

COMMERCIAL SUSTAINABLE BUILDING

- why need sustainability
- Some of building intro
- building analysis

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- ▶ Per: Gro Harlem Brundtland, International world leader on sustainable development. Prime Minister of Norway 1981-1996.

“Development that meets the needs of the present without compromising the ability of future generations to meet their own
needs.”

- ▶ - 2002. World Summit on Sustainable Development.
- ▶ <http://www.un-documents.net/our-common-future.pdf>

WHY NEED SUSTAINABILITY?

When the greenhouse gas is made too much on earth, the extra greenhouse gas would remain re-radiated the sunlight to earth and retain them, to make the temperature of earth increase.

- ▶ The truth is: the construction industry has taken great responsibility of it, indirectly and
- ▶ directly by 18% of greenhouse gas emission in 2010. Which include gas emission of carbon Dioxide.
- ▶ (cited in Man, Thomas, Robert & Catriona 2017, p.2)
- ▶ < <http://www.sbe16sydney.be.unsw.edu.au/Proceedings/34621.pdf> >

NEED?

- ▶ 1. CH2 house
- ▶ 2. pixel
- ▶ 3. sustainability Victoria

MELBOURNE CONTRIBUTION

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- ▶ Council House 2 (CH2) was Australia's **first** building to be awarded a six star green star design rating. Since its completion in 2006, CH2 has changed the landscape of its local area and inspired developers and designers across Australia and the world.
- ▶ CH2 is located at 240 Little Collins Street, Melbourne. The building has generated substantial interest, with many people keen to see for themselves how its features appear and work.
- ▶ <http://www.melbourne.vic.gov.au/building-and-development/sustainable-building/council-house-2/Pages/council-house-2.aspx>

COUNCIL HOUSE 2



THERMAL COMFORT? (AIRCON, TIMBER SHUTTERING)
NATURAL CALLING?
INTERNAL ENVIRONMENT AND ENERGY EFFICIENCY?



PIXEL, 205 QUEENSBERRY STREET, CARLTON.

[HTTP://WWW.PIXELBUILDING.COM.AU/](http://www.pixelbuilding.com.au/)

- ▶ <https://www.youtube.com/watch?v=uJWojLQD05M>
- ▶ Searching “Sustainability Victoria Building Fly through” in Youtube.

SUSTAINABILITY VICTORIA
50 LONSDALE STREET, MELBOURNE.



- ▶ FIVE TOPIC
- ▶ 1. lighting
- ▶ 2. IT
- ▶ 3. MATERIAL
- ▶ 4. WASTE
- ▶ 5. FLOOR PLAN

SUSTAINABILITY VICTORIA
50 LONSDALE STREET, MELBOURNE.



- ▶ LARGE WINDOW (DAYLIGHT), BLIND USE.
- ▶ MOTION SENSOR OF LIGHT
- ▶ MASTER SYSTEM (30' 60' TIMER)

LIGHTING

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- ▶ 1. LAPTOPS, CLOSING SCREEN, SAVE ENERGY
- ▶ 2. SMALL SPACE WE HAVE, LESS ENERGY USE.
- ▶ 3. BEHAVIOURAL/TECH

IT SOLUTION

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- ▶ 1. ECO PREFERRED MATERIAL.(TOXIC)
- ▶ 2. LOW ENERGY USE.
- ▶ 3. REUSEABLE, DURABLE (CONSIDER END OF LIFE MANAGEMENT)
- ▶ 6. NON-GLUE TILE, EASY REPLACEMENT, (NO VOLATILE ORGANISED COMPOUNDS)
- ▶ 7. CARPET, RECYCLABLE.

MATERIAL

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- ▶ 1. WASTE SEPARATION (PAPER, ORGANIC, PLASTIC, LANDFILL)
- ▶ 2. EMS (ENVIRONMENTAL MANAGEMENT SYSTEM)
- ▶ 3. CONSTRUCTION DEBRIS (95% WASTE SOLD, REUSE, RECYCLE)
- ▶ 4. CONFIRM PAINTING
- ▶ 5. BELOW 81% INDUSTRIAL WATER USAGE. (WATER TANK, PLANT PURIFYING BLACK WATER)
- ▶ 6. SHOWERHEAD, DISHWASHER, WATER EFFICIENCY.

WASTE



- ▶ 1. OPEN PLAN ENVIRONMENT, IMPROVING LIGHT/VENTILATION EFFICIENCY.
- ▶ 2. PLANT WALL(PURIFY AIR/SEPARATE)
- ▶ 3. RECYCLED CARD BOARD
- ▶ 4. OPEN PLANNED AREA AND SEPARATED AREA?
- ▶ 5. EXTRACTED FAN.

FLOOR PLAN

▶ SORRY FOR LONG PARAGRAPH...

THANKS!!!

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