Sustainable Future’s Building
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Project Description

- Design a sustainable building to replace the infamous “Frank White” Building at UQ
- Multi-disciplinary space for students and teachers
- Standard approach: design a building
- Our team’s approach: design a space that fulfils the function of a building whilst being sustainable from a social, environmental and economic point of view
What is Sustainability?

“...meeting the needs of the present without compromising the ability of future generations to meet their own needs.”
So... what are some practical ways to achieve this?
5. **GREEN WALL**
- Drip irrigation or hydroponic design
- No soil
- Private jungle room to boost productivity & morale
- *Biophilia*

6. **ENVIRONMENTAL SENSORS**
- Monitor humidity and temperature throughout the office

7. **WORKING SPACES**
- Power shuts down to desk outside of office hours
- Plants to cool and clean air

8. **DOUBLE GLAZED WINDOWS**
- Controls heat transfer through glass rom direct solar irradiance
- Facilitates natural lighting

4. **MATERIALS (RHA)**
- Rice Husk Ash (waste product) substitute for fly ash (concrete)
- Potential for 20% increase in compressive strength of concrete
- Capitalising on waste products & empty freight vehicles for transport
ABORIGINAL AWARENESS
• Acknowledgement of traditional owners (The Turrbal and Jagera People)
• Engaging in the commission of aboriginal artwork
• Ongoing project aiming to promote student engagement with cultural heritage
• Increased mindfulness of the land they use every day

10

9
DEDICATED EV CHARGING
• Dedicated EV parking spaces
• Basic AC Charging - Level 2, Mode 3
• Chargers use solar panel energy
• Free parking incentive
• Paid parking for gasoline vehicles (14P, Red Zone, $2.50/hr for up to 14 hours).

13
CYCLIST FACILITIES
• Bike Box facility encouraging staff to cycle to work
• End of trip facilities
• Coffee incentive program
• Reduced number of carparks to encourage cycling

12
ORANGE SKY LAUNDRY (SDG 10 & 17)
• Providing homeless / financially struggling students with laundry services
• Safe environment for those who feel disconnected to be listened to
• Utilising empty space at night time

11
GREYWATER TREATMENT PLANT
• Redirects water from taps to toilet systems
• Connection to UQ lakes for remaining effluent to be used as a source of irrigation (e.g. Great Court)
• Cleans rainwater for taps and showers
How green offices can provide the foundations towards meeting several Sustainable Development Goals

| Green offices can enhance employees' health, wellbeing & productivity |
| Building green offices creates jobs and boosts the economy |
| Green offices are a key part of sustainable cities and communities |
| Green offices produce fewer emissions, helping to combat climate change |
| Through building green offices, we create strong, global partnerships |
| Good health and wellbeing |
| Affordable and clean energy |
| Decent work and economic growth |
| Industry, innovation and infrastructure |
| Sustainable cities and communities |
| Responsible consumption and production |
| Climate action |
| Life on land |
| Partnerships for the goals |

- Green offices can use renewable energy, making them cheaper to operate
- Green offices can catalyse innovation and be resilient to climate change risks
- Green offices use ‘circular’ principles, where resources are not wasted
- Green offices can enhance biodiversity, save water resources and help to protect forests
Where to from here?

1. No more “business as usual”.
2. Sustainability is an opportunity, not a liability.
3. Be open to change, challenge the norm, be daring.
5. The thinking has been done, now is the time to act.
"Be the change you wish to see in the world"

— Mahatma Gandhi