



THE UNIVERSITY OF
MELBOURNE

LESSONS LEARNT FROM OUR 6 STAR GREEN STAR COMMUNITIES RATING

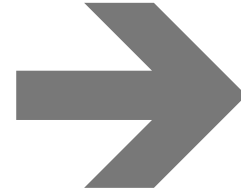
Dr Gerard Healey, Manager, Sustainable Campus Design

September 2017

sustainablecampus.unimelb.edu.au / ourcampus.unimelb.edu.au

SUSTAINABLE CAMPUS

Overview



What is Green
Star
Communities?

Our Green Star
Journey

What did we
achieve?

What next?

What advice do
I have?



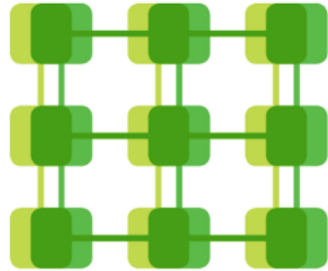
What is Green Star Communities?

SUSTAINABLE CAMPUS

What is Green Star Communities?



Governance



Liveability



**Economic
prosperity**



Environment



Innovation

Processes involved in planning, designing and delivering the plan for development

Attributes of the place that will be delivered

SUSTAINABLE CAMPUS

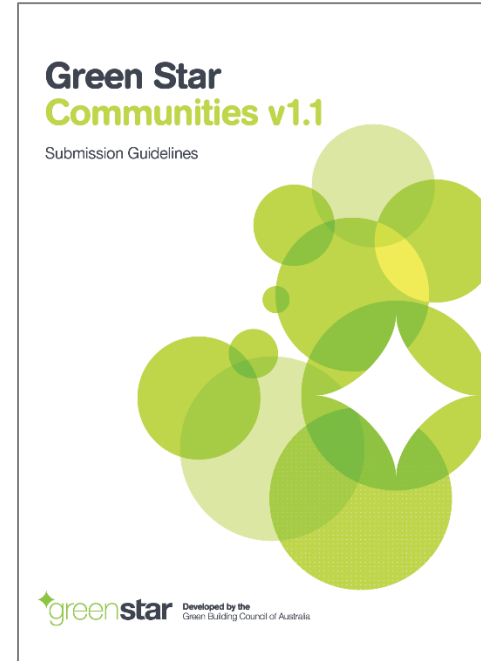
What is a “community”?



SUSTAINABLE CAMPUS

What is a “community”?

“The GBCA believes there would be no real value in trying to establish a definition for community, as its openness to interpretation is potentially its strongest point.”

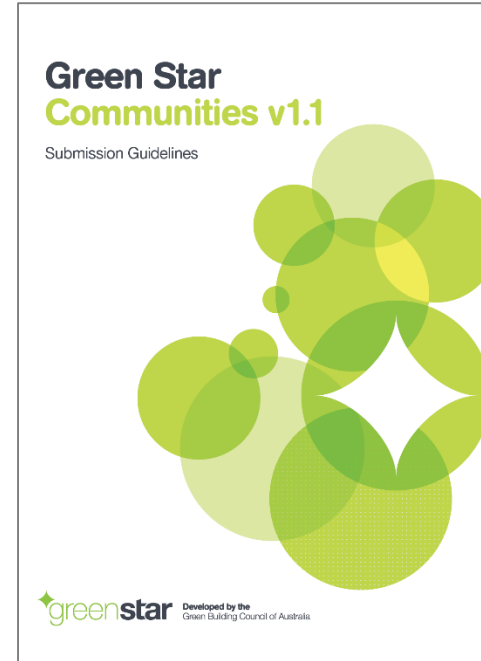


SUSTAINABLE CAMPUS

What is a “community”?

