

Welcome

TO MEET THE STARS

Convesso

8 Waterside Place
Victoria Harbour

Hosted by

Trudy Ann King

State Manager for VIC/ SA,

Asia Pacific Regional Manager - WorldGBC



green building council australia



**Event
Sponsor**

THE laminex GROUP

Update

Education Pilot

Precincts Tool

Asia Pacific Network

**GREEN
BUILDING
COUNCIL OF
AUSTRALIA**



AT A GLANCE



Today's Speakers

Emma Woodhouse
Development Manager
Vivas Lend Lease

Matthew Williams
Consultant,
Sustainable Design,
Lend Lease design

Roger Poole
Architect
Bates Smart



Convesso 8 Waterside Place Victoria Harbour

Emma Woodhouse



Overview

- Lend Lease and Vivas Lend Lease
- The Convesso 8 Waterside Place development including its location in Victoria Harbour and key design features.
- Green Star MURT Pilot Programme and its influence on the Convesso project.



Lend Lease Sustainability



Sustainability has been an integral part of our culture for more than 50 years. Today, our employees insist that making a difference in our communities, improving health and safety standards, and reducing our environmental impacts are central to our business strategy.

We believe it's the right thing to do. But it's also the smart thing to do, because it creates long-term commercial value and reduces our operational and financial risk.

Every Action Adds Up

www.lendlease.com/sustainability



Vivas Lend Lease





DISCLAIMER: This is a conceptual image of the Victoria Harbour Masterplan as currently approved by Vic Urban and the Department of Planning and Community Development. Lend Lease Development Pty Ltd is not representing that the form and the extent of development of Victoria Harbour that is shown in this image will take place. The Masterplan has been amended since the development of Victoria Harbour commenced and we reserve the right to amend the Masterplan from time to time in the future, subject to the approval of Vic Urban and relevant authorities. Lend Lease Pty Ltd 14 April 2009.

