EG

DECARBONISATION PATHWAY

965 Botany Road, Rosebery, NSW

1. EXECUTIVE SUMMARY

EG's Real Zero Strategy is targeting zero carbon by 2030 across the Delta portfolio. A Real Zero Carbon building matches all energy demand with the supply of carbon free renewable energy in accordance with the United Nations 24/7 Carbon Free Energy Compact, of which EG is a proud member.

EG worked with built environment experts Buildings Alive to create these bespoke decarbonisation pathways for each asset and has since partnered with EGX climtech Avani to deliver these ambitious, market leading pathways.

These pathways are;

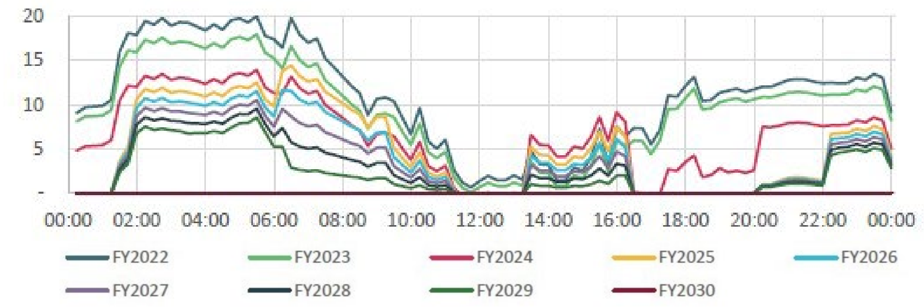
- Credible - emissions reductions should be "real" and beyond question
- Accountable - progress should be measurable, measured and reported
- Commercial - maximise investment opportunity / minimise operating costs
- Future-ready - thinking ahead
- Recognised - aligned with emerging frameworks
- Practical - applied and in 'action' rather than theoretical
- Targeted - within the boundaries of organisational control
- Timely - this is the 'decisive decade' and EG can display leadership

A high-level analysis was conducted to generate a potential decarbonisation pathway for 965 Botany Road based on near real-time grid carbon intensity. The below table is a summary of a potential decarbonisation pathway targeting FY30 to achieve Real Zero for Scope 1 & 2 site energy emissions.

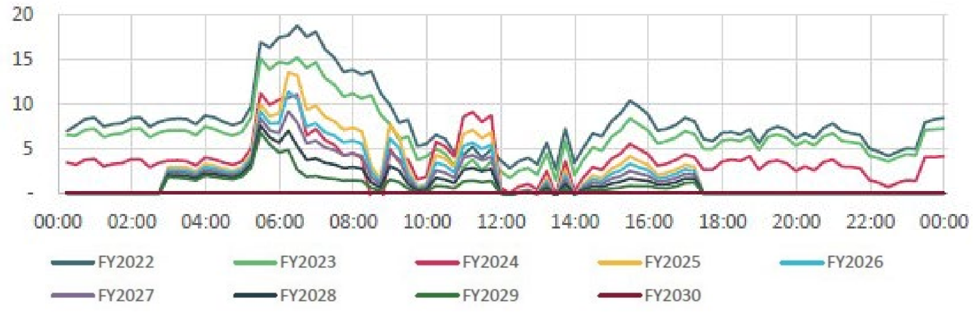
Note that with Solar PV there is generally a slight excess of electrical energy available (~10 kWh) during 11:30AM - 1:30PM on a summer day for battery charging etc.

If measures on the following page were implemented, in FY30 around 7.5% of emissions remain to be addressed through electricity procurement.

Summer Day – Resulting Carbon Profile (kg/interval)



Winter Day – Resulting Carbon Profile (kg/interval)



1. EXECUTIVE SUMMARY SUMMARY OF MEASURES

Summary of Measures	Timing
Baseline Year Energy Carbon Emissions (NGA)	FY22
On-Site Renewable Energy 110 Kw system installed in the building	FY22
Undertake **Real-time Grid Carbon Measurement**. Emissions reduce in line with grid decarbonisation	FY23 onwards
Energy Efficiency • Optimisation of existing systems • Package Air Conditioning Unit controls upgrades • Lighting upgrades	FY23 onwards FY23 FY23 FY23
Demand Flexibility Implement automated demand / response strategies based on building / carbon profile forecasts	FY24 onwards
On-Site Battery Storage A 100-kWh battery in 2024 could remove ~8% of the remaining emissions in summer and ~ 11% in winter from 2025	FY25 (or sooner)
Off-Site Renewable Energy Energy procurement of time matched power purchase agreement for removal of remaining emissions	FY30 (or sooner)
Resulting Real Carbon Emissions	**0 kg CO_2 –e pa**

