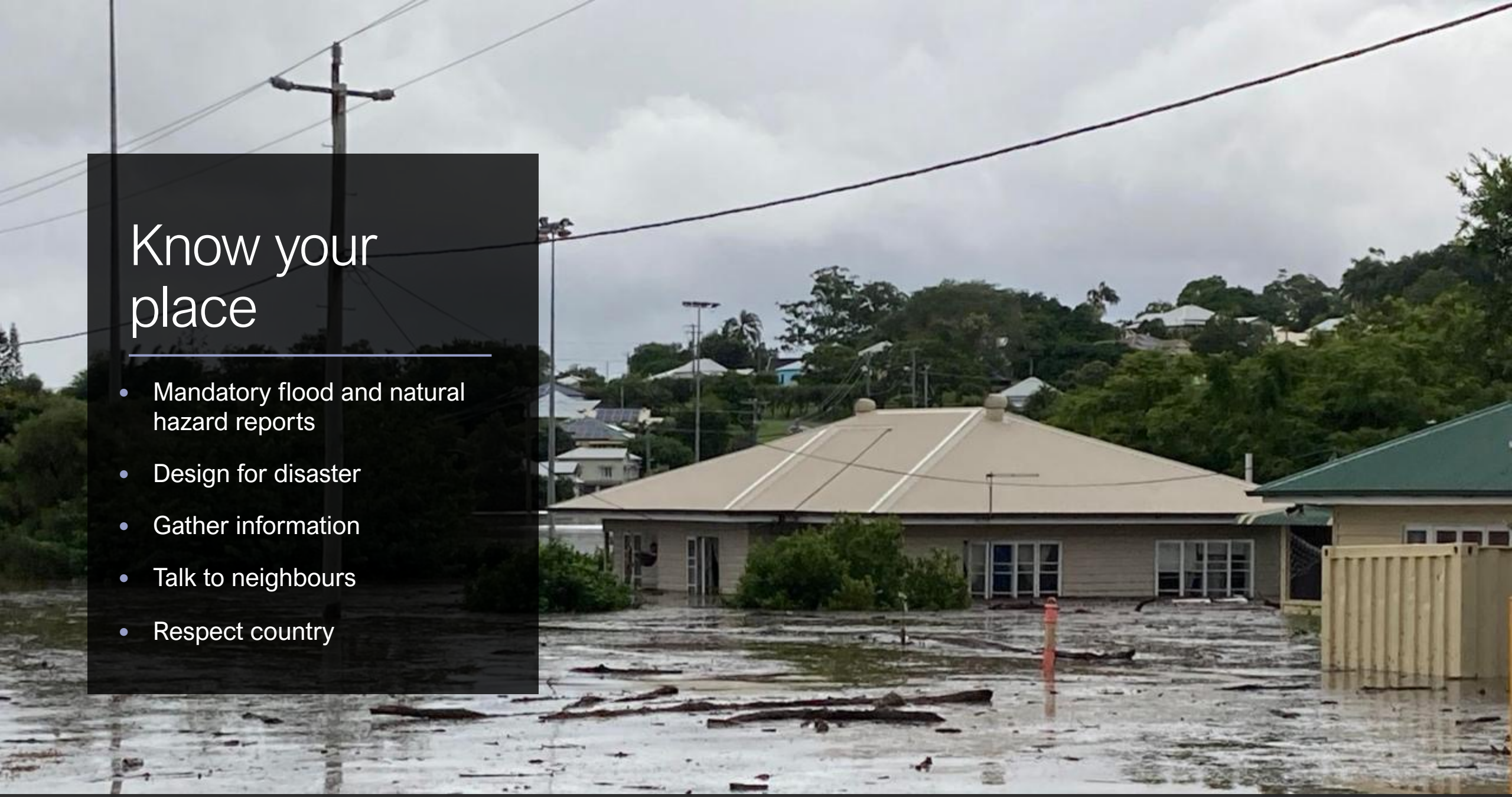
Gympie Envirotech

SUSTAINABLE BUILDINGS

FOR BEYOND 2030



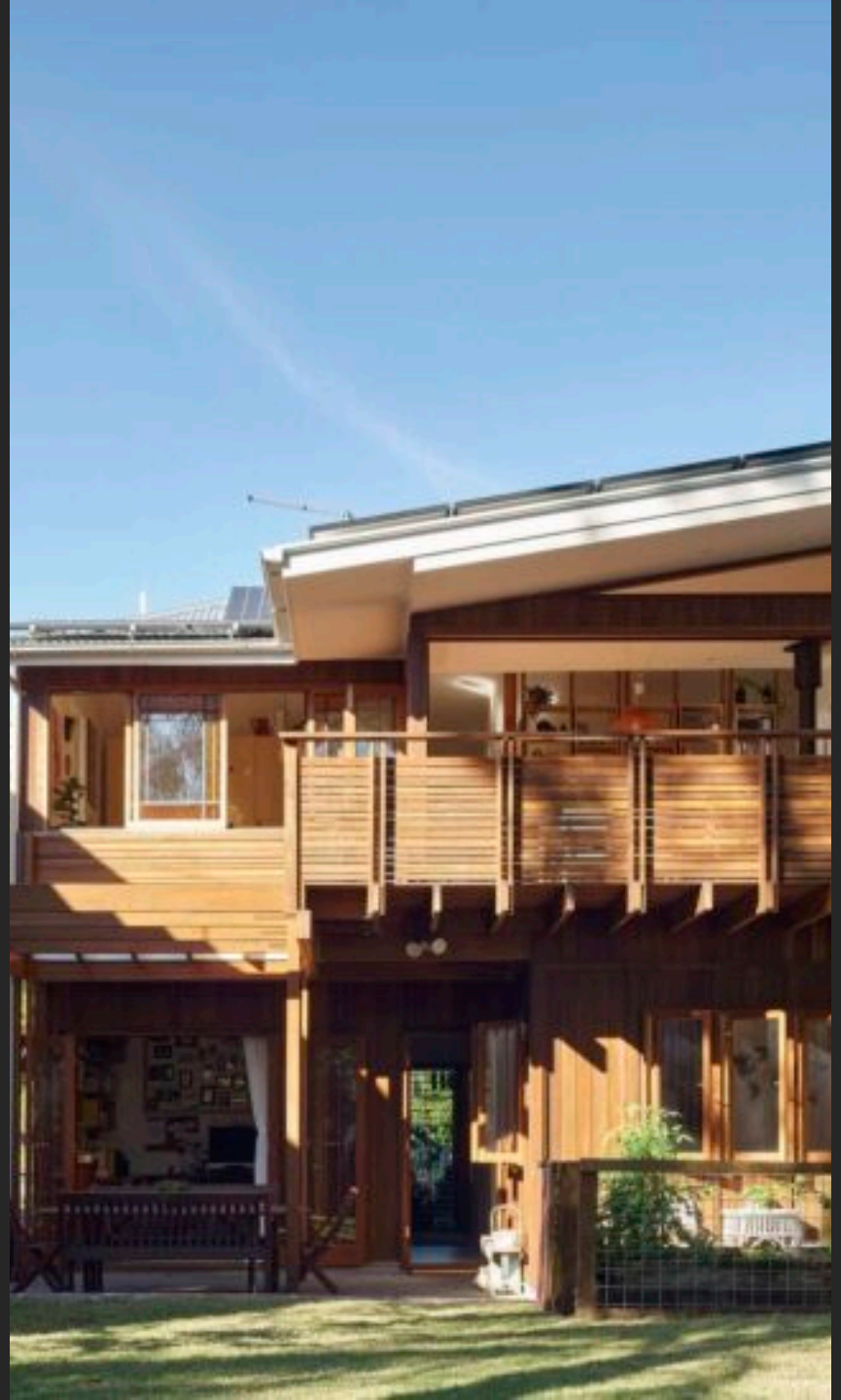
Know your place

- Mandatory flood and natural hazard reports
- Design for disaster
- Gather information
- Talk to neighbours
- Respect country

Know your hazards

Ask Council about floods and hazards

- Build at least a metre above the highest flood line
- Know what type – riverine, ground, coastal
- Know your fire risk
- Add water tanks

