action Programme
Timber	Reused / FSC / AFC/ PEFC
PVC	Best practice PVC
Other	ISO 14001

- Precast concrete will be used to expedite construction and reduce the embodied carbon of the development.

7.0 CONCLUSION

This ESD Report demonstrates the proposed Data Centre located on 2-8 Lanceley Place and 14 Campbell Street, Artarmon, aims to meet the Secretary's Environmental Assessment Requirements (SEARs) as a state significant development. Through the implementation of the initiatives noted within this report, the project clearly demonstrates the commitment to ESD principles throughout the design, construction, and operation. Additionally, the project design team has worked to optimise energy performance and address key climate related risks posed to the site, work that will continue to be developed throughout the detailed design.