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2. SITE OVERVIEW 965 BOTANY ROAD, SYDNEY

This report is a "Real Zero" decarbonisation pathway document for 965 Botany Road based on Buildings Alive's analysis conducted in Sept / Oct 2022. It assesses the potential contribution of various strategies to a FY30 Real Zero Carbon target for the building.

This assessment is based on documentation provided and various assumptions as stated. It follows procedures as set out in "220913 Zero Carbon Roadmap Methodology - EG Funds“

Basic Building Details

- NLA 2,880 sqm use offices
- NABERS Rating of 4.5 Stars (Valid thru Dec 22)
- 100% occupied at the time of the report

Energy Source (Base Building)

- Grid Import (Electricity)
- On-site Solar(Electricity) - 110 KW installed in Dec 2021
- No diesel generator
- No natural gas (all-electric building)

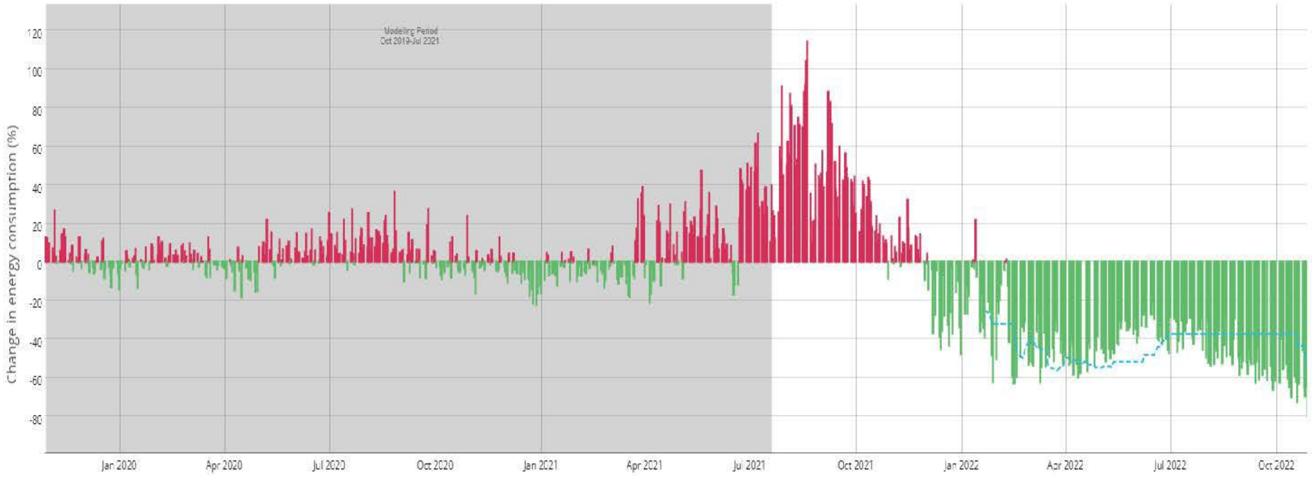
The scope of this assessment includes Scope 1 & 2 direct emissions. EG is committed to exploring collaborative opportunities with tenants to measure the carbon footprint of their energy use in real time and reduce it to Real Zero by 2030. It is EG's intent that these Scope 3 emissions (the carbon emissions resulting from tenant energy use) be included within EG's target in the future.

3. SITE ENERGY SOURCES / EMISSIONS

For this analysis, a baseline year of FY22 has been selected based on analysis of the past several years of operation.

- Baseline year energy usage is electricity (683,010 kWh).
- Scope 1 & 2 energy emissions for the baseline year were 455,122 kg as calculated using NGA factors.
- By measuring emissions utilising actual interval level carbon intensity of the electricity grid, baseline year emissions would have been 410,323 kg, 10% lower.

