



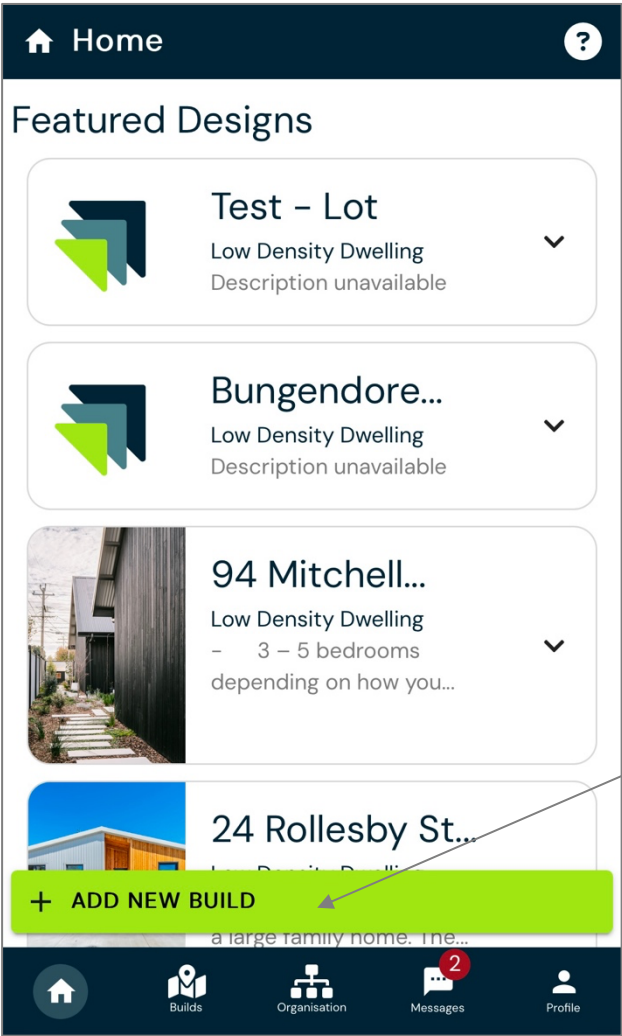
GETTING STARTED

The following document is a simple step by step guide to the RapidLCA app to help you get started in LCA modelling. Please also refer to RapidLCA support page, guide videos, and the FREQUENTLY ASKED QUESTIONS document.

- We encourage you to ‘dive in’ and use the app
- Use the ? tab in the app and this will link to the support page and here you will find support videos
- In the support page there is also the ability to submit a question about the use of the app
- The FREQUENTLY ASKED QUESTIONS document will be routinely updated with your questions and answers

Request a peer-to-peer modelling session with Cerclos [here](#)

GETTING STARTED



Register into the Cerclos RapidLCA website and access the main page shown here


Select the TAB + ADD NEW BUILD

< Build Location

?

New South Wales, Australia


Development




NSW – Australian Zero Carbon Housing Challenge


No *Government Authority* within 50km of this location.

+ ADD A NEW DEVELOPMENT







Builds



Organisation



Messages2



Profile

Type in your State and select appropriate Australian Zero Carbon Housing Challenge location

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DESIGN INFO

Enter Design Info

Design Name

1 Kullaroo Road Barragga Bay NSW

Dwellings

1

Bedrooms

4

Bathrooms

2.5

Carparks

2

Type of Carpark

Garage

Floors

1

Floor to Ceiling Height (m)

2.5

Gross Floor Area (GFA)

234

Occupancy / Operational Handover Date

26/08/2025

Energy Monitoring

No Energy Monitoring

Thermal Rating

NatHERS 7.0 Star

Natural Lighting

Normal

RESULTS

UNLOCK FULL ...

Builds

Organisation

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Add dwelling number – note each townhouse in a development is 1 dwelling

Add bedroom number. If it is a bedroom but used as a study count it as 1 bedroom.

If it is a study or family room that doubles as a bedroom add 0.5 for each

Add bathroom number - for a laundry or powder room with a toilet/WC add 0.5

Add carparks – covered only then add type

Add floor levels – 3 stories maximum

Add average ceiling height

Add GFA - includes external wall thickness, unenclosed covered areas attached (such as covered entry portico, garages, covered carports). Exclude unenclosed/open air car spaces, uncovered decks and pergolas from your GFA totals

If the house has a digital meter or PV solar system or other monitoring, then select Integrated under this tab

Select appropriate Thermal Energy rating

This is where you pay for full operation

Select appropriate natural lighting level

WATER BALANCE INPUTS

≡

Customise Water Balan...

?

Water Supply

Rain Water Supplemented - All ...