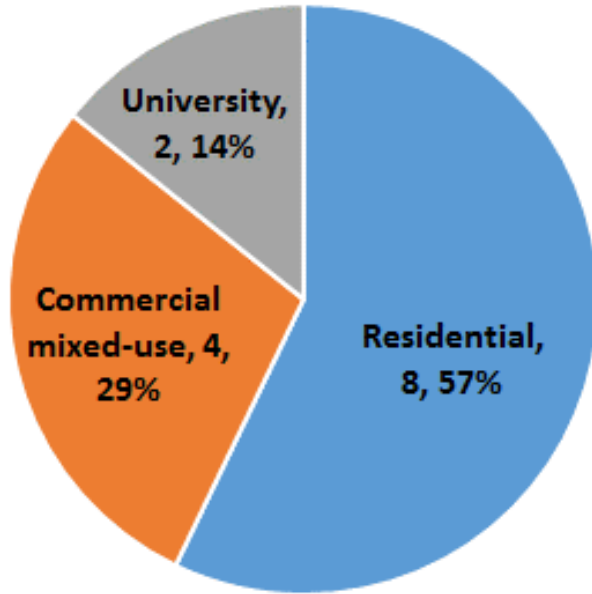
For rating eligibility, projects should do some or all of the following:

- Increase demand for public transport systems or highways
- Make use of adjacent areas of public realm for occupants and visitors;
- Enhance, diversify or add local employment, social mix, or ecological value;
- Increase demand for medical centres, schools, retail centres, places of worship etc;
- Opportunities for community-level provision of utilities;
- Significant impact on existing communities.



SUSTAINABLE CAMPUS

Project types that have been rated



Characteristics to consider:

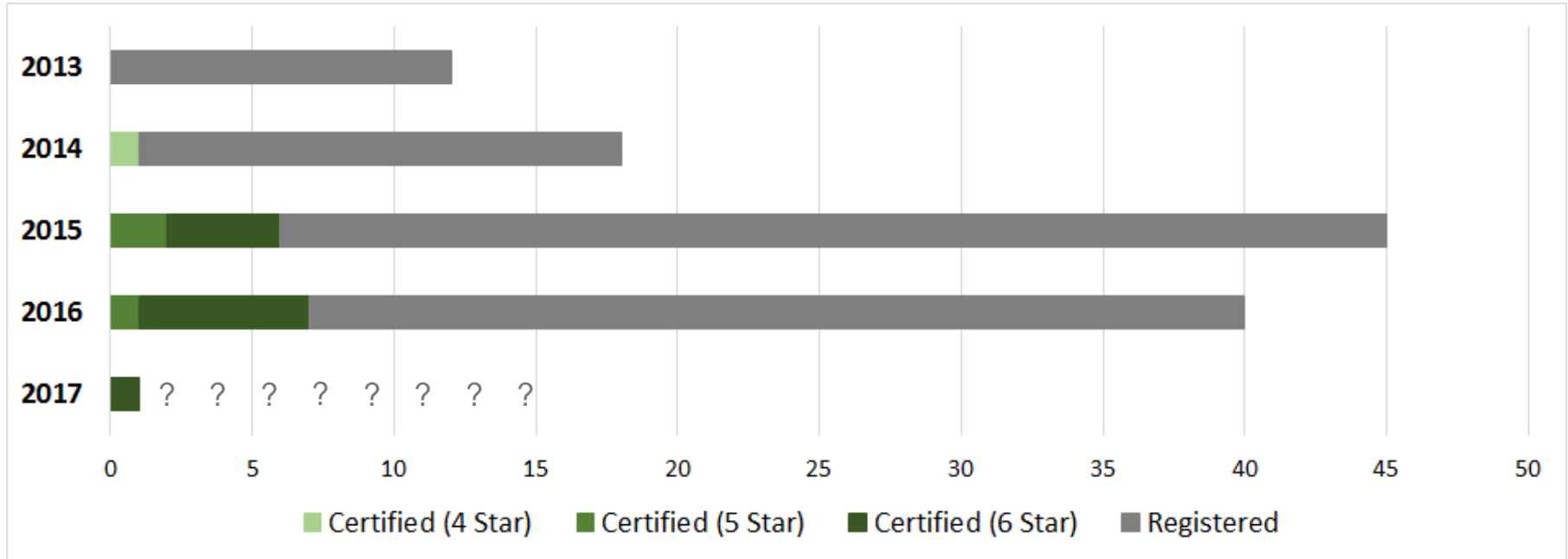
- Owner-operator vs Commercial developer
- Responsible for everything vs infrastructure and lot boundaries only

Implications for how well some credits apply and what is considered “innovative”.

