DesignInc Architecture **Urban Design** Interiors Landscape designinc.com.au Sustainability Action Plan Brisbane Studio



We acknowledge the Wurundjeri Woi-wurrung people as the Traditional Custodians of the land we work on Turrbal and Jager. We pay respect to the past, present and future Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

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#### LIEU —

Place of Learning, Intentionality, Education and Listening.

by Timothy Buckley

Representing the cyclical nature of all things — beginning with the birthing of the intentional reconciliation journey, growing through the listening and learning from community, culminating in the creation of a workplace that celebrates inclusivity.

## Introduction

Architects bear a significant responsibility for the 39% of global greenhouse gas emissions generated by the building sector.

To address this challenge, our architectural practice has developed a Sustainability Action Plan (SAP) to achieve sustainability goals, promote accountability, and optimise resources.

By setting clear objectives, fostering collaboration and innovation, we aim to reduce our impact on the environment and inspire others to prioritise sustainability in the building sector.

At DesignInc Brisbane we aim to create healthy buildings and environments which improve the quality of people's lives. This is achieved through providing meaningful connections to nature and natural experiences alongside supportive functions which conserve, harvest and renew our natural resources.

A healthy, resilient, building operates with a minimum of energy, water, and waste. It is carbon neutral, ecologically positive, and beautiful – supporting mental and physical wellbeing.

To support this goal, we have prepared this Sustainability Action Plan to formalise our benchmarks and proposed aspirations to hold ourselves accountable and encourage others.

## **Targets**

Project	Practice	
Carbon	Carbon	
Energy	Energy	
Water	Water	
Materials	Consumables	
	Waste	

## **Australian Architects Declare**

As signatories to the Architects Declare movement, we are proudly working to investigate and implement the ten sustainability principles into our practice.

In addition to the ten principles, this Sustainability Action Plan works in conjunction with our Reconciliation Action Plan to support our commitment to becoming more educated about how we can better understand and embrace Indigenous Design Principles.

We commit to reviewing and reflection on our actions outlined in this SAP on an annual basis.



## Principles

- Raise awareness of the climate and biodiversity emergencies and the urgent need for action amongst our clients and supply chains.
- 2. Advocate for faster change in our industry towards regenerative design practices and a higher Governmental funding priority to support this.
- 3. Establish climate and biodiversity mitigation principles as the key measure of our industry's success: demonstrated through awards, prizes and listings.
- 4. Share knowledge and research to that end on an open source basis.
- 5. Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.

- 6. Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice.
- 7. Include life cycle costing, whole life carbon modelling and post occupancy evaluation as part of our basic scope of work, to reduce both embodied and operational resource use.
- 8. Adopt more regenerative design principles in our studios, with the aim of designing architecture and urbanism that goes beyond the standard of net zero carbon in use.
- 9. Collaborate with engineers, contractors and clients to further reduce construction waste.
- 10. Accelerate the shift to low embodied carbon materials in all our work.

  Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail.

## **Project Targets**

We have set targets in four areas that will allow us to track our progress towards readily quantifiable aspects of resilient, regenerative buildings.

Achievement of these goals will require ourselves to change and external advocacy to encourage our clients who will ultimately benefit from more efficient and responsible buildings and those we collaborate with to create them.

Our progress towards our targets will be reviewed and reported on an annual basis.

### Carbon

Reduce the carbon emissions of our projects towards a net zero 2040 goal.

#### 2025

25% reduction of embodied carbon and operational carbon.

#### 2030

50% reduction embodied carbon and operational carbon.

#### 2040

Net zero carbon.

## Energy

Treat energy as a precious resource, seek to minimise use and renew.

#### 2025

2030

new buildings.

Limit use of potable water for irrigation Reduce potable water needs by 35% for new buildings.

Reduce potable water needs by 50% for

Limit use of potable water for irrigation

Treat stormwater on site.

Treat stormwater on site.

#### 2030

capacity.

2025

where possible.

Gas free projects.

Reduce energy needs by 70% for new base buildings.

Reduce energy need by 50% for new

base buildings and tenancy spaces

Provide renewable infrastructure

Provide renewable infrastructure capacity.

All energy sourced from renewables (on or off-site).
Gas free projects.

#### Water

Treat water as a precious resource, minimise waste and use of potable water, while avoiding downstream impacts and pollution.

### Materials

Set baseline for responsible materials, transparency, sustainable extraction, support of local industry and waste diversion for all projects.

#### 2025

Minimum 5-star Green Star capable projects.
Prioritise locally made.
Minimise toxic chemicals.
Divert 30% materials from landfill.

#### 2030

Minimum 6-star Green Star capable projects.

Prioritise locally made.