ⓘ

Water Treatment

Mains Connected

ⓘ

Shower Head Fittings

4 Star (less than or equal to 6.0 ...)

ⓘ

Toilets Fittings

4 star (4.7L/flush, 3.2/half flush, ...)

ⓘ

Tapware Fittings

5 Star (greater than 4.5 and les...

ⓘ

Washing Machine

4.0 star (10.5L/kg clothing wash...

ⓘ

Dishwasher

4.5 star (9.44L/wash for 10 plac...

ⓘ

Garden Type

Dripper garden bed and no lawn

ⓘ

Rainwater Pump Type

Medium pressure and flow (0.2...

ⓘ

RESULTS

> NEXT

2

Add water supply types – mains, rainwater, supplemented, etc

Add water treatment if any or mains connected

Include efficiency of shower fittings

Include efficiency of toilet fittings

Include efficiency of tapware

Include efficiency of washing machine

Include efficiency of dishwasher

Include irrigation and garden types

Include rainwater pump pressure if required

7

INTEGRATED SERVICES

Customise Integrated S...

Global Warming Potential Total, GWP

Templates are Sorted from Lowest to Highest Impact.

Orange bars represent impacts, green bars represent improvements.

Group ☐

Indoor Lighting Fitout · 1 # (#)

LED Residential Lighting (Standard Efficiency)

Cooling System · 1 # (#)

Split System Air Source Heat Pump for Cooling, Average Efficiency (COP/EER 3.65), R32 Refrigerant

Cooking Appliances · 1 # (#)

Cooking, Res Electric Oven Induction Stove

Hot Water System · 1 # (#)

Standard Heat Pump (HWS_App)

Heating System · 1 # (#)

Split System Air Source Heat Pump for

+ > NEXT

Builds Organisation Messages (2) Profile

Include lighting number and efficiency

Include cooling system type (note this is separate to heating type even if the same system)

Include stove and hotplate type

Add water heater type


Include heating system type (note this is separate to heating type even if the same system)

Note include all the systems in the house, use the + tab to add more


PLUG LOADS

Customise Plug Loads

?

Sort by Target

Global Warming Potential Total, GWP




Templates are Sorted from Lowest to Highest Impact.


Orange bars represent impacts, green bars represent improvements.

Group


☐


Refrigeration · 1 # (#)

Refrigeration, Residential Average, Detailed, Op & Em (2025 Update)




Appliances · 1 # (#)


Appliances, Residential Average Op&Em





+

> NEXT

Builds

Organisation

Messages2

Profile

Include quantity of refrigerators and refrigerator space ventilation

This is an average based on your house size of joinery and fixtures and fittings (note that you cannot modify this tab)

OUTDOOR SERVICES

Customise Outdoor Ser...

?

Global Warming Potential Total, GWP

Templates are Sorted from Lowest to Highest Impact.
Orange bars represent impacts, green bars represent improvements.

Group ☐

Renewable Generation · 0 kW (kW)

Solar PV System Residential – Zone 3 (Perth Sydney etc)

Swimming Pool Filtering · 0 m2 (m2)

Swimming Pool – Pumps and Filters Ultra Efficient

Swimming Pool Temperature Control · 0 m2 (m2)

Swimming Pool Seasonal Temperature Control – No Pool Cover – Gas

Swimming Pool · 0 m2 (m2)

Pool Structure – Concrete

Outdoor Lighting Fitout · 98.65 m2 (m2)

LED Outdoor Lighting (Residential – Standard Efficiency) m2

Water tank · 21875 L (L)

+

> NEXT

Buils

Organisation

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Profile

Include PV solar system installed

If required include swimming pool, control, and structure (note that this is set to zero so no need to change this if no pool)

Include outdoor lighting area and efficiency as required


Also include water tank material type in this section if required

STRUCTURE

≡

Customise Structure

?



Global Warming Potential Total, GWP

⌵


⌵

Templates are Sorted from Lowest to Highest Impact.


Orange bars represent impacts, green bars represent improvements.

Group ☐


Entry Doors · 2 # (#)




Aluminium Door Frame/glazed (entry)




Internal Doors · 8.5 # (#)




Door – HollowCoreTimber/WoodenJam/painted




Internal Wall Area · 71.28 m2 (m2)




Wall – Internal Partition, 90mm timber stud, insul., PB & paint




Internal Wall Area · 87.1 m2 (m2)




Wall – Internal Partition, 90mm timber stud, insul., PB & paint



External Wall Area · 74.03 m2 (m2)



External Wall – Brick veneer 110mm,



> NEXT











Include all the elements that best describes the construction of the house externally and internally. This includes walls, floor, roof, internal walls, windows, doors, and the like. If you include accurate areas turn off the scaling tab as this will not be required

For refurbishments include existing materials retained but set area to 0.001 (remember to turn off scaling)