Source: GBCA Annual Reports

SUSTAINABLE CAMPUS

Green Star Communities projects

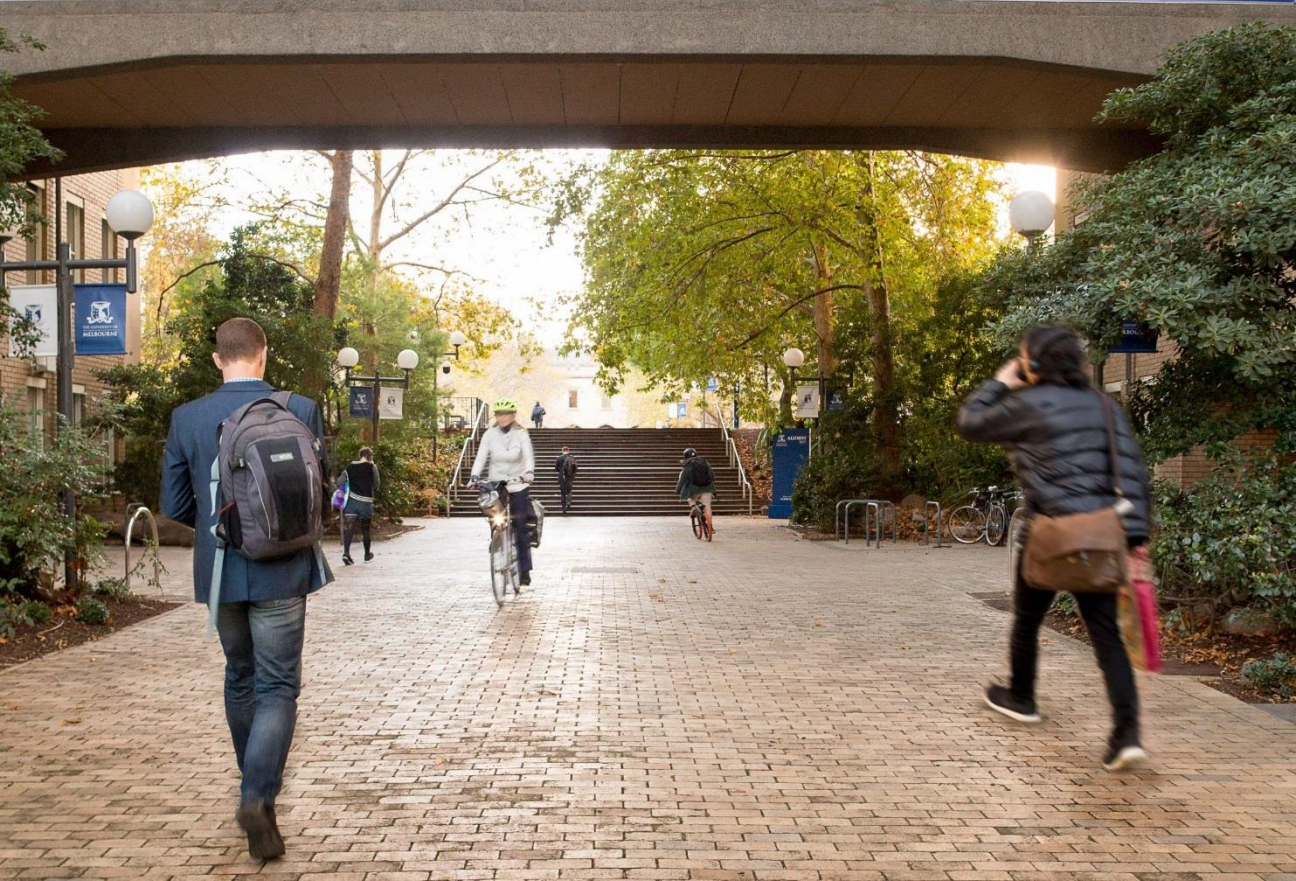


Certification process and timing

- Initial project certification
 - Based on the “plan of development”
 - Should be achieved within 3 years of registration (possibility of a 1 year extension if requested and justified)
- Recertification
 - Based on what has been done (process) and built (attributes)
 - Must be achieved within five years of the initial certification and every five years thereafter until the project is fully built-out