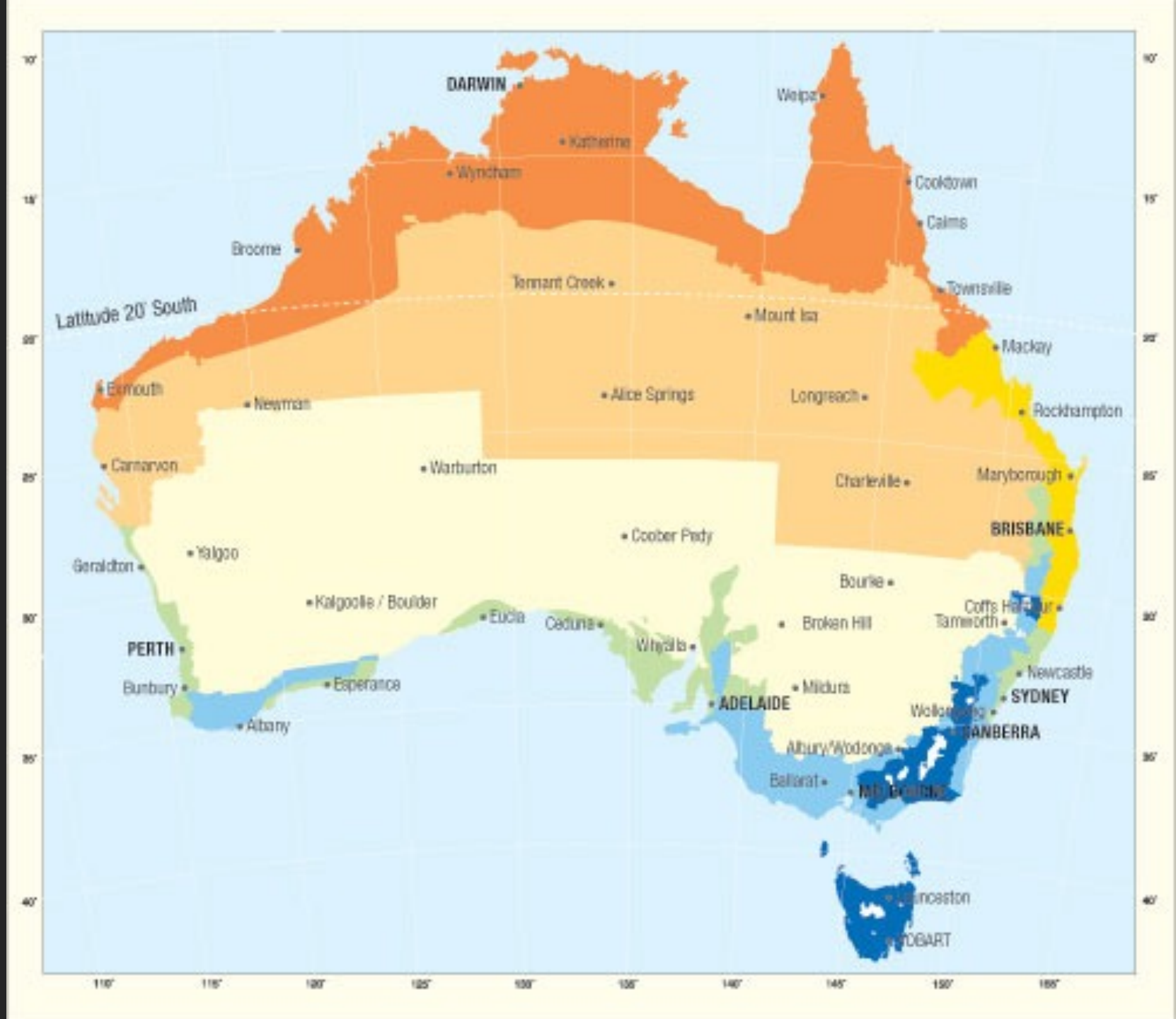


Know your climate

Gympie is classed as

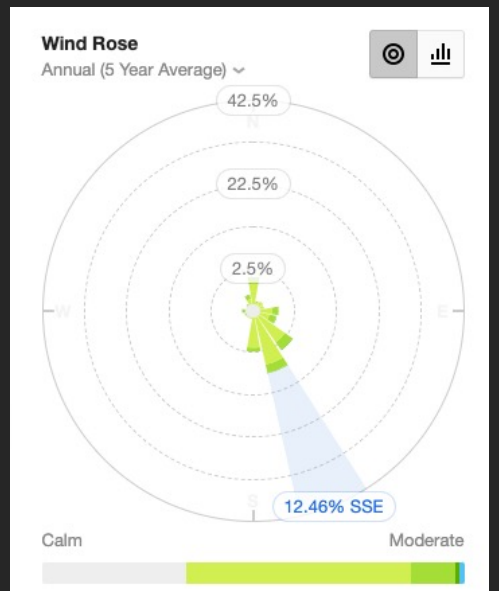
SUBTROPICAL

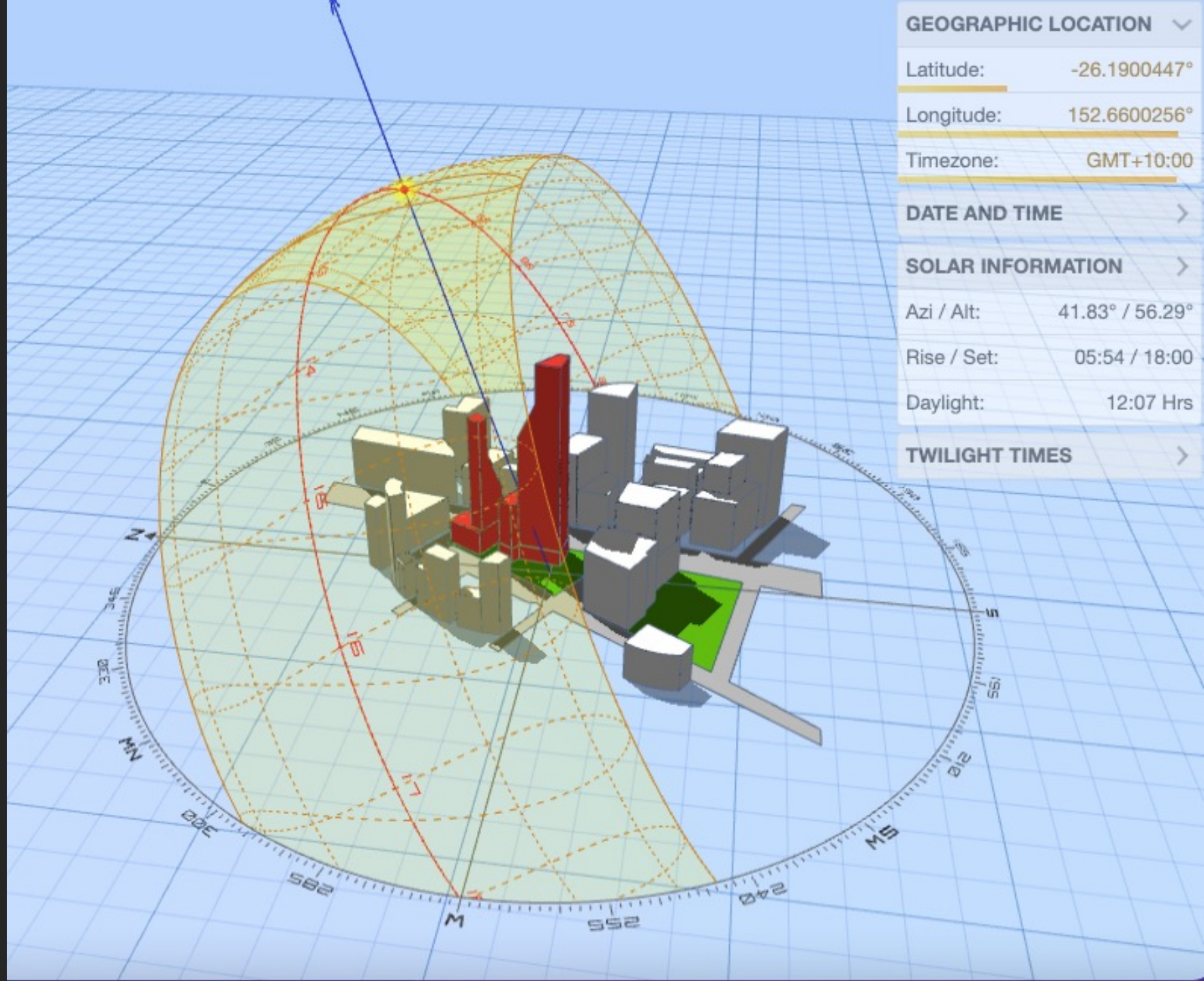
ZONE	DESCRIPTION
1	High humid summer, warm winter
2	Warm humid summer, mild winter
3	Hot dry summer, warm winter
4	Hot dry summer, cool winter
5	Warm temperate
6	Mild temperate
7	Cool temperate
8	Alpine



Gympie is:

- What is the character?
- What is the microclimate?
- Where does the sun come from?
- Where are the breezes coming from and when?
- How cold does it get?