Note include all the structure in the house, use the + tab to add more – see page following

6:52

Choose Attribute

Select Attribute

Start typing to search components

Search Components

Fittings, furnishings and equipment · (#) (Refrigeration Energy Use)

Refrigeration, Residential Average, Detail

Fittings, furnishings and equipment · (#) (Medium Sized Kitchen(s))

[ARCHIVED] Kitchen Fittings, Furnishings &

Superstructure · (m2)

150mm CLT Floor (m2)

Superstructure · (#) (Door)

Aluminium Door Frame/glazed (entry)

Fittings, furnishings and equipment · (#) (Average Household Appliances)

Appliances, Residential Average Op&Em

Fittings, furnishings and equipment · (#) (Average Household Appliances)

Appliances, Residential Average Op&Em (

Services equipment · (kWh)

Battery – Lithium Ion LiFePO4 (using lead

External works · (m2) (m2 carport area)

Car Port – Poured concrete floor (100mm

Internal finishes · (m2) (m2 of ceiling)

Ceiling – Plasterboard,paint, insul, 210mm

Superstructure · (m2) (m2 of 100mm thick (R2.8) ...)

Ceiling Insulation – Fibreglass, 100mm (m

Services equipment · (m2) (m2 of outdoor lit area)

CFL Outdoor Lighting (Residential), m2

Superstructure · (m2)

CLT 150mm Roof Ext. Metal Cladding

Services equipment · (m2) (m2 of outdoor lit area)

Compact Fluorescent Residential Lighting


CANCEL

Select appropriate attributes under the + tab to refine your design

FINISHES

Customise Finishes

?

 Sort by Target

Global Warming Potential Total, GWP

Templates are Sorted from Lowest to Highest Impact.

Orange bars represent impacts, green bars represent improvements.

Group

Living Area · 71.48 m2 (m2)

Floor Covering – 13mm Engineered Timber Floating Floor with Acoustic Underlay

Wet Area · 19.64 m2 (m2)

Floor Covering – Tiles (ceramic/5mm)

Kitchens Dining Area · 87.56 m2 (m2)

Floor Covering – Tiles (ceramic/5mm)

Bedroom Area · 48.88 m2 (m2)

Floor Covering – Carpet (glue down/Nylon)

+

> **VIEW RESULTS**

Builds

Organisation

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2

Profile

Include all the elements that best describes the finishes of the house internally. Note this includes floor finishes only – wall and ceiling finishes are covered in Structure

When finished this section select View Results to see how your project performed

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RESULTS SUMMARY

Results Summary

?

Example Design
Lyneham ACT

Model Purpose: Improved
Design Phase:

94% Reduction (70% Reduction
Target)

Global Warming Potential Total, GWP, Life Cycle

✓ >

50% Reduction (50% Reduction
Target)

GWP Excluding Export Energy for On-site Renewables, A1-A3, A4, A5, B1, B2, B3, B4, B5, B6, B6+, B7, B7+, C1, C2, C3, C4, D2, D3, D4, D5

✓ >

22% Reduction (30% Reduction
Target)

GWP - Embodied Carbon, A1-A3, A4, A5, B1, B2, B3, B4, B5, C1, C2, C3, C4, D2, D3, D4, D5, excluding on-site renewables

! >

34% Reduction (15% Reduction
Target)

GWP - Upfront Carbon, A1-A3, A4, A5, excluding on-site renewables

✓ >

✎ RE-DESIGN

☑ SUBMIT

📁 ARCHIVE

🏠

Builds

🏢

Organisation

💬²

Messages

👤

Profile

The results show the project performed in overall Life Cycle and how it performed in Upfront Carbon

At this stage you can either choose to submit (this is where you will add documents) or if still in design stage there is the option to redesign. Note that after submitting there is still the option for redesign as needed

Results Summary

?

Design Phase: RICS WLCA Phase 4 – Post-completion phase

108% Reduction (70% Reduction Target)

✓

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Global Warming Potential Total, GWP, Life Cycle

62% Reduction (50% Reduction Target)

✓

>

GWP Excluding Export Energy for On-site Renewables, A1-A3, A4, A5, B1, B2, B3, B4, B5, B6, B6+, B7, B7+, C1, C2, C3, C4, D2, D3, D4, D5

51% Reduction (30% Reduction Target)

✓

>

GWP – Embodied Carbon, A1-A3, A4, A5, B1, B2, B3, B4, B5, C1, C2, C3, C4, D2, D3, D4, D5, excluding on-site renewables

61% Reduction (15% Reduction)

REPORTS

CREATE BASEL...

CREATE PRESET

RE-DESIGN

SHARE

ARCHIVE

Builds

Organisation

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Profile

After submitting there are report generation options and the ability to share results. You can also choose to redesign if required

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