Buildings Alive REF Building Performance Tracker - Model baseline year in grey, baseline year for study in blue



FY22 Site Energy Emissions – NGA vs Measured

4. DECARBONISATION PATHWAY

4.1 ENERGY EFFICIENCY OPTIMISATION

Overview

Most buildings are not fully optimised based on the control systems and equipment currently in place. If these systems run at their optimum every day, significant savings can be made.

Initiative

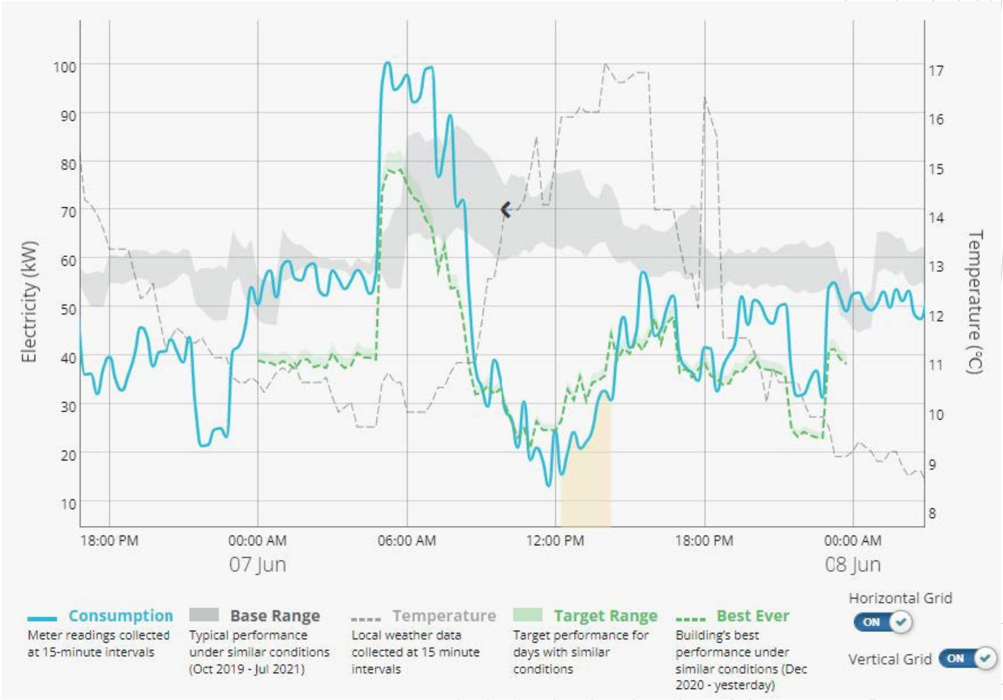
The Rapid Efficiency Feedback (REF) service provided on-site by Buildings Alive provides estimated potential savings made from operating the building at its best every day and calculates a "Target" profile that the building should be striving to achieve. This feedback is utilised by the building operators to tune and optimise the existing control strategies on site.

EG continues to investigate further energy efficiency opportunities across the asset, striving to reach peak performance.

Results

Energy Savings of 5% on a summer's day and 10% on a winter's day are possible.

This figure shows an example week for this building where potential performance ("Best Ever") is compared to actual consumption



4.1 DECARBONISATION ENERGY CONSERVATION MEASURES

Overview

The review has found several Energy Conservation Measures (ECMs) which can be implemented to save further energy beyond the optimisation of existing systems.

With real-time carbon intensity measurement, Energy Conservation Measures (ECM) will have different decarbonisation impacts at different times.

Lighting Upgrade (FY23)

There is a combination of fluorescent lights, LEDs and HighIntensity Discharge (HID) floodlights (~400W) in the building. It is recommended that an upgrade be undertaken to ensure all lights are efficient LEDs with appropriate controls (e.g. motion controlled where suitable).

Packaged Air Conditioning Units (PAC units) unit controls Upgrade (FY23)

Most of the existing PAC units were installed in 2017 and do not need replacement in the short term. However, there is no proper control over them resulting in the units operating 24/7 and heating and cooling conflicts. It is recommended that controls on these units be improved with a timer and fixed temperature deadbands.

This figure shows a summary of Energy Conservations measures assessed using traditional energy / cost methods.