Key points

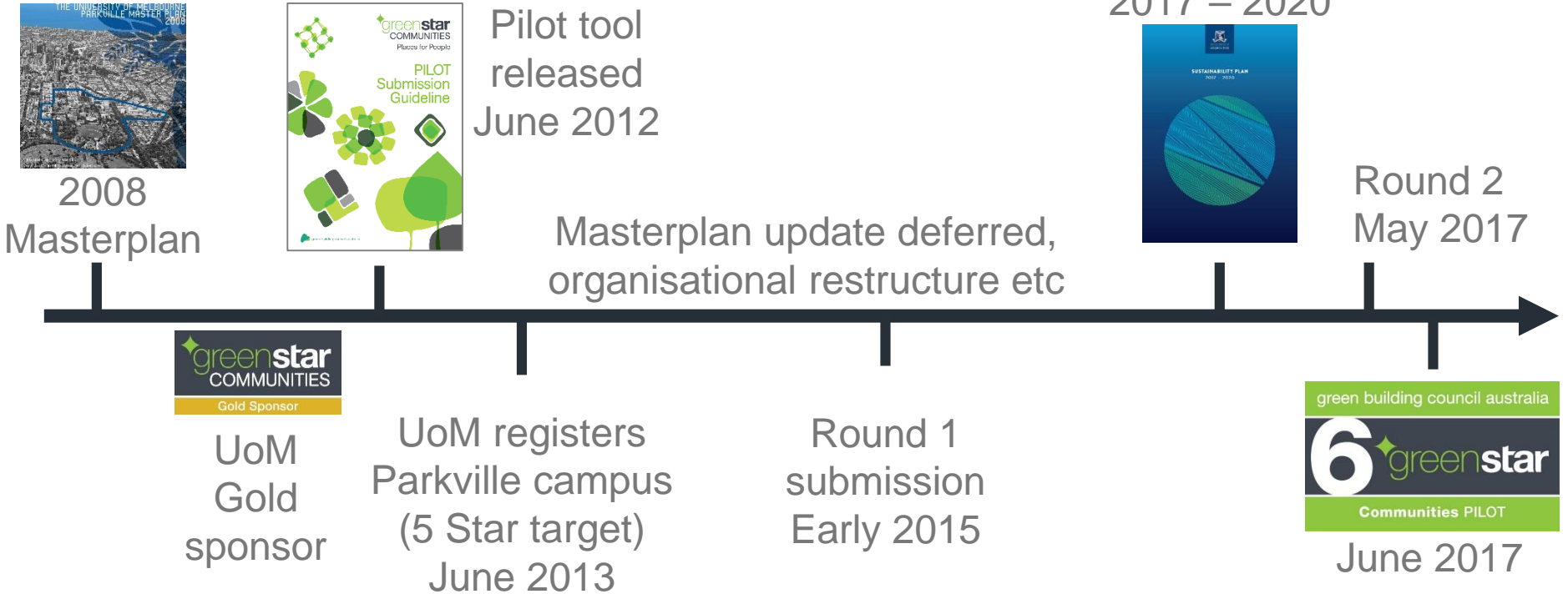
- Open to many different types of projects provided they have broad impacts on their surrounds
- Credit criteria tends to focus on aspects common to most “communities” – design and construction of infrastructure and public areas
- Initial certification of a masterplan, then recertification every 5 years to confirm it is on track
- Steady uptake to date by industry, primarily for residential and commercial mixed-use projects
- Curtin University and University of Melbourne have achieved ratings



Our Green Star Journey

SUSTAINABLE CAMPUS

Timeline



SUSTAINABLE CAMPUS

Why did we do it?

SUSTAINABLE CAMPUS

Why did we do it?

From June 2013 media release:

“Achieving a Green Star – Communities rating **reflects our University’s commitment to campus-wide sustainability,**” says Vice Chancellor, Professor Glyn Davis.