Customers



Young Apartment
Dwellers

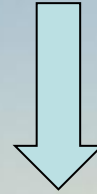


Empty
Nesters

Overseas
Buyers



CONVESSO
**8 WATERSIDE
PLACE**



Convesso 8 Waterside Place

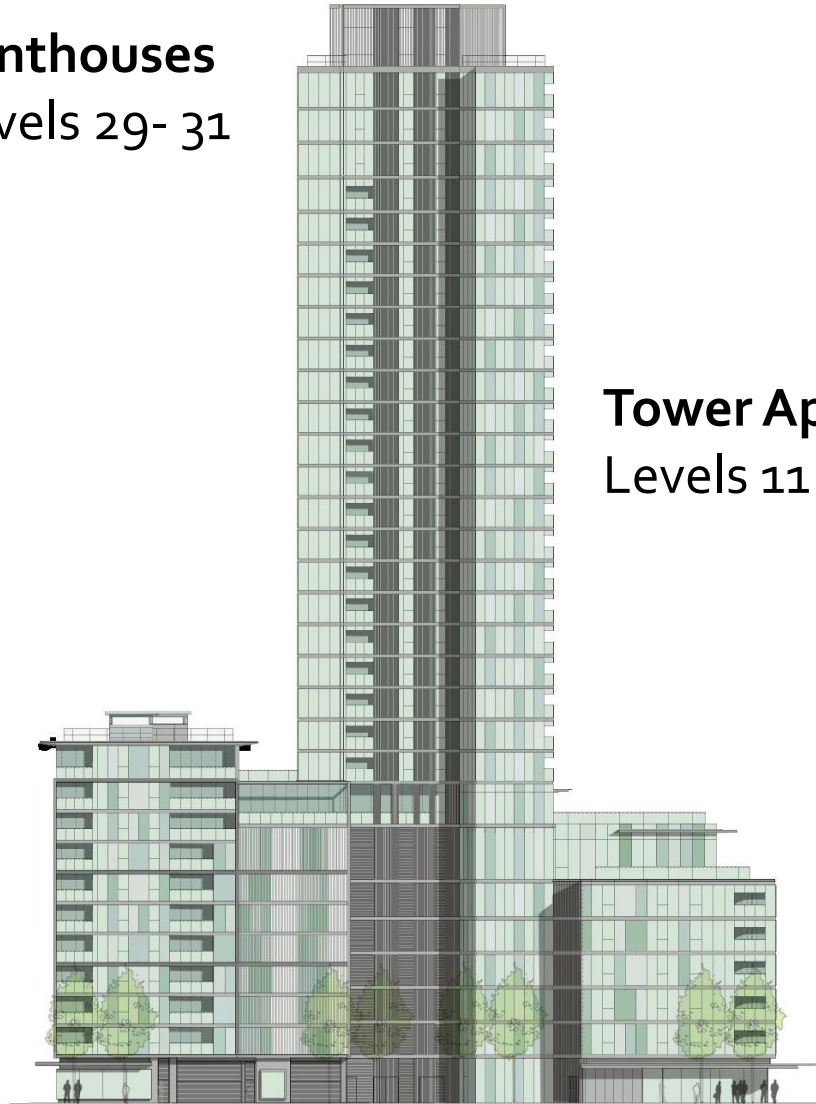


Penthouses
Levels 29- 31

Tower Apartments
Levels 11 - 28

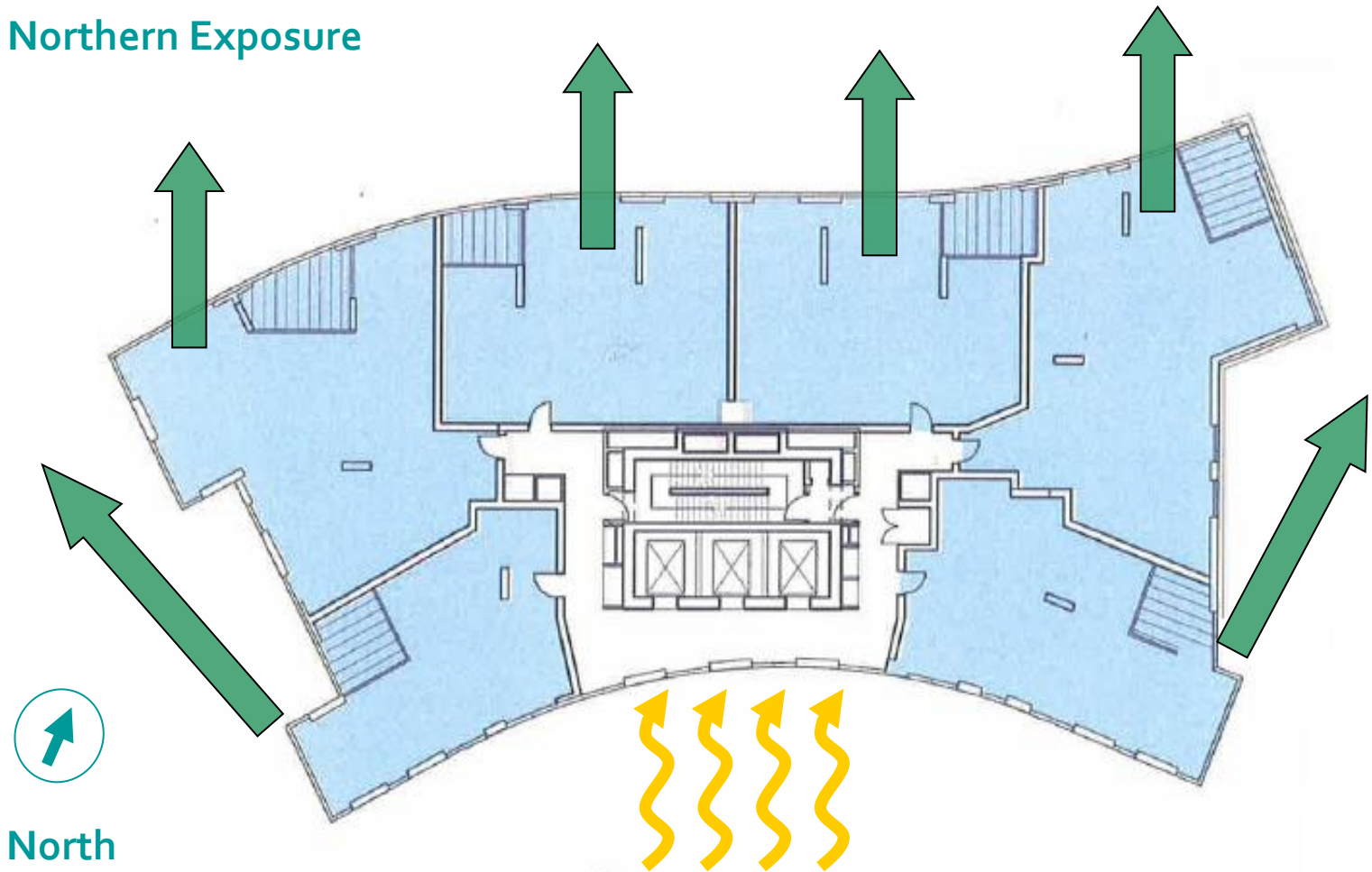
**Cityside
Apartments**
Levels 1 - 10

Waterfront Homes
Levels 1 – 6



Apartment Planning Principles

Northern Exposure



North

Natural Light to Lobby









Sustainable Living



Green Star MURT PILOT Participation



We're a year in to the project and the design is 70% complete and you want to do what?!?

An opportunity for...

- A paradigm shift?
- A marketing tool?
- A change in gear – take things up a notch or two?
- Knowledge - research and development?

Key Challenges & Drivers

Governance Structures

Individual occupants, owners corporations, committees etc

Motivating Factors & Market Awareness

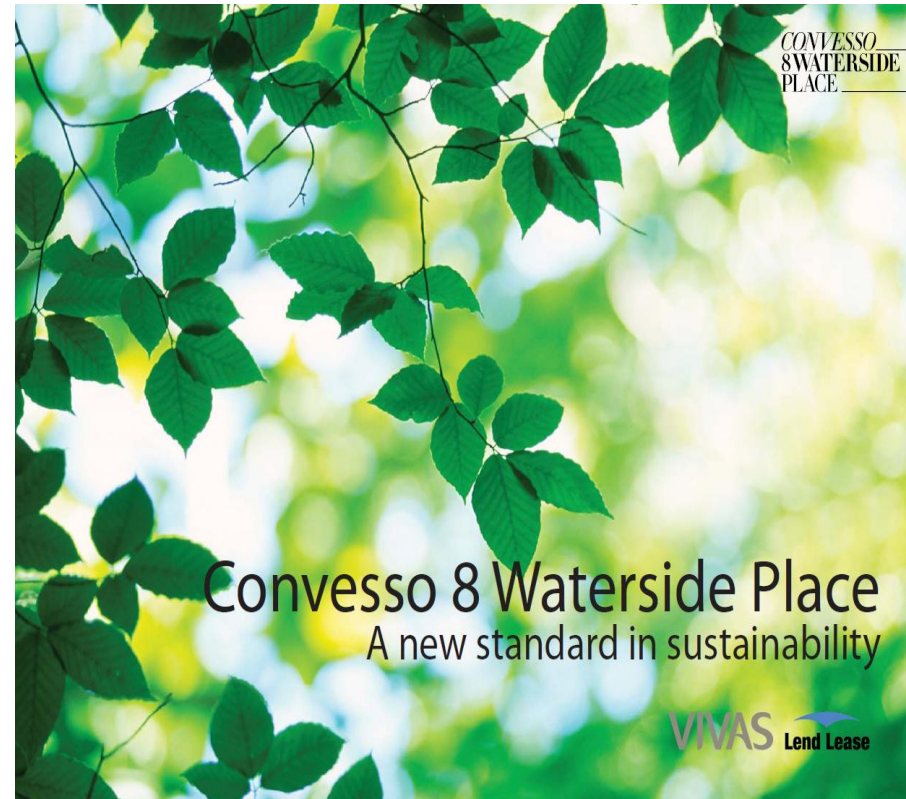
Motivating factors driving purchasing decisions.
What initiatives will our customers value?

Marketability

How can we inform our purchasers on the value of purchasing in a sustainable development?
Creating a unique selling proposition.

Commercial viability

Additional capital cost. Additional circa \$14K / apt or circa 2% additional to D&C cost



Sustainability Agenda

- Setting Market Direction
- Focus on initiatives that will influence behaviours
- Focus on initiatives that enhance the lifestyles we can offer to residents
- Research and adopt what we know will deliver results
 - That fit with current governance
 - Have no ongoing operational encumbrances residents
 - Have a high probability of return on investment





Imagine
Create

Convesso 8 Waterside Place Victoria Harbour

Matt Williams



Vivas Lend Lease have identified a direction that all new projects will be Green Star rated.

- Timing - Convesso is the next Vivas building to be built.
- Green Star – how do we incorporate at this stage? What are our options? How many stars?
- Optimise good design practice, minimise capital costs, limit ongoing maintenance and management by the owners corporation
- What makes sense?

The Convesso Green Star journey



- What is Green Star and how is the Multi-Unit Residential Tool (MURT) different to other tools?
- What are the innovations that we targeted at Convesso?
- What rating have we achieved and how did we do it?
- What would we do differently next time?



What is Green Star?



- Green Star is a comprehensive, national, voluntary environmental rating system that evaluates the environmental design and construction of buildings.
- Green Star was developed for the property industry in order to:
 - Establish a common language;
 - Set a standard of measurement for green buildings;
 - Promote integrated, whole-building design;
 - Recognise environmental leadership;
 - Identify building life-cycle impacts; and
 - Raise awareness of green building benefits.

Changes to Multi Unit Residential Tool



Management	IEQ	Energy	Transport	Water	Materials	Land use & Ecology	Emissions
Smart Metering (visual display)	Private External Space (80% not 100%)	Min 7 Star Accurate (10% better than 5 Star)	Car Share	Water Efficient Appliances	Universal Design	Communal Garden Facilities	No new credits
	External Views	Unoccupied Spaces	Trip Reduction (Mixed use)	Swimming Pool/ Spa Water efficiency	Shell & Core		
		Energy Efficient Appliances		Water Sub Metering (now in metering credit)	Design for Disassembly		
		Energy Sub metering (now in metering credit)			Joinery		
					Internal Walls		

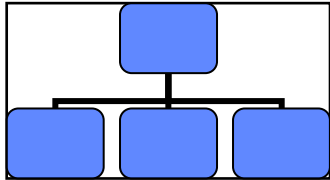
No Longer in V1 tool

Changed in V1 tool

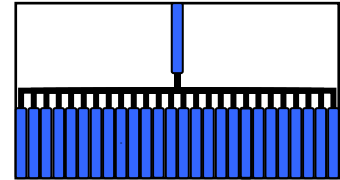
Added to V1 tool



Commercial vs. Residential



Governance Structures



Corporate / Institute

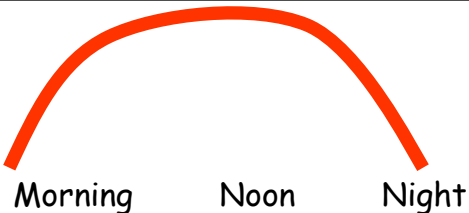
Occupants / Owners

Mum's and Dad's
New Home Owners
Retiree's

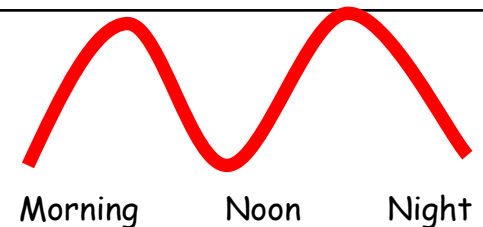
Green Star Office V1
Green Star Office V2
Green Star Office V3