ECM Description	1. PAC unit controls upgrade	2. Lighting upgrade
Electricity Saving PA (kWh)	39,956	8,538
Energy Cost Savings PA ($)	$8,500	$2,000
Implementation Cost ($)	$10,000	$3,000
Simple Payback (Years)	1.2	1.5
Simple ROI (%)	85%	67%
Annual Energy Savings (%)	15%	5%

4.2 DEMAND RESPONSE LOAD FLEXIBILITY

Overview

The ability to shift building load from periods of high carbon intensity to adjacent periods of lower grid carbon intensity is key to delivering an optimised daily profile and minimising total emissions.

This will require controls optimisation based on a provided signal. Notable controls strategies which can be automated on the building-side to achieve this function have been identified here.

Initiative

Global VAV Zone Temperature SP offset

This allows multiple VAV terminal units across the buildings to have their zone temperature setpoint adjusted simultaneously to allow for the cooling / heating load to be shifted as required.

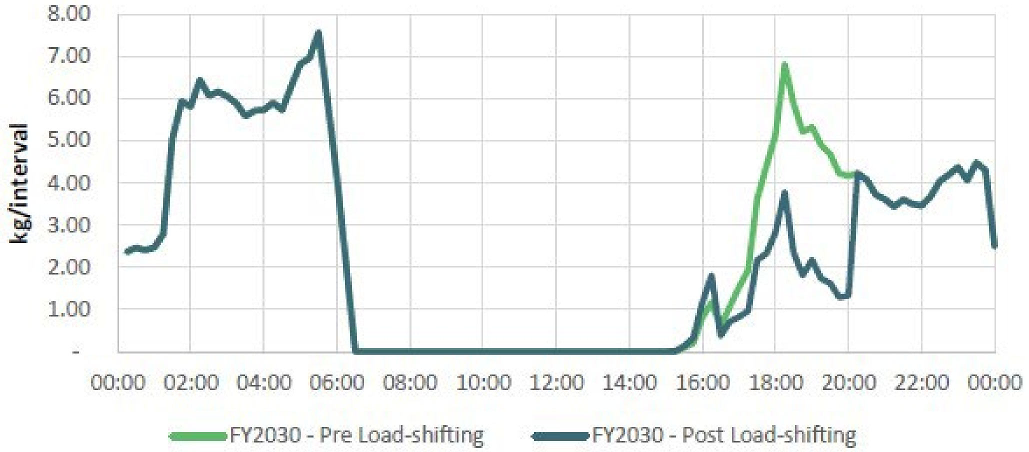
Packaged Units Fan/Compressor Speed Limiting

This allows the fan speed to be limited based on the demand stage of the building. The fan speed can also be dynamically reset up / down and locked to control the Fan kW load during a peak event.

Results

FY24: Implement control strategies to shift 40% of evening summer load utilising strategies above. Winter load shifting should focus on delaying morning warmup peak (based on carbon/building forecasts).

This figure shows an example week for this building where potential performance ("Best Ever") is compared to actual consumption



Plot showing carbon-impact of shifting load on a Summer Day

4.2 DEMAND RESPONSE WINTER EXAMPLE

The impact of shifting load using the previously identified strategies has been simulated for 965 Botany Road and emissions savings compared across current and future decarbonisation grid intensity profiles.

The analysis assumes that 40% of the evening load between 4:30PM - 8PM is shifted to 1PM - 4:30PM. This can be achieved using a control procedure like the one below:

At 1PM

- Reduce the average zone temperature setpoints by a degree to 22 °C across all the areas by utilising the upgraded Packaged Units (PAC) unit controls". The aim of this is to over-cool the spaces slightly.

From 4:30PM

- Increase the average zone temperature setpoints to 23.5°C across the floors to reduce the cooling requirement.

These control strategies will be automated and fine tuned during the coming years. The analysis shows that with the current (FY23) grid carbon intensity level, the shifting of end-of-day load by 30% can result in 0.7% total daily emissions savings.

This is projected to grow to 4.3% daily emissions savings as the grid decarbonises in 2030.

Demand shifting under the existing grid carbon intensity profile results in a 0.7% daily emissions saving

Demand shifting under future decarbonised grid results in a 4.3% daily emissions savings

4.3 ON-SITE RENEWABLE ENERGY SOLAR PV

Overview

On-site Solar PV is currently a very cost-effective form of energy. It has its highest carbon impact the earlier it is implemented as the grid decarbonises its impact is lessened, therefore it is ideal to install it early in the decarbonisation journey.