“Students, like academics, increasingly consider the environmental significance of their choices. We hope a **Green Star – Communities rating will signal to prospective students and staff that we are serious about our belief in innovation and investment in sustainability** and the future.”

SUSTAINABLE CAMPUS

Why did we do it?



We will know we have been successful in our aspirations if, by 2020, the University of Melbourne is:

...

10. recognised as a leader in embedding sustainability in all aspects of the University's operations, teaching and learning, research and engagement.



What did we
achieve?

SUSTAINABLE CAMPUS

Initial certification

18



**Certified in June 2017 -
valid until June 2022.***

Green Star Category Achievements

Total number of points awarded | **80.9/100***

 Governance
18 / 21

 Design
06 / 11

 Liveability
18 / 23

 Economic Prosperity
18 / 19

 Environment
11.9 / 26

 Innovation
09

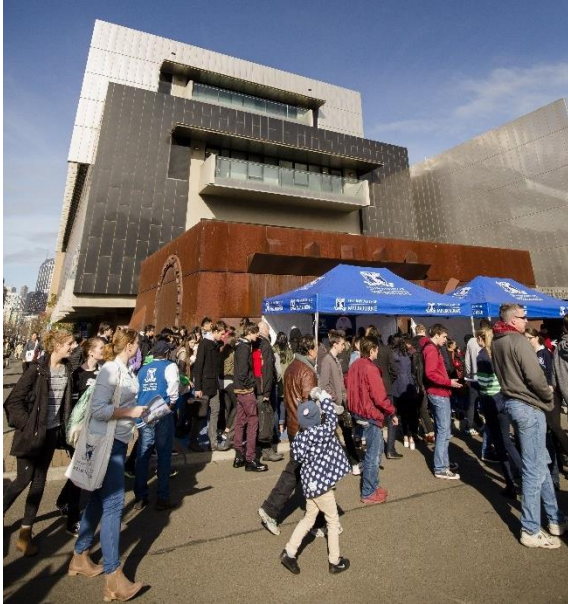
SUSTAINABLE CAMPUS

What is our “community”?



SUSTAINABLE CAMPUS

Governance



Easier

- Gov-1 Accredited Professional
- Gov-3 Sustainability Awareness
- Gov-5 Operational Governance
- Gov-7 Environmental Management

More challenging

- Gov-2 Corporate Responsibility
- Gov-6 Adaptation and Resilience
- Des-3 Design Review

Not targeted / not achieved

- Gov-2 Corporate Responsibility- Sustainability Reporting (Comprehensive)
- Gov-4 Engagement - Strategy Implementation
- Des-2 Context Analysis