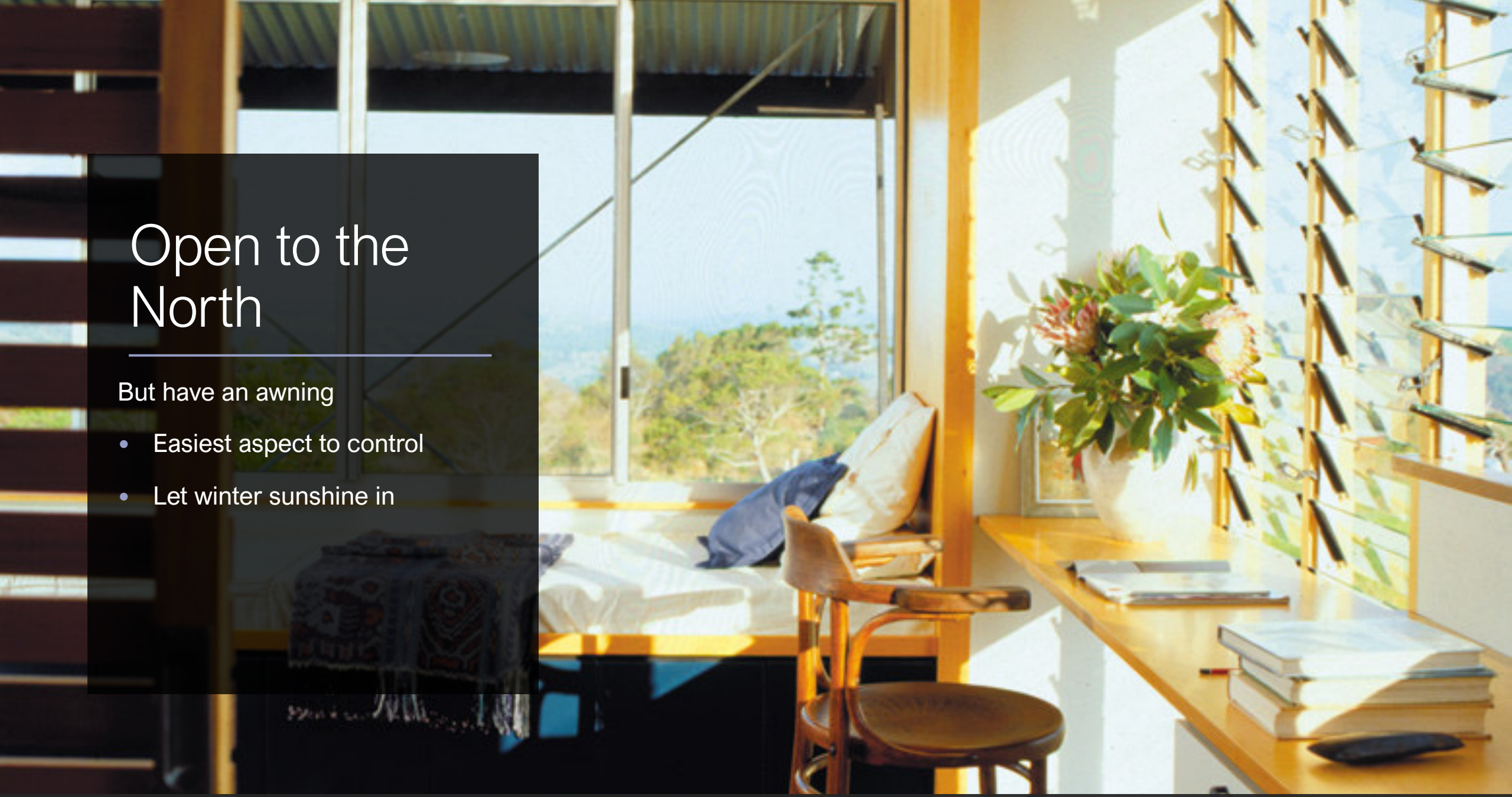




Building designs should reflect:

- Topography
- Character
- Place
- Heritage
- Aspirations

And be designed for a resilient future