Minimise chemicals.

Divert 50% materials from landfill.



## **Project: Carbon**

Architects hold a moral responsibility and pivotal role in the building sector, a sector responsible for 39% of global greenhouse gas emissions.

We will take proactive measures to be part of the solution and reduce this number to combat global warming. Our targets progress towards a 2040 net zero goal.

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Reduce the carbon emissions of our projects towards a net zero 2040 goal.

#### 2025

25% reduction of embodied carbon and operational carbon.

### Action

1.0

Establish benchmarking process to implement on all projects.

Advocate for Electrical Engineers appointment to undertake estiamtes energy consumption evaluation measured in kWh / m<sup>2</sup>

Review energy efficiency initatives with clients to understand how energy can be reduced or sourced alternatively to reduce emissions.

#### 2.0

Measure up-front embodies carbon for pilot project/s.

#### 3.0

Collate data on energy performances from pilot project/s. Iterate in next pilot / review projects to seek further reductions.

#### 2030

50% reduction embodied carbon and operational carbon.

#### 2040

Net zero carbon.



## **Project: Energy**

Resilient, carbon zero ready buildings must be electric, consume less energy, and generate energy where possible.

## Target

Treat energy as a precious resource, seek to minimise use and renew.

#### 2025

Reduce energy need by 50% for new base buildings and tenancy spaces where possible. Provide renewable infrastructure capacity. Gas free projects.

#### 2030

Reduce energy needs by 70% for new base buildings. Provide renewable infrastructure capacity. All energy sourced from renewables (on or off-site). Gas free projects.

## Action

1.0

Develop Energy Use Intensity (EUI) benchmarking process.

Advocate for Electrical Engineers appointment to undertake estiamtes energy consumption evaluation measured in kWh / m² / year.

Review energy efficiency initatives with clients to understand how energy can be reduced or sourced alternatively to reduce emissions.

#### 2.0

Educate and enable project teams to optimise energy use through passive design and on site renewable energy generation potential.

#### 3.0

Collate data on energy performances from pilot project/s.

Iterate in next pilot /

review projects to seek

further reductions.

#### 4.0

Advocate for gas free projects and renewable infrastructure.



## **Project: Water**

Educate and enable project teams to optimise water use through high efficiency fixtures as standard selections. Develop positive strategies for stormwater and minimisation of off-site impacts.

## Target

Treat water as a precious resource, minimise waste and use of potable water, while avoiding downstream impacts and pollution.

#### 2025

Limit use of potable water for irrigation
Reduce potable water needs by 35% for new buildings.
Treat stormwater on site.

#### 2030

Reduce potable water needs by 50% for new buildings.
Limit use of potable water for irrigation
Treat stormwater on site.

## Action

1.0

Develop and implement water use benchmarking process.

Advocate for Hydraulic Engineers appointment to undertake estiamtes energy consumption evaluation measured in L / m² / year.

#### 2.0

Educate and enable project teams to optimise water use through high efficiency fixtures as standard selections.

Develop positive strategies for stormwater management and treatment / retention and minimisation of off-site impacts.

Review energy efficiency initatives with clients to understand how energy can be reduced or sourced alternatively to reduce emissions.

#### 3.0

Collate data on energy performances from pilot project/s.

Iterate in next pilot / review projects to seek further reductions.

#### 4.0

Advocate for rainwater harvesting and re-use, where appropriate.

Advocate for regenerative stormwater and off-site impact minimisation strategies.



## **Project: Materials**

The materials we use impact the embodied carbon and environmental quality of our projects. We aim to minimise unnecessary materials and adopt a 'less is more' approach to design. Selected products should align to, or exceed our material targets.

2.0

## Target

Set baseline for responsible materials, transparency, sustainable extraction, support of local industry and waste diversion for all projects.

#### 2025

Minimum 5-star Green Star capable projects. Prioritise locally made. Minimise toxic chemicals. Divert 30% materials from landfill.

#### 2030

Minimum 6-star Green Star capable projects. Prioritise locally made. Minimise chemicals. Divert 50% materials from landfill.

## Action

1.0

Minimise the amount of new material planned for use in our projects during upfront design phases and all subsequent detailed design development phases.

Educate and enable project teams to select sustainable options when new materials are required.

Advocate for sustainable practices to industry and to our clients and external stakeholders.

## **Practice Targets**

DesignInc Brisbane has been Carbon Neutral since 2023.

Our practice targets illustrate our commitment to minimising the environmental and negative ethical impacts of our practice.

## Carbon

Become Climate Active and seek to reduce emissions annually.

## Energy

Reduce energy use.

### Water

Reduce water use.

### Consumables

Reduce consumption and increase ethical supply.