Initiative

As the roof is a large flat area, mostly unused, it provided an ideal opportunity to install solar panels with ~1,900m^2 roof area and minimal shading. In December 2021, a 110 kW Solar PV system was installed. This system has permission to export to the grid.

Results

- The annual solar electricity generation is expected to be approximately 95,550 kWh, equivalent to 14% of the electricity consumption in the baseline year (FY22).
- This resulted in 372 kg of CO2 emissions reduction on a summer day in FY22 and 144 kg of CO2 emissions reduction on a winter day.

Summer Day Carbon Impact of Solar PV (kg/interval)

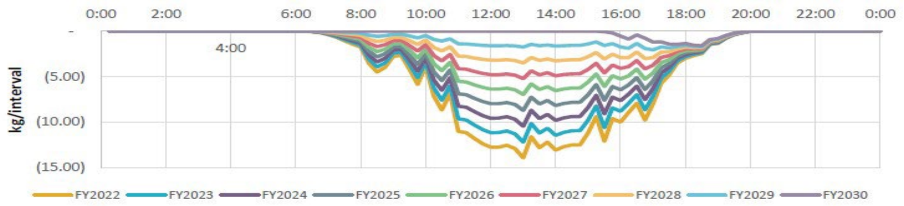


Chart above shows the lessening impact of Solar PV on a Summer Day to 2030 (due to grid decarbonization)

Rooftop view prior to solar install showing approximate location of solar PV. (Image from Google Maps)

4.4 ON-SITE ELECTRICAL STORAGE

Overview

A basic assessment of the potential for electric storage on site was conducted. Note that the ultimate mix between site battery / electricity procurement / EVs will be determined later in the decarbonisation process.

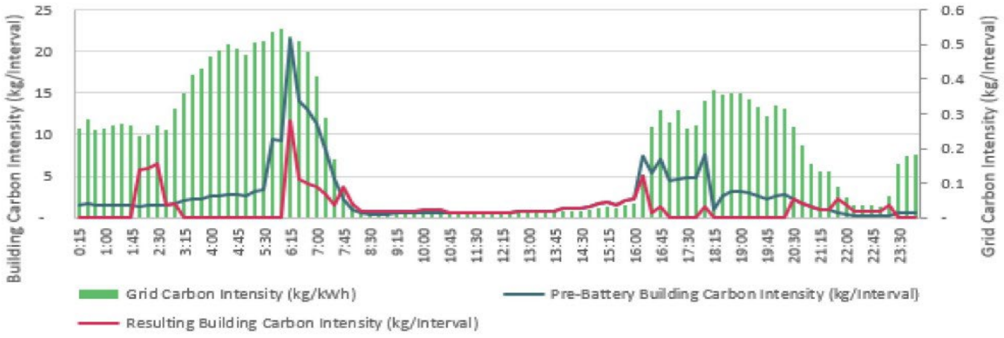
Battery Storage

- There is potential to integrate a sufficient battery system to enable greater demand flexibility including electrical peak demand reduction and load shifting for carbon optimisation.
- If a 100 kWh battery was installed, in FY30 it would likely be able to save 5-10% of the remaining emissions and would occupy approx. 4.5 m x 4m space. This would be in the order of $95k at current battery prices.

Electric Vehicles (EVs)

- Over the coming years increasing amounts of EVs will be increasingly common. EVs will eventually be a potential resource to assist with decarbonisation if they are managed intelligently. Specific modelling of EV charging / discharging has not been included in this report, but eventually, they may help reduce the size of on-site battery storage / off-site renewable energy procurement required.
- Consideration for charging infrastructure should be incorporated into building CapEx planning.