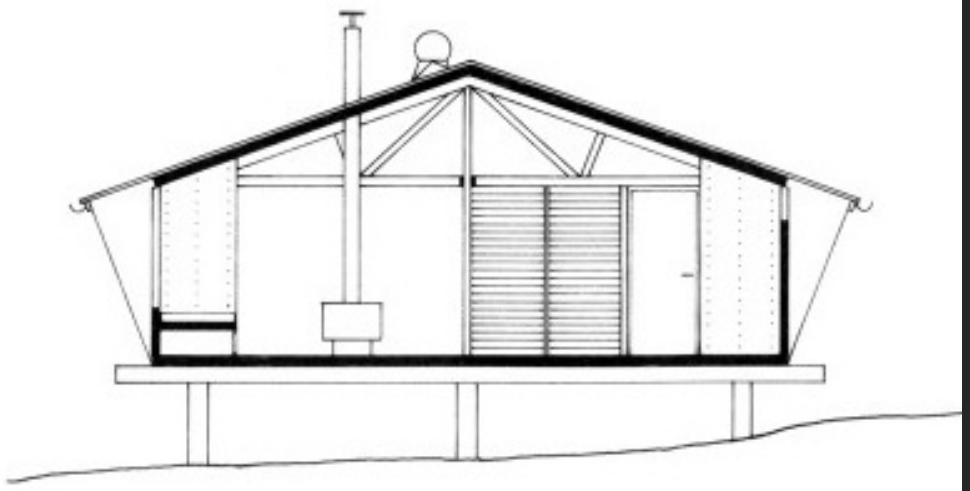
Open to the North

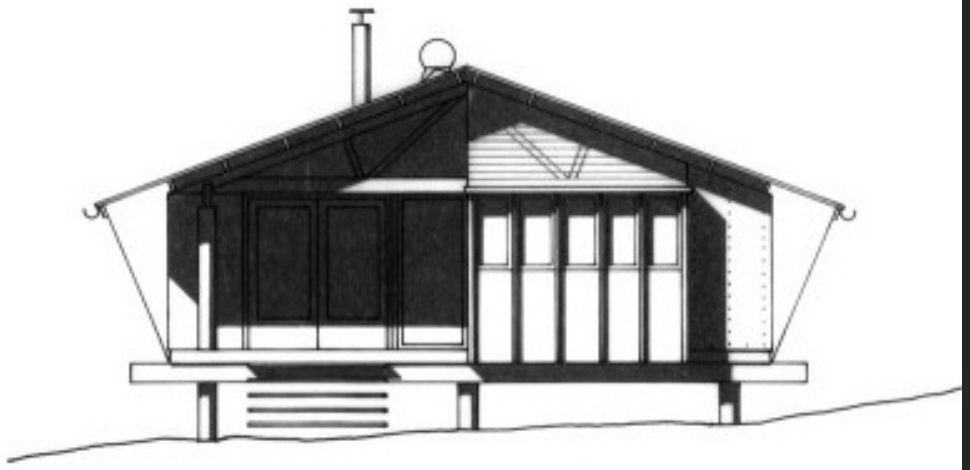
But have an awning

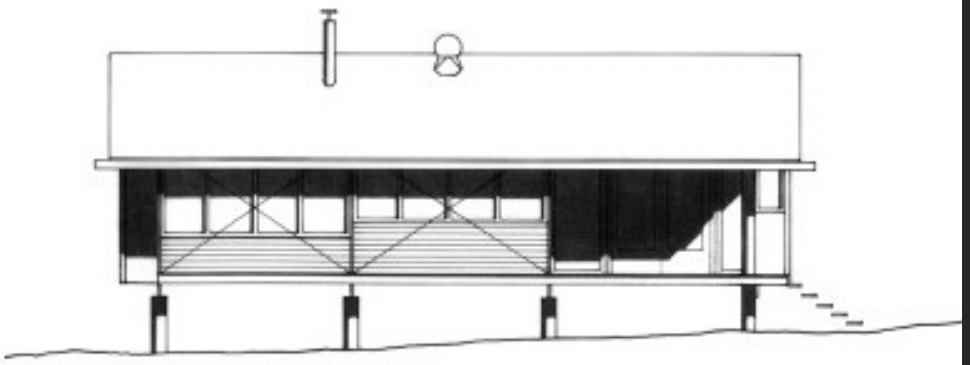
- Easiest aspect to control
- Let winter sunshine in