SUSTAINABLE CAMPUS

Liveability



Easier

Liv-1 Access to Amenities

Liv-2 Community Development

Liv-3 Healthy and Active Living

Liv-4 Access to fresh food - Access to Fresh Food

More challenging

Liv-4 Access to fresh food - Local Food Production

Liv-5 Safe Places

Liv-6 Culture, Heritage, and Identity

Not targeted / not achieved

Sustainable Buildings

SUSTAINABLE CAMPUS

Economic Prosperity

22



Easier

Econ-1 Employment and Economic Resilience - Proximity to Major City

Econ-2 Education and Skills Development

Econ-4 Community Investment

Econ-5 Affordability

Econ-6 Incentive Programs

Econ-8 Peak Electricity Demand

More challenging

Econ-7 Digital Infrastructure

Not achieved

Econ-3 Return on investment

SUSTAINABLE CAMPUS

Environment



Easier

Env-1 Site Sensitivity - Previously Developed Land

Env-7 Potable Water Consumption

Env-10 Waste Management - Operational Waste

Env-11 Transport

More challenging

Env-5 Greenhouse Gas Intensity

Not achieved

Env-2 Ecological Enhancement

Env-3 Heat Island Effect

Env-4 Light Pollution

Env-6 Sustainable Buildings

Env-8 Stormwater

Env-9 Materials

Env-10 Waste Management - Reduction in Site, Construction, and Demolition Waste

SUSTAINABLE CAMPUS Innovation



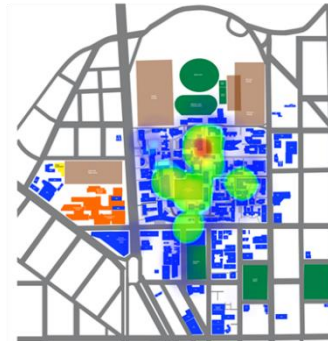
University Square



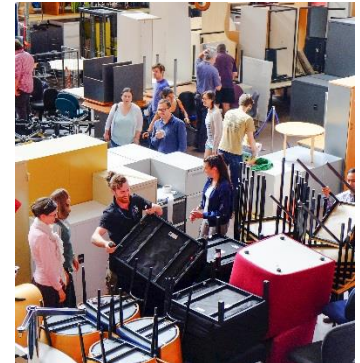
Green Impact Programme



Extensive stakeholder consultation for Sustainability Charter and Plan



Smart Campus analytics



Furniture and IT reuse centre

Additional recycling streams (polystyrene, fluorescent tubes)

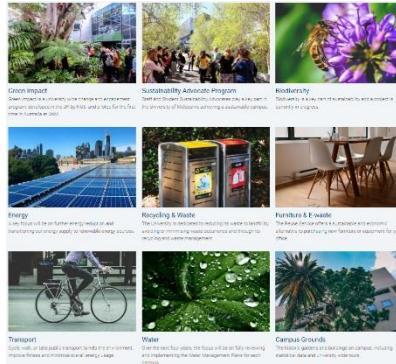
SUSTAINABLE CAMPUS Innovation



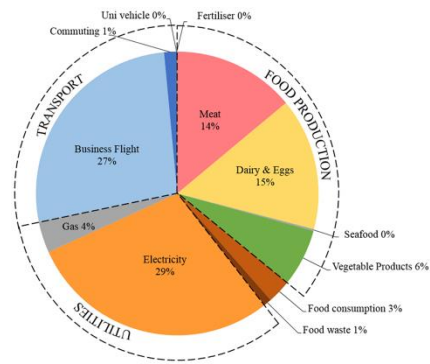
Campus as a Living Laboratory



Health and wellbeing



Sustainability engagement



Nitrogen footprinting

SUSTAINABLE CAMPUS

So, was it worth it?

SUSTAINABLE CAMPUS

So, was it worth it?

27



Independently benchmarking ourselves and being “*recognised as a leader in embedding sustainability*”

SUSTAINABLE CAMPUS

So, was it worth it?



Independently benchmarking ourselves and being “*recognised as a leader in embedding sustainability*”



“...*signal to prospective students and staff that we are serious about our belief in innovation and investment in sustainability...*”

The background of the page is a photograph of a large, multi-story brick building, likely a university hall. The building is partially obscured by the dense, green foliage of large trees with thick, gnarled branches. In the lower right corner, several people are seen walking, suggesting a campus environment. The overall scene is bright and sunny, with natural light filtering through the leaves.

COMING SOON

SUSTAINABILITY PLAN WATCH

The University of Melbourne Student Union is excited that the University is finally taking action on sustainability.

This page exists to track the targets and commitments laid out in the plan, and to hold them to account throughout the next four years.

If you have any information about the plan or sustainability at Melbourne that you would like to contribute please get in touch.

[CONTACT](#)



What next?

SUSTAINABLE CAMPUS

Renewable energy, on and off campus



MELBOURNE RENEWABLE ENERGY PROJECT

In an Australian first, some of Melbourne's most iconic businesses, universities, cultural institutions and Councils are banding together to drive investment in new renewable energy.

The group wants to buy:

110 GWH energy

=

15 WIND TURBINES

or

250,000 SOLAR PANELS

enough to power **28,475** households in Melbourne for a year

or

the equivalent of planting **160,612** trees

SUSTAINABLE CAMPUS

New developments and challenges





What advice do
I have?

Tips if you are considering a rating

- Have a clear understanding of why you want a rating
- Review the credit criteria, but focus on the aim of the credit and think from first principles
- Take advantage of the characteristics of your University community
- Delivery is what counts!



THE UNIVERSITY OF

MELBOURNE