#### Waste

Reduce waste.

#### 2025

Achieve climate active status.

Seek to reduce emissions annually.

#### 2025

Reduce office energy usage. Encourage staff to use renewables, clean energy and phase out gas.

Advocate for base building renewables.

#### 2025

10% reduction in water use.
Use high efficiency fixtures.

Advocate base building water saving.

60% Local and ethical purchasing

Promote paperless working and

Reduce consumable and appliance

#### 2025

30% reduction in landfill.

Recycle 60% of equipment and samples.

Implement waste streams.

#### 2030

Continue climate active status.

Seek to reduce emissions annually.

#### 2030

Continue optimisation and advocacy.

#### 2030

20% reduction in water use.

#### 2030

2025

purchasing.

reduce printing.

Further reduce consumable and appliance purchasing.

Promote paperless working and reduce printing.

80% Local/ethical purchasing.

#### 2030

50% reduction in landfill. Recycle 80% of equipment and

samples.

#### **DesignInc**

## How

### In-house Education

We will embrace knowledge sharing and openly debating and discussing topics as a way of improving our practice. We hold regular business improvement meetings to discuss ways to improve our operations. We find this culture is enhanced by our open plan office and communal spaces.

We will invite external experts to present ideas to the team to widen our knowledge base on topics including sustainability and supplier offerings.

We are establishing a sustainability lunchbox series to widen and deepen team knowledge on various sustainability topics.

### Advocacy

Advocate for sustainable, regenerative outcomes to clients, consultants, stakeholders and suppliers.

## Depth of Knowledge

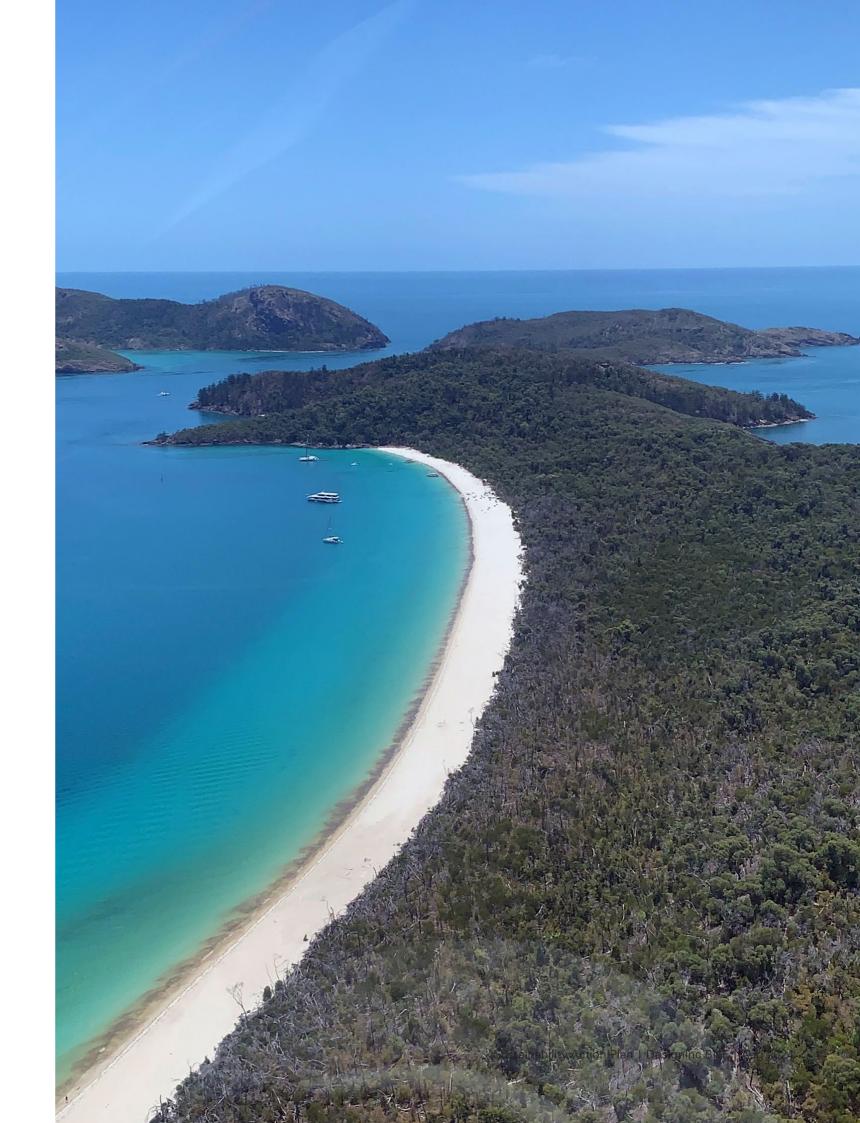
Encourage individual team members to actively increase their knowledge and expertise across various areas of sustainability and then share that knowledge with the team.