Create liveable outdoor space

- Verandahs
- Decks
- Courtyards
- Covered and uncovered
- Gardens







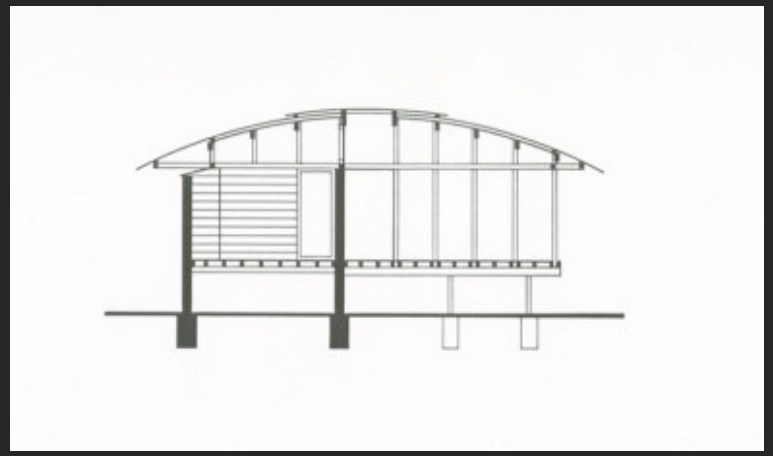
Put on a good hat/roof

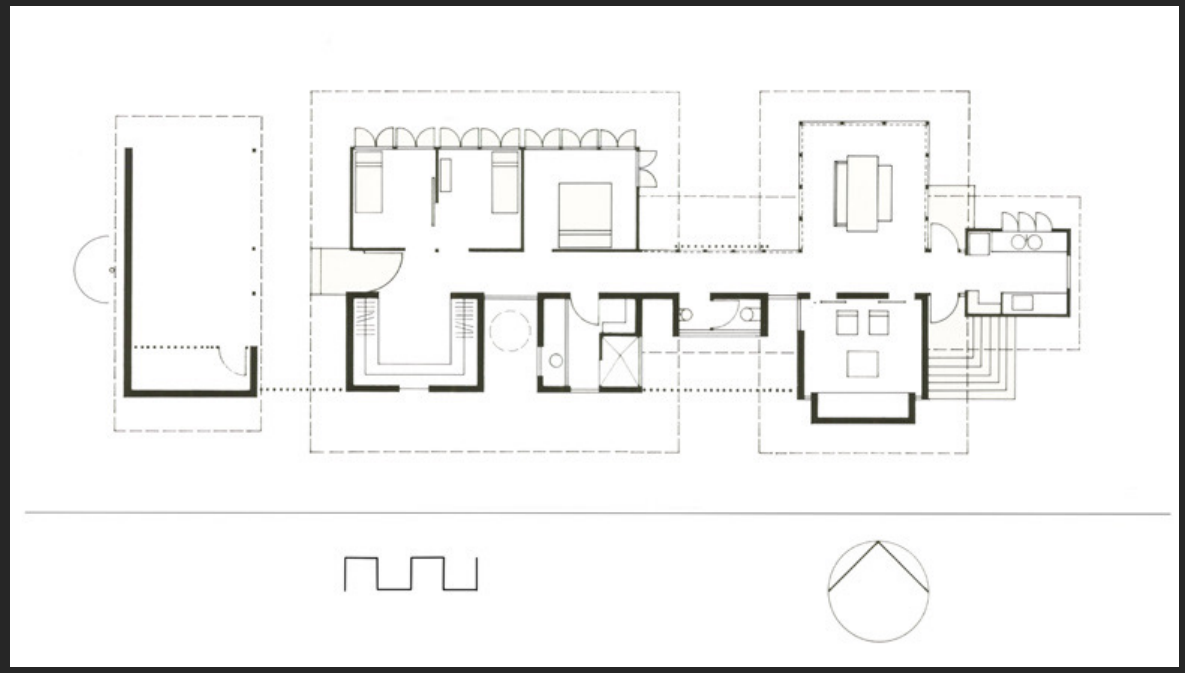
Moderate the climate with a well-insulated protective roof

- Use light colours
- Maximise insulation
- Minimise roof penetrations
- Big overhangs, eaves and awnings protect lower windows
- Consider green roofs
- Consider solar pv and solar hw