2030 Summer Day Battery Impact (Carbon)



Example SOkWh battery installation

(https://www.teslaratj.com/tesla-largest-powerwallinstallatjon-goes-Hve/)

4.5 OFF-SITE RENEWABLE ENERGY

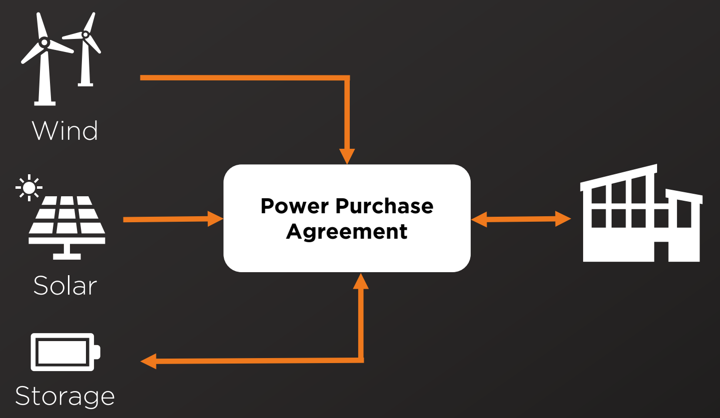
Remaining Scope 2 emissions which are not eliminated through any of the previous measures need to be removed through procurement of time-matched renewable energy.

The ultimate mix between on-site storage and time-matched renewable energy procurement will be determined later in the pathway as the full impact of other decarbonisation measures are measured.

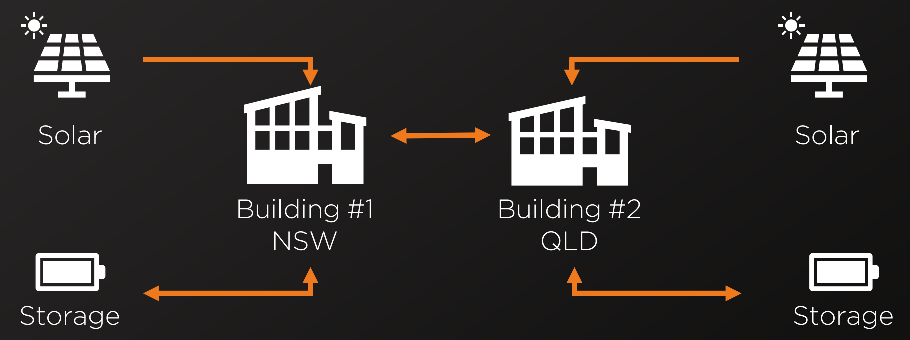
Power Purchase Agreements (PPAs) have been a common form of procuring renewable energy on a non-time-matched basis. Increasingly, time-matched PPAs are available and there are new purchasing models being rapidly developed to serve this emerging market[1].

Another potential approach is to measure / share excess energy (renewables / batteries) between sites within the fund and use this to help reduce overall emissions.

Power Purchase Agreement (PPA) representation needs to be time-matched



Peer-to-peer granular energy sharing



1 https://cloud.google.com/blog/topics/sustainability/a-new-clean-energy-purchasing-model-to-drive-decarbonization

4.6 OTHER SCOPE 1 EMISSIONS

Additional emission sources considered part of Scope 1 emissions.

Refrigeration Equipment

- The packaged HVAC units supply the whole building with airconditioning.
- It appears that most of the units in the building use R410 as the refrigerant.
- It is recommended that existing systems be replaced with lower Global.
- Warming Potential (GWP) alternatives as they reach end of life.