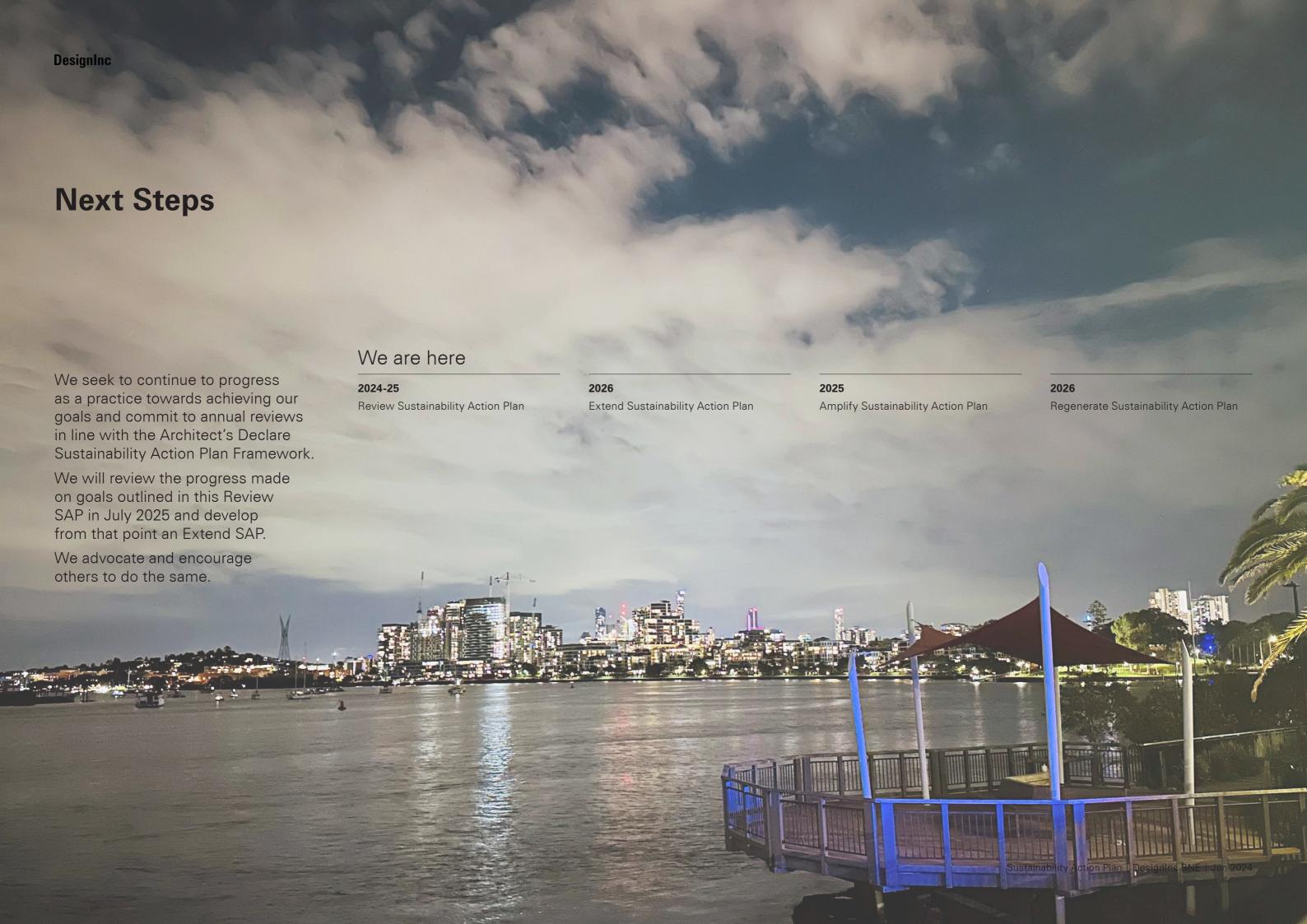
Build a resource library for use by everyone in the practice to ensure knowledge about sustainability topics is shared across the team.

### A Committed Green Team

As we welcome new members to our team, it is important that we ensure everyone increases their level of understanding on the ideas of sustainability.

We will achieve this through a variety of activities including the continued focus on team education through lunch time sessions and the incorporation of specific sustainability questions into our quality assurance processes.





## **DesignInc**

## **DesignInc Brisbane**

Our studio is on Turrbal land.

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We are an association of independent practices with offices in Adelaide, Brisbane, Darwin, Melbourne, Perth & Sydney.

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