Ventilate and operate

- Add windows and doors that can open for cross-ventilation
- Keep you plan thin so air can move
- Ensure that openings can close to keep air in/out





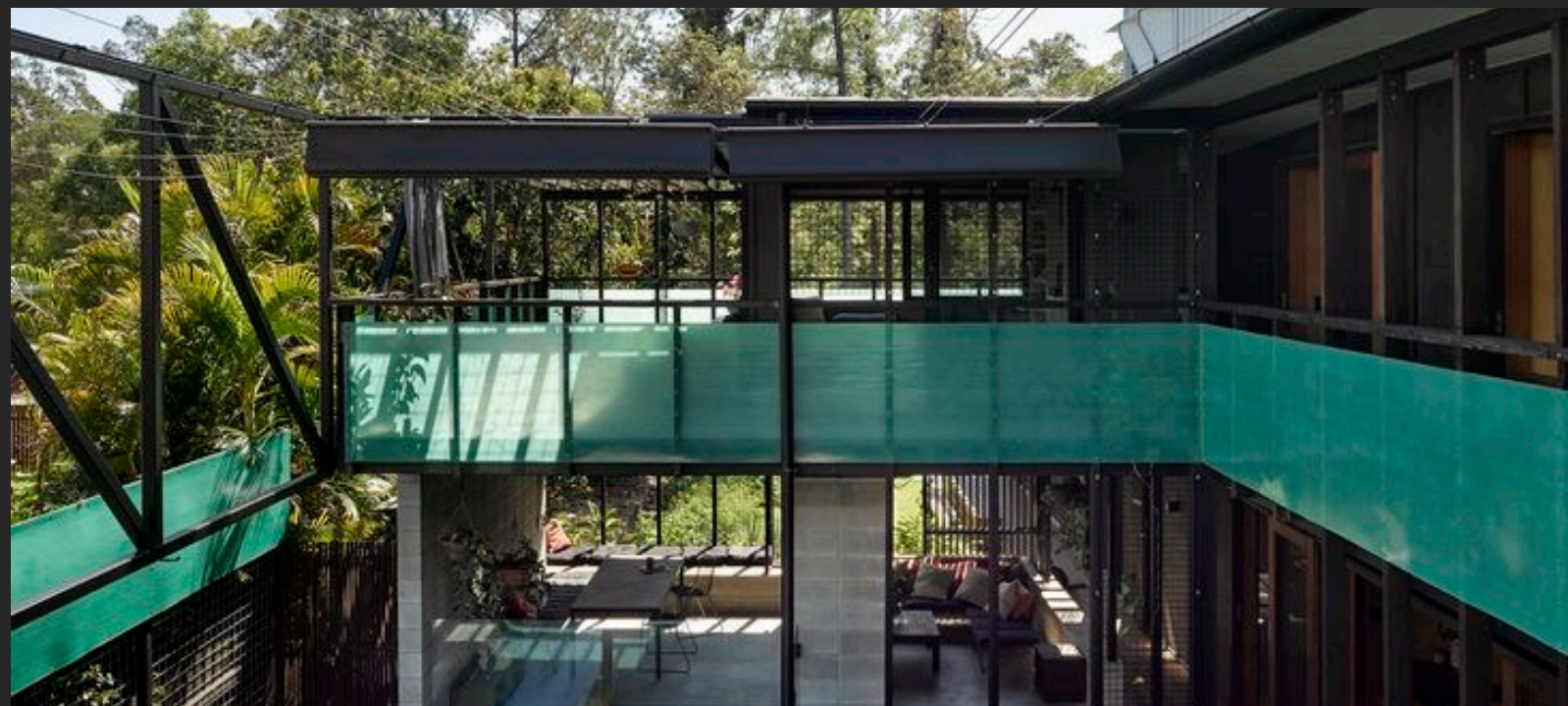
Protect walls and openings from weather

- Awnings
- Screens
- Insulation
- Overhangs
- Sliding
- Rolling
- Operable

Green it up

JUST ADD PLANTS

- COOL THE AIR
- PURIFY THE AIR
- BIODIVERSITY
- REDUCTION OF RUN-OFF



Reduce Energy

- Buy energy efficient appliances
- Put on solar PV
- Put on solar hot water
- Allow for electric cars
- Allow for batteries

NCC Changes

Delayed until no earlier than October 1

- Part J
- Livable Housing
- Fire

The ABCB will recommend Building Ministers consider delaying publication of the full and final version of NCC 2022 until no earlier than 1 October 2022.

Building Ministers are scheduled to meet in late August 2022 and will consider NCC 2022, including fin ABCB on proposed improvements to residential energy efficiency provisions for NCC 2022.

Recognising the tight timeframes associated with Building Ministers not meeting until late August, and other issues currently affecting the construction sector, the ABCB will recommend to Building Ministers date for NCC 2022 be further delayed from 1 September 2022, to be not earlier than 1 October 2022.

Overview

The energy efficiency provisions in the National Construction Code (NCC) support the sustainability objective of the Australian Building Codes Board (ABCB), which is outlined in its Intergovernmental Agreement signed by the nine Australian Governments.