Market Recognition

Green Star Pilot MURT



Usage Profiles



Best Practise Sustainability



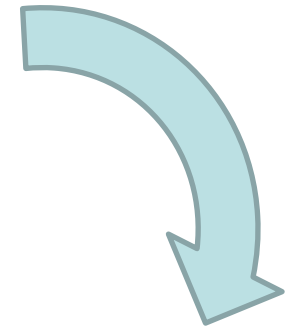
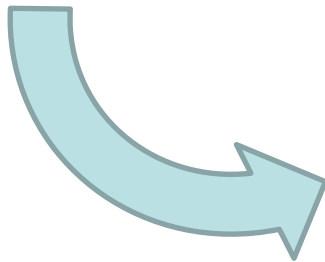
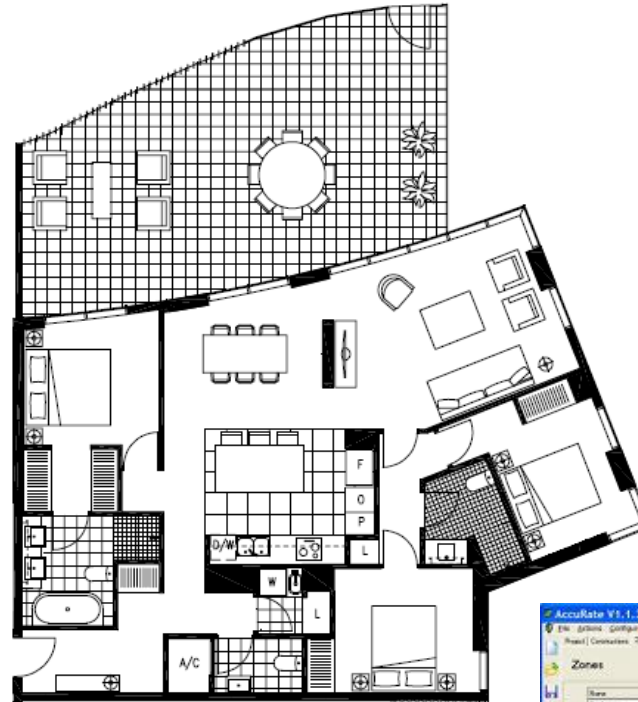
Business As Usual

- ESD Consultant
- Building Tuning and Commissioning, User guides
- High level of acoustic insulation
- Low VOC paints, carpets, adhesives, sealants
- Energy efficient lighting and a/c
- Water Efficient fittings and fixtures
- Brownfield redevelopment
- Reduced emissions – low ODP

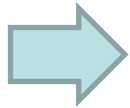
Beyond the Norm

- High performance façade
- Smart metering
- Energy and water efficient appliances

Heating and Cooling Loads

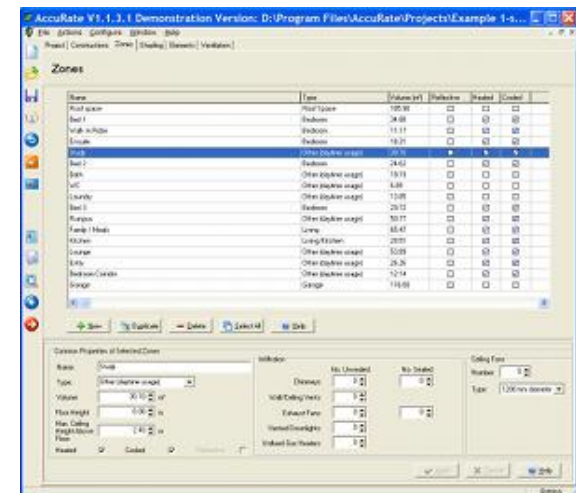


5.0 Star
★★★★★



8.4 Star
★★★★★
★★★★★

70% reduction in heating and cooling loads



Name	Type	Volume (m³)	Induction	Heated	Cooled
Plant Room	Plant Room	105.99	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ball 1	Ballroom	24.68	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ball 2	Ballroom	11.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corridor	Ballroom	13.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office	Other (Office) usage	25.76	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ball 2	Ballroom	24.62	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ball 1	Other (Office) usage	19.79	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WC	Other (Office) usage	6.88	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	Other (Office) usage	13.88	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ball 2	Ballroom	29.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reception	Other (Office) usage	30.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family 1 Meeting	Meeting	65.47	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1000m	Living Kitchen	28.91	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corridor	Other (Office) usage	32.88	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WC	Other (Office) usage	25.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bedroom/Office	Other (Office) usage	12.14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage	Storage	119.68	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basic	Thermostat	Heating	Hot (Unheated)	No (Unheated)	Cooling Fans
Type:	Other (Office) usage	On	7	0	3
Volume:	25.76 m³	1000 W/m²	1000 W/m²	1000 W/m²	1000 W/m²
Max. Ceiling Height:	2.4 m	1000 W/m²	1000 W/m²	1000 W/m²	1000 W/m²
Zone:	Office	1000 W/m²	1000 W/m²	1000 W/m²	1000 W/m²

Options for Smart Metering

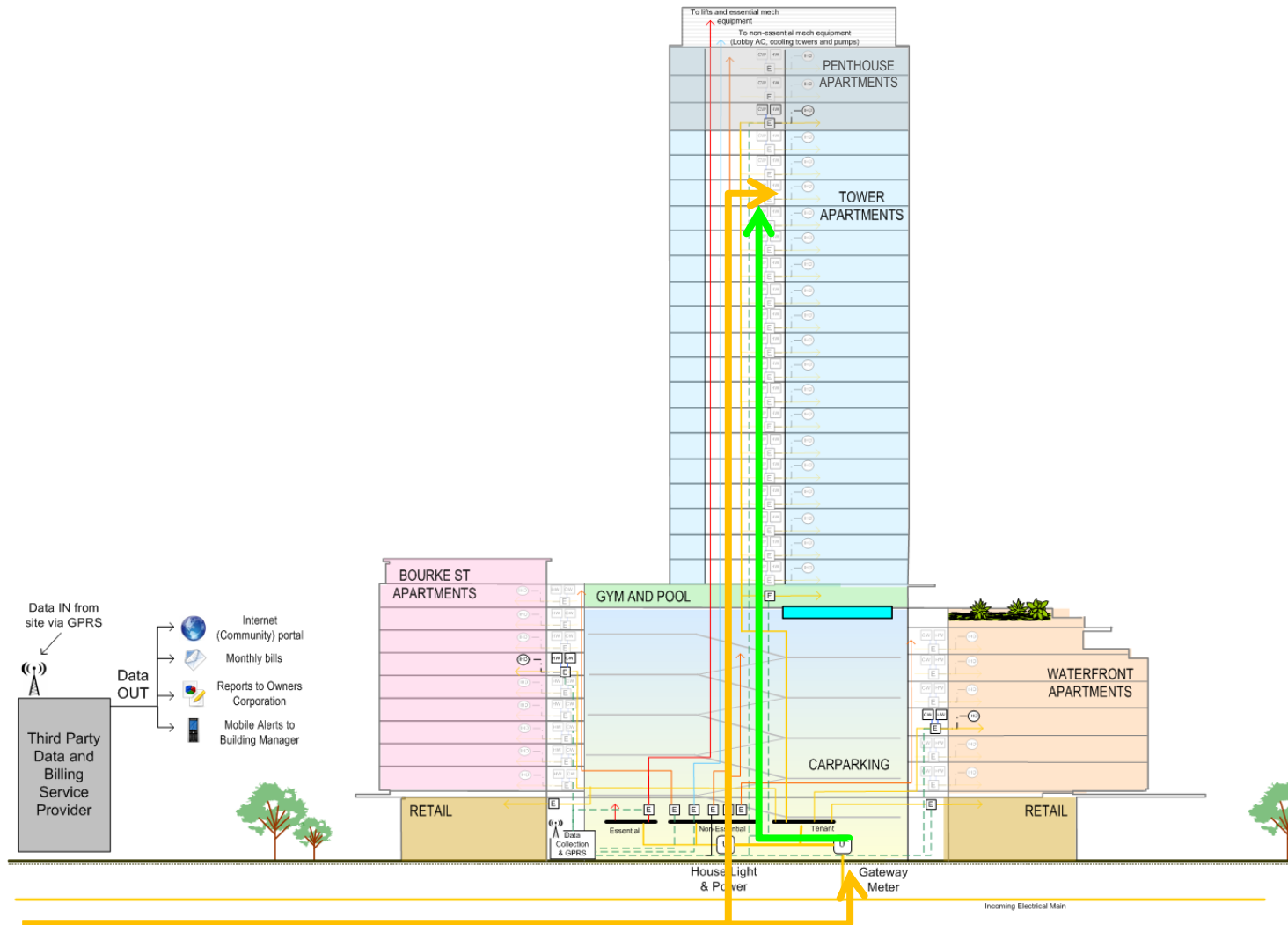


Option 1. CT metering -
**Cheap but innaccurate
and not water or gas yet**

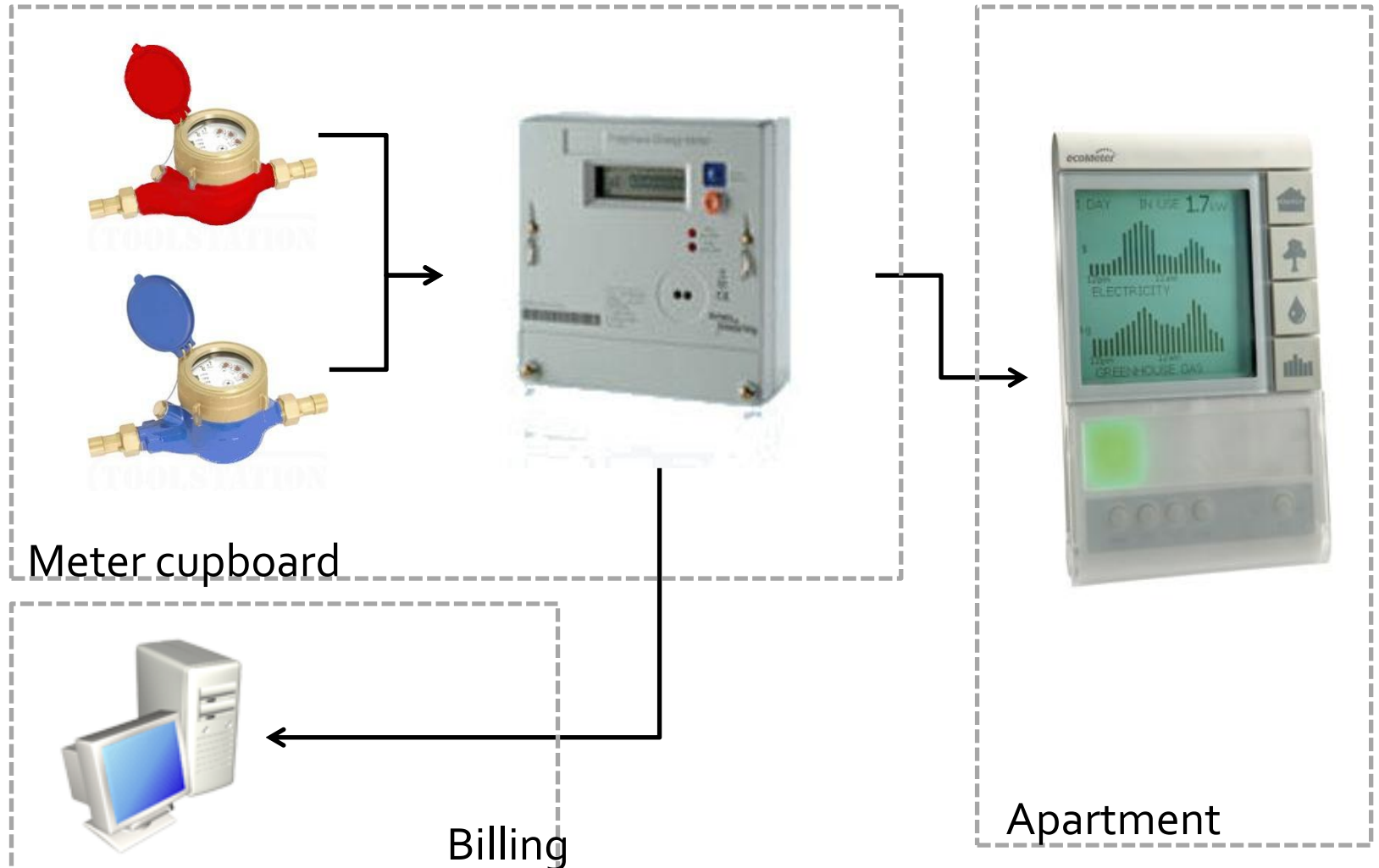


Option 2. BMS metering –
**Complicated and costly but
accurate.**

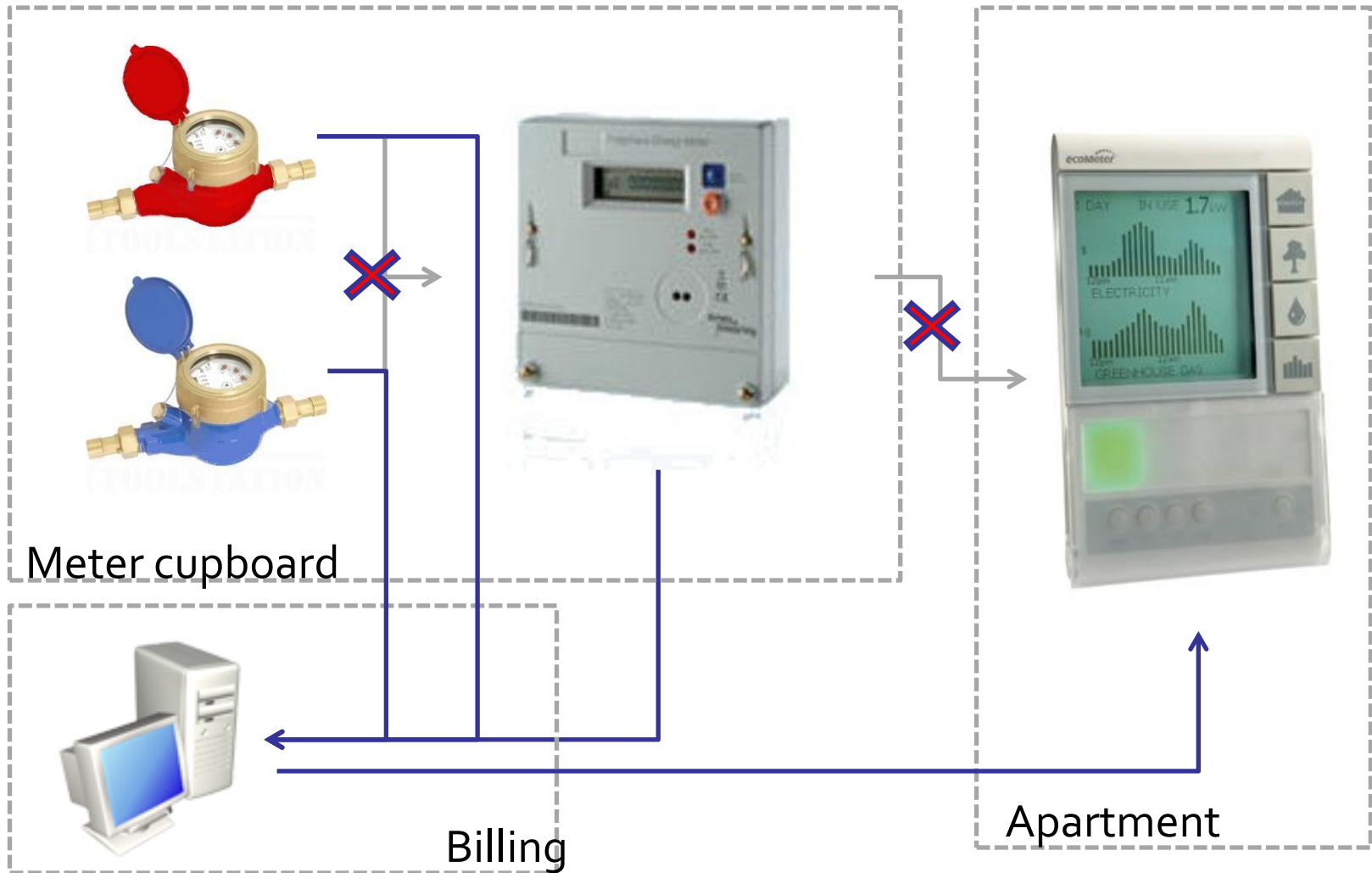
Embedded Smart Metering Network



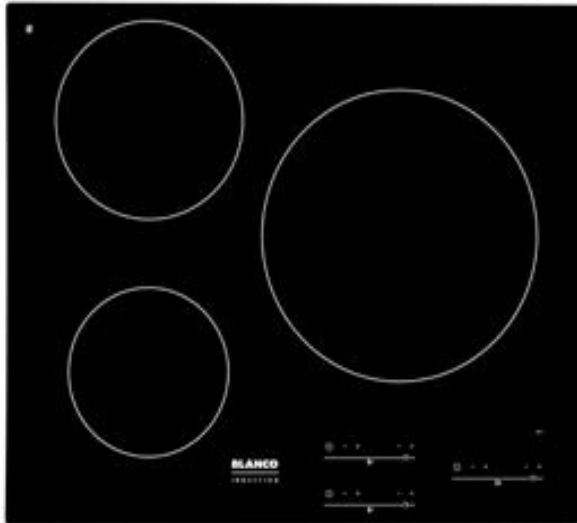
Private Smart Meter Network



Alternative approach to Smart Metering



Induction Cooking



84% Efficiency

38% Efficiency

Supply Side versus Demand Side



versus



Key Sustainability Initiatives

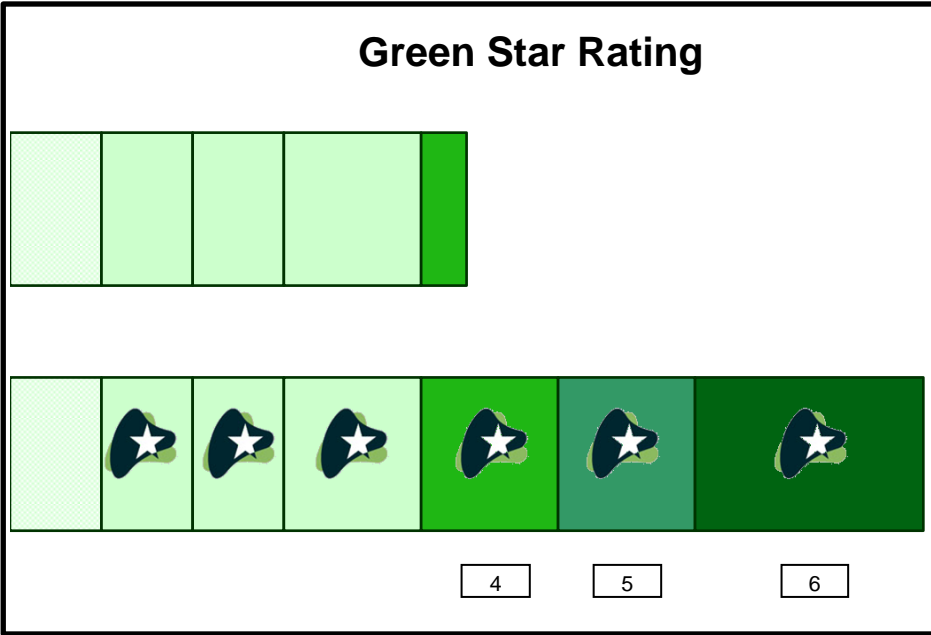


- High performance glazing system
- Insulation to walls and ceilings
- Visual Display Smart meters
- Energy & Water Efficient Appliances
- Master switch to each apartment
- Water efficient tapware
- Rainwater tanks
- Low VOC materials
- Recycling provisions for residents

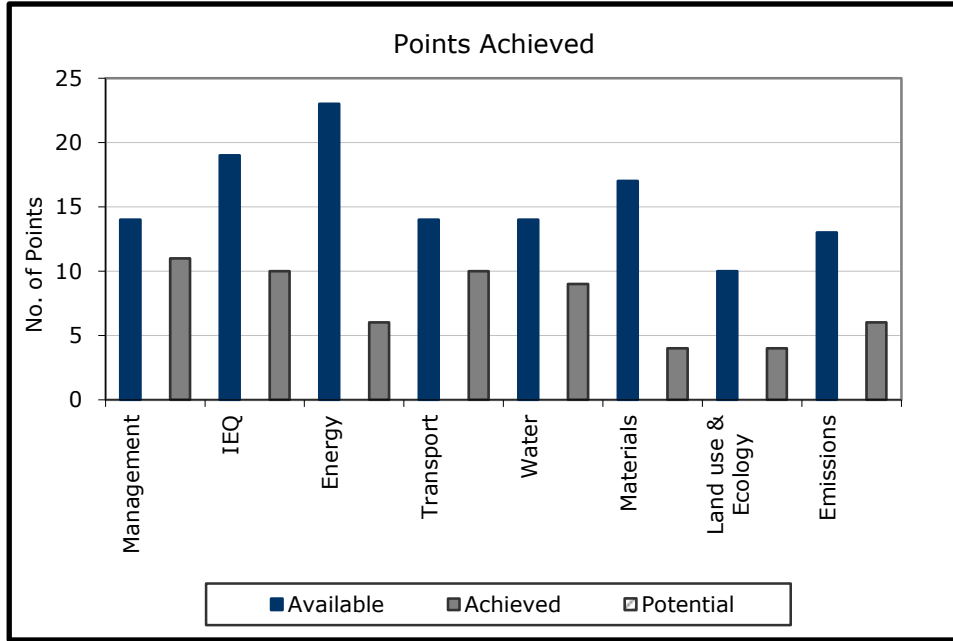
Green Star Credit Summary



Green Star Rating



Points Achieved



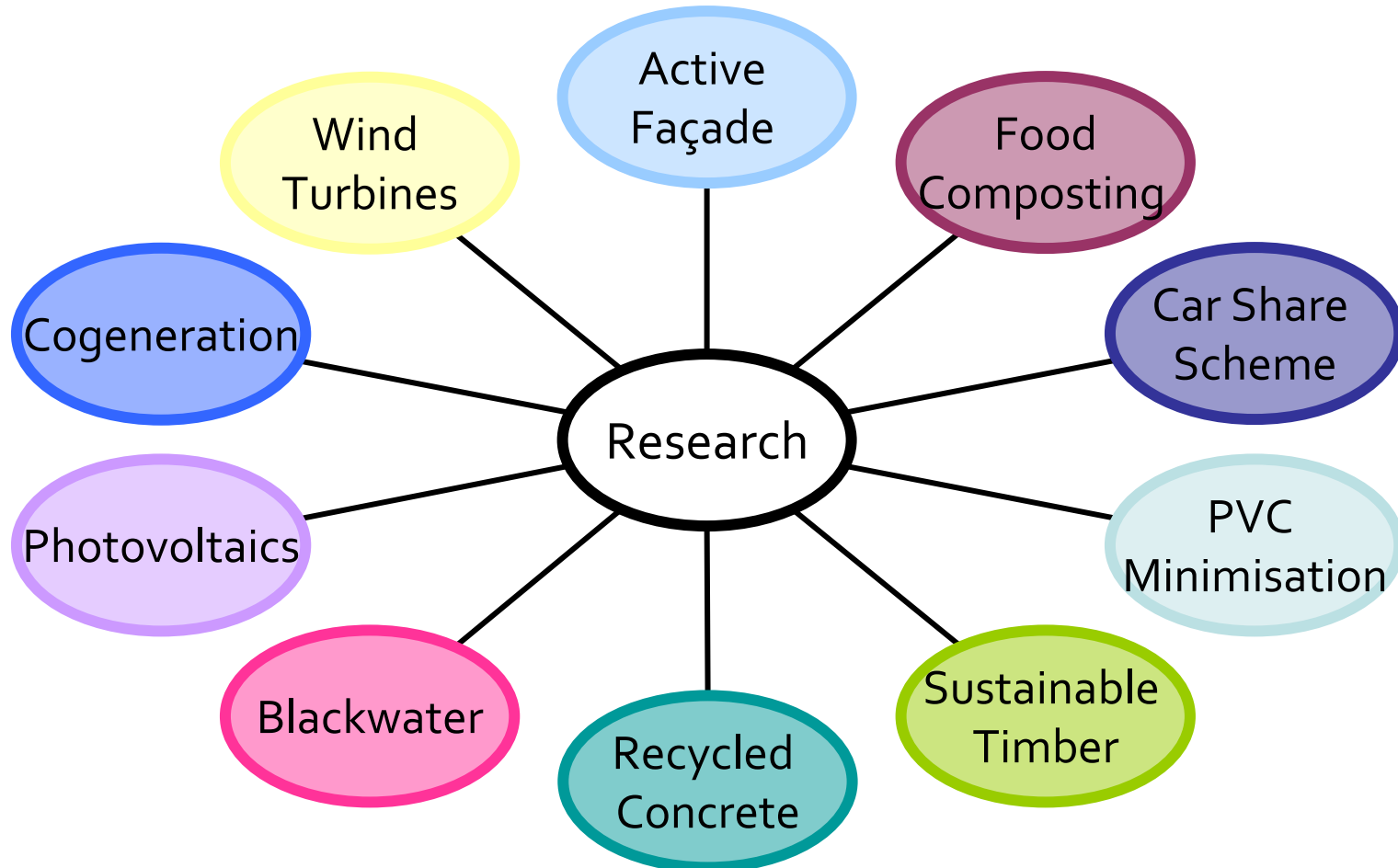
Green Star Credit Summary



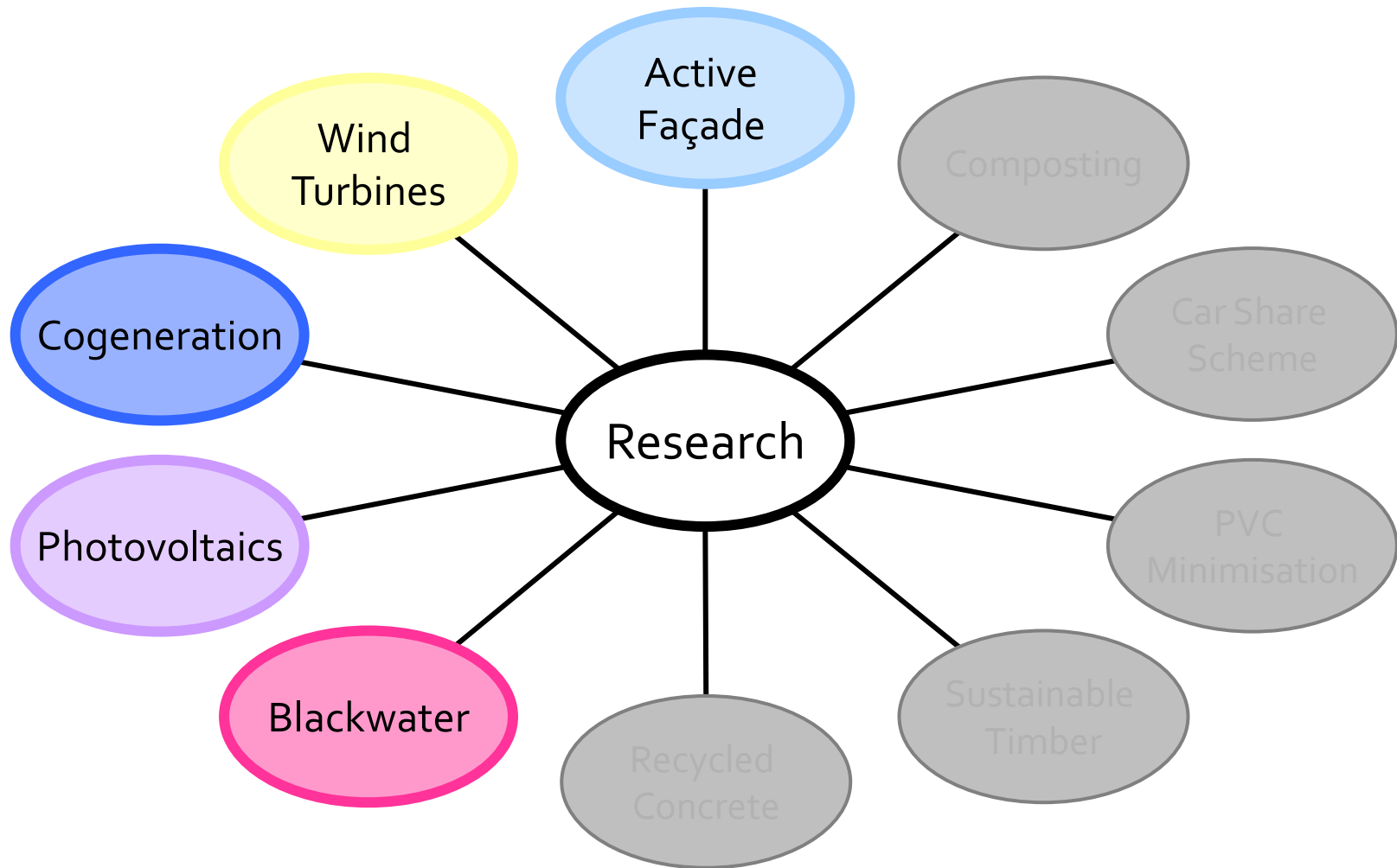
Category	Title	Credit No.	Points Available	Points Achieved
Management				
	Green Star Accredited Professional	Man-1	2	0
	Commissioning - Clauses	Man-2	2	2
	Commissioning - Building Tuning	Man-3	1	1
	Commissioning - Commissioning Agent	Man-4	1	0
	Building Users' / Occupants Guide	Man-5	1	1
	Environmental Management	Man-6	3	3
	Waste Management	Man-7	2	2
	Smart-metering	Man-8	2	2
	TOTAL		14	11
Indoor Environment Quality				
	Ventilation Rates	IEQ-1	2	0
			1	1
	Air Change Effectiveness	IEQ-2	3	0
	Daylight	IEQ-3	2	0
	Thermal Comfort	IEQ-4	2	1
	Hazardous Materials	IEQ-5	0	na
	Internal Noise Levels	IEQ-6	2	2
	Volatile Organic Compounds	IEQ-7	3	3
	Formaldehyde Minimisation	IEQ-8	1	1
	Private External Space	IEQ-9	1	0
	Electric Lighting Levels	IEQ-10	1	1
	External Views	IEQ-11	1	1
	TOTAL		19	10
Energy				
	Conditional Requirement	Ene-	Conditional Requirement	Yes
	Energy Improvement	Ene-1	15	0
	Energy Sub-metering	Ene-2	2	2
	Peak Energy Demand Reduction	Ene-3	2	0
	Unoccupied Spaces	Ene-4	2	2
	Energy Efficient Appliances	Ene-5	2	2
	TOTAL		23	6
Transport				
	Car Parking Minimisation	Tra-1	2	1
	Fuel Efficient Transport	Tra-2	2	0
	Cyclist Facilities	Tra-3	3	3
	Commuting Public Transport	Tra-4	5	5
	Trip Reduction - Mixed Use	Tra-5	2	1
	TOTAL		14	10
Water				
	Occupant Amenity Water	Wat-1	5	2
	Water Efficient Appliances	Wat-2	1	1
	Water Meters	Wat-3	2	2
	Landscape Irrigation	Wat-4	1	1
	Heat Rejection Water	Wat-5	2	0
	Fire System Water Consumption	Wat-6	1	1

Materials				
	Recycling Waste Storage	Mat-1	2	2
	Building Re-Use	Mat-2	0	na
	Concrete	Mat-3	3	0
	Steel	Mat-4	2	2
	PVC Minimisation	Mat-5	2	0
	Sustainable Timber	Mat-6	2	0
	Recycled-Content & Reused Products and Materials	Mat-7	1	0
	Dematerialisation	Mat-8	2	0
	Floor Coverings	Mat-9	1	0
	Universal Design	Mat-10	1	0
	Shell & Core	Mat-11	1	0
	TOTAL		17	4
Land Use & Ecology				
	Conditional Requirement	Eco-	Conditional Requirement	Yes
	Reuse of Land	Eco-1	1	1
	Reclaimed Contaminated Land	Eco-2	2	0
	Change of Ecological Value	Eco-3	4	1
	Topsoil	Eco-4	0	na
	Communal Garden Facilities	Eco-5	3	2
	TOTAL		10	4
Emissions				
	Refrigerant ODP	Emi-1	1	1
	Refrigerant GWP	Emi-2	2	0
	Refrigerant Leaks	Emi-3	1	0
	Watercourse Pollution	Emi-4	2	2
			0	na
	Discharge to Sewer	Emi-5	4	1
			0	na
	Legionella	Emi-6	1	0
	Insulant ODP	Emi-7	1	1
	Light Pollution	Emi-8	1	1
	TOTAL		13	6
Sub-total weighted points:			49	
Innovation				
	Innovative Strategies & Technologies	Inn-1	2	1
	Exceeding Green Star Benchmarks	Inn-2	2	0
	Environmental Design Initiatives	Inn-3	1	0
	TOTAL		5	1
Total weighted points:			50	
Once certified this would equate to a Four Star rating.				

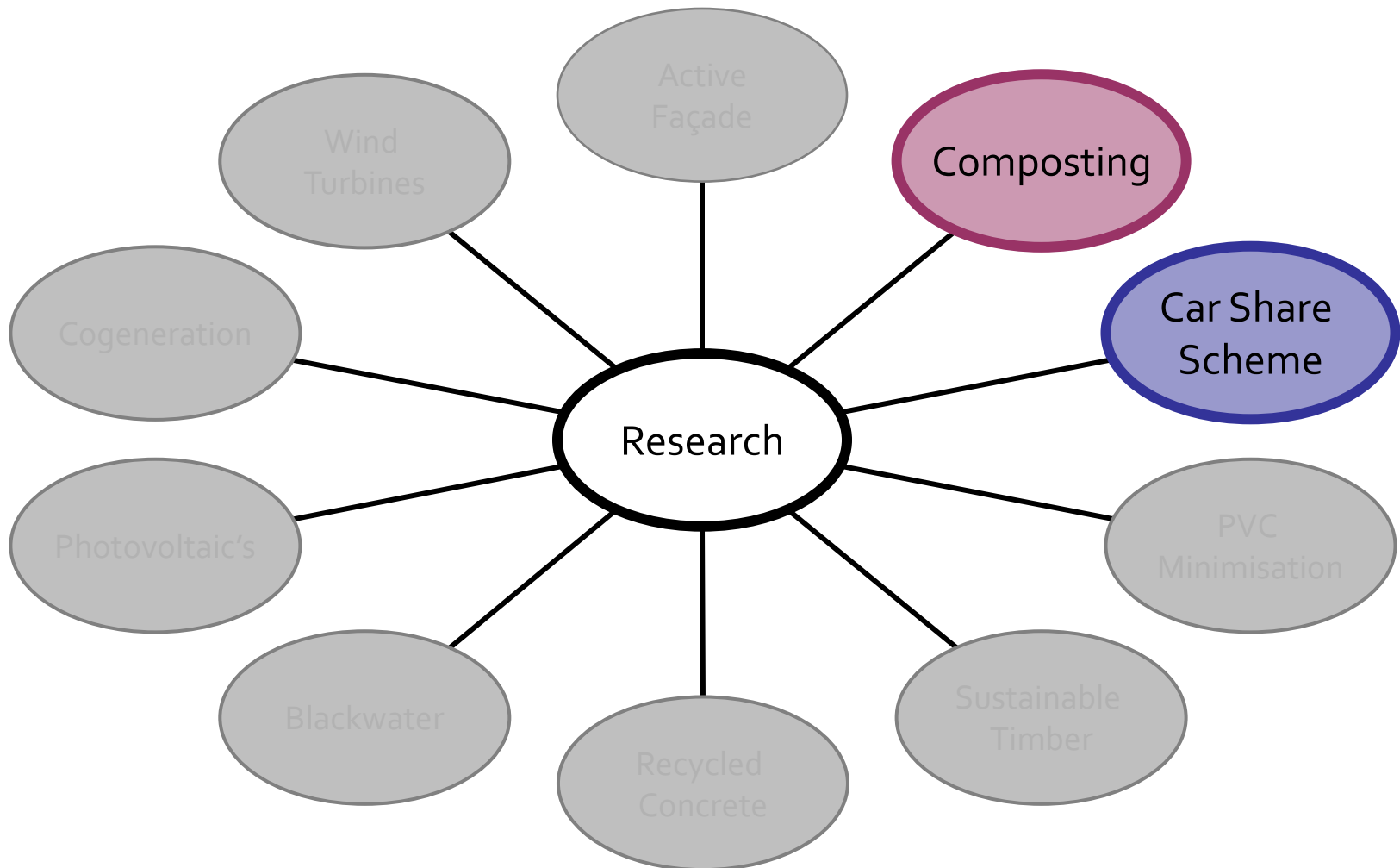
Research



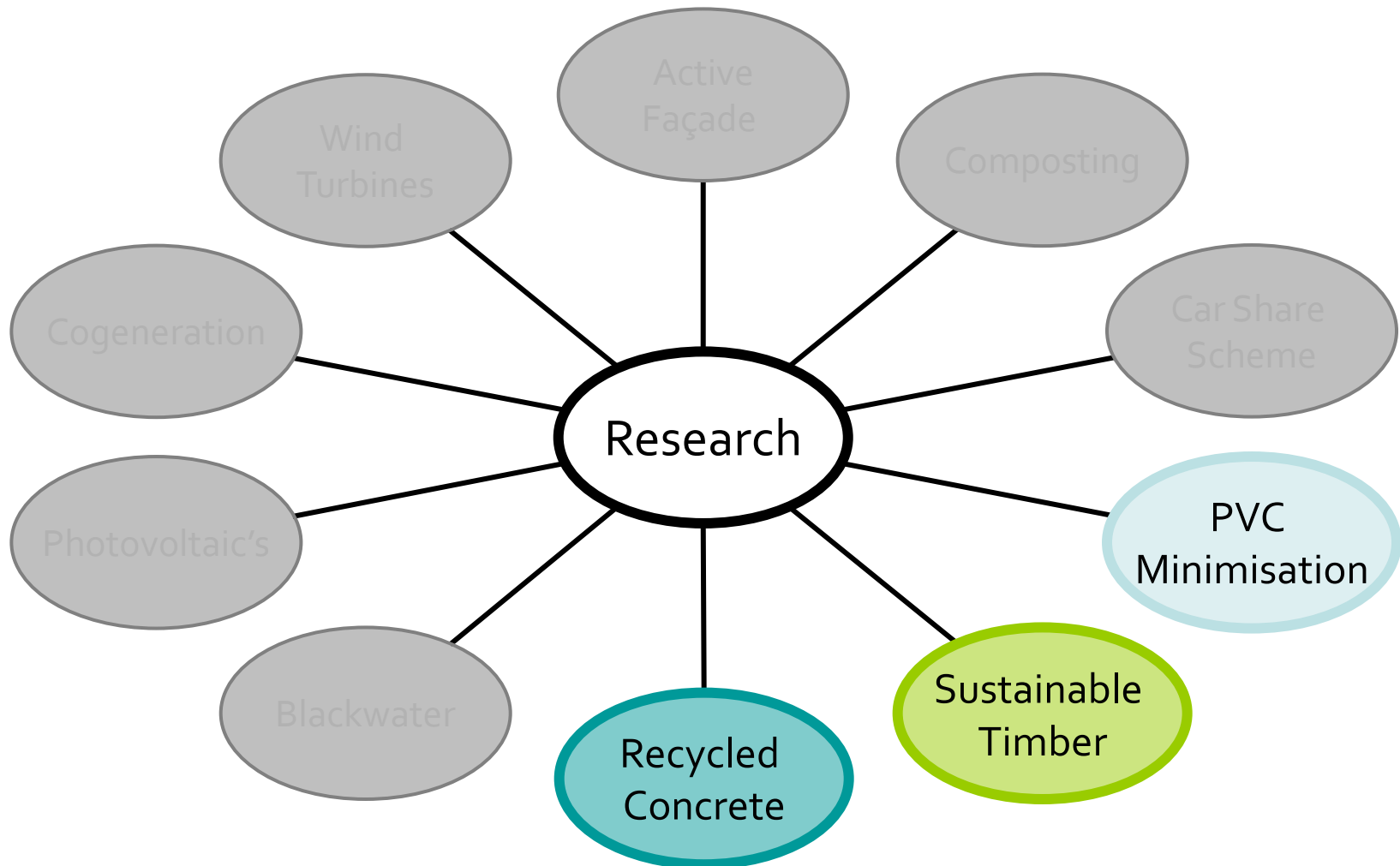
Supply-Side Initiatives



Third Party Issues



Materials



In Conclusion



™green building council australia

Convesso 8 Waterside Place is an opportunity to “draw a line in the sand” for resource use.

It has been designed to maximise best practice principles whilst still allowing use of alternative water and energy sources in the future.



CONVESSO
**8 WATERSIDE
PLACE**

**Designing Sustainable
Environments for
Healthful Living**

Roger Poole FAIA RIBA
Chairman
Bates Smart Pty Ltd

VIVAS  **Lend Lease**
BATESSMART™



CONVESSO
**8 WATERSIDE
PLACE**

**Designing Sustainable
Environments for
Healthful Living**



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CONVESSO
**8 WATERSIDE
PLACE**

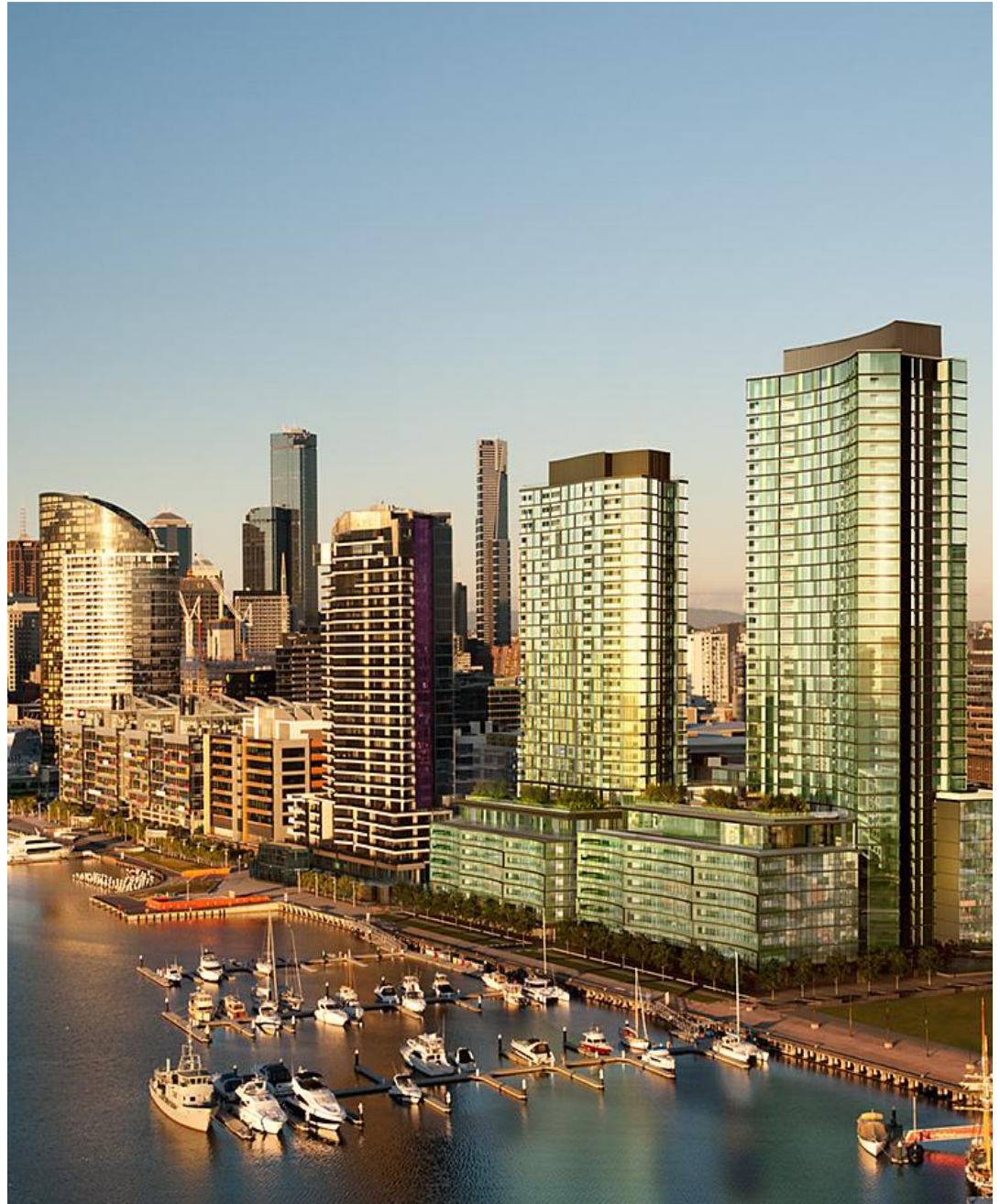
**Melbourne's Population
Growth**

Metropolitan Melbourne
recently passed the 4
million mark in population

Melbourne will reach 5
million around 2025, and up
to 8 million by 2050

This growth may translate
into around 600,000
households by 2025

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BATESSMART™



CONVESSO 8 WATERSIDE PLACE

Growth in Established Areas

Ideally, around 300,000 of these new households would move into established areas

There is strong resistance to major density increases in existing inner Melbourne neighbourhoods

Victoria Harbour can accommodate higher densities within established guidelines

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CONVESSO
**8 WATERSIDE
PLACE