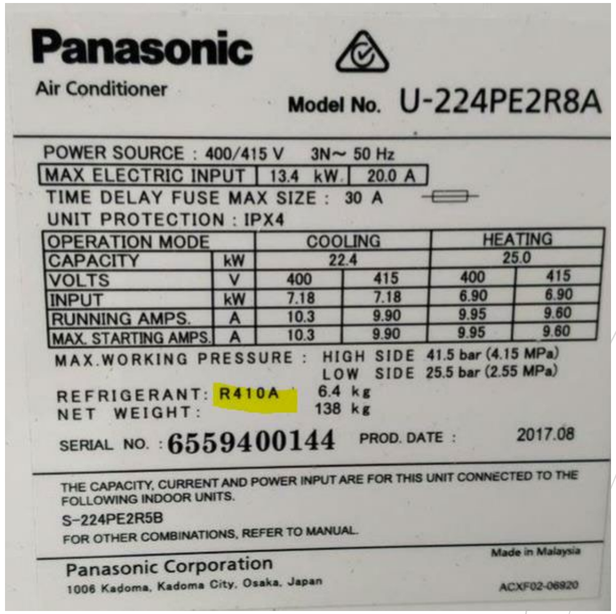
CO2 equivalent of various refrigerants

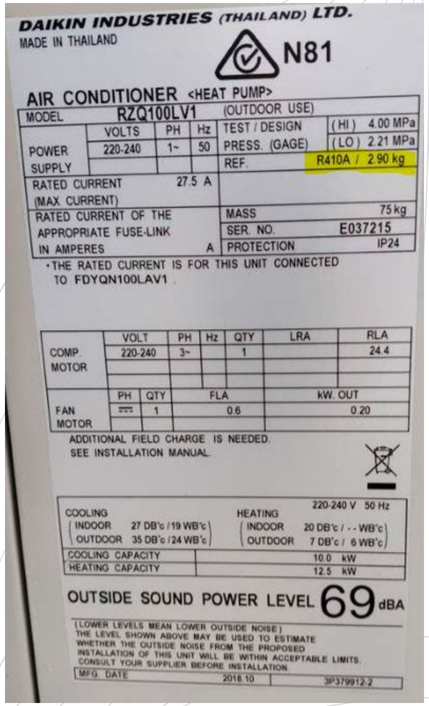
https :/ /www.daikin.com/ corporate/why _daikin/benefits/r-32

Environmental Impact of
Air Conditioner Refrigerants and Trends

	Ozone Depletion Potential (ODP)	100 Year Global Warming Potential of Different Refrigerants*1
R12 (CFC)	1.0	10,900
R22 (HCFC)	0.055	1,810
R410A (HFC)	0	2,090
R32 (HFC)	0	675

Example of the two main types on PAC units in the building





5. CAPEX AND ADDITIONAL CONSIDERATIONS

For cost-effective decarbonisation, key building lifecycle milestones have been considered and these have been aligned with decarbonization interventions where possible.

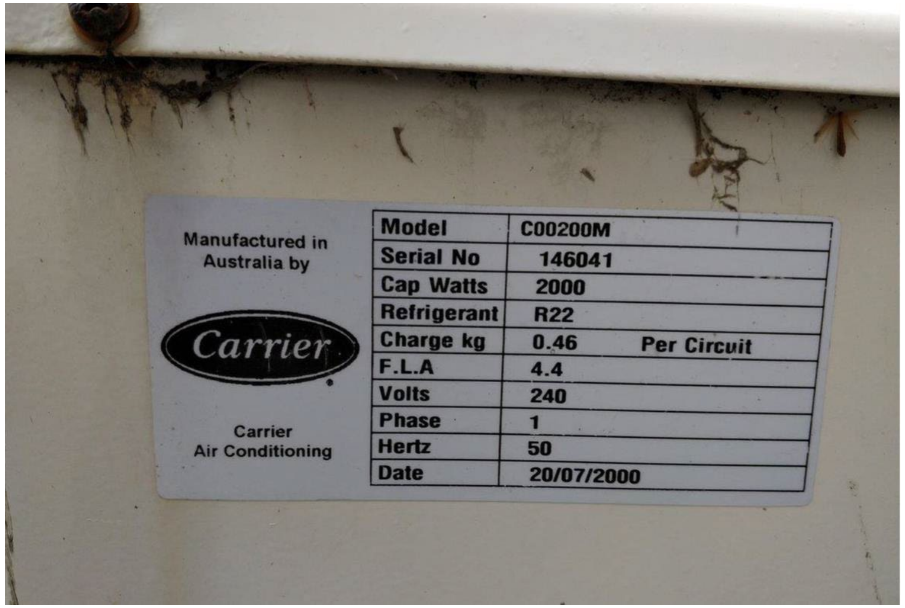
Upgrade of Existing PAC units that are reaching end of life

- According to the Mechanical contractor TVH, there are several original PAC units in the building that needs to be replaced soon.
- Replacement should consider units with higher efficiency and with a refrigerant with the lowest GWP.

LED lighting upgrade

- The fluorescent lights and High Intensity Discharge(HID) floodlights (~400W) in the building.
- They can be upgraded efficient LEDs with appropriate controls (e.g. motion controlled where suitable).

Example an original PAC unit in the building



6. CONCLUSION

EG's Real Zero Strategy is an ambitious, market leading approach to realise real zero carbon across EG's Delta Portfolio

EG is proud to have worked with industry experts Buildings Alive and Avani along this pathway, and will report on progress in EG's annual ESG Report, as well as in Delta Fund Quarterly Reports.

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