After a major stringency increase for commercial buildings in NCC 2019, in mid-2019, Building Ministers directed the ABCB to develop enhanced residential energy efficiency provisions informed by the former COAG Energy Council's Trajectory for Low Energy Buildings policy. This work supports the Australian Government's commitment under the Paris Agreement to reduce greenhouse gas emissions, and the National Energy Productivity Plan. These policies all include a focus on the role that buildings play in reducing emissions, improving energy productivity, reducing household energy bills, helping to transition to greater use of renewable energy and zero emissions vehicles.

To instigate this work, the ABCB released a scoping study for public comment from late July to early September 2019. The results of this consultation were later published in an outcomes report.

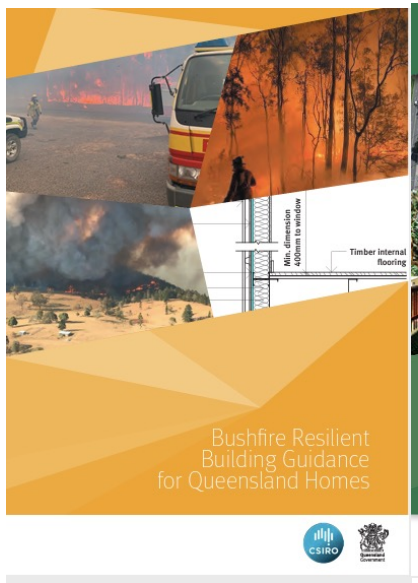
The scope of changes proposed for the NCC 2022 residential energy efficiency provisions included:

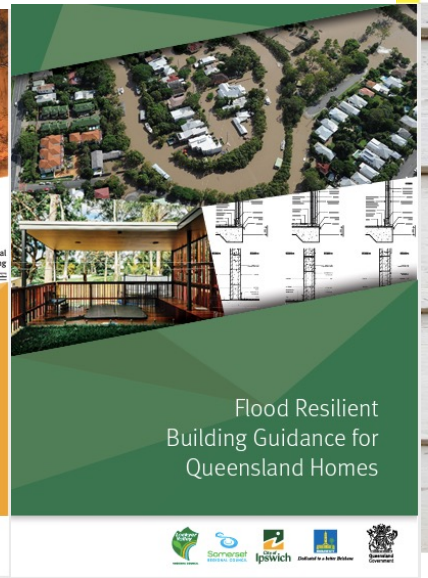
- a stringency increase in the thermal performance of homes to the equivalent of a 7-star NatHERS energy rating (current level is equivalent to 6-stars NatHERS)
- introducing a whole-of-home approach with an annual energy use budget for the regulated equipment in the home (i.e. space conditioning, heated water, lighting and swimming pool & spa pumps).

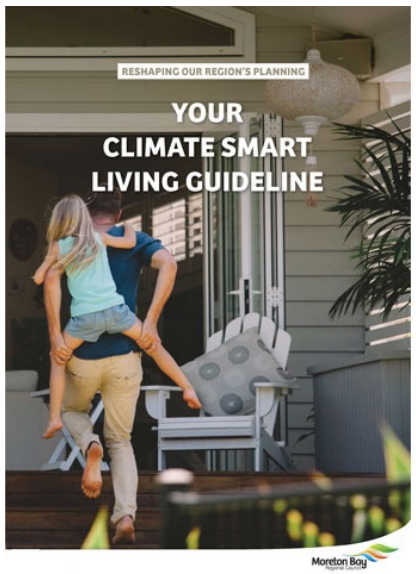
For the whole-of-home approach, the draft provisions for Class 1 buildings are based on a level of stringency equivalent to 70 per cent of the annual energy usage of these benchmark

Other Codes and Guidelines

- Queensland Development Code
- State guidelines
- Local guidelines







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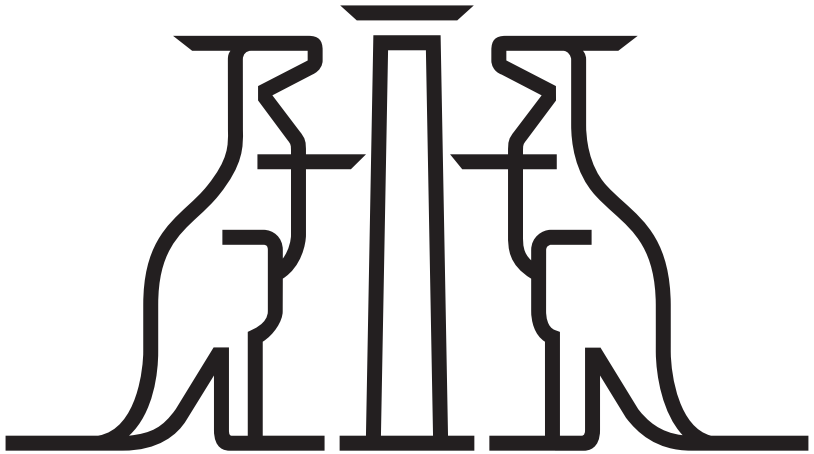
Thank you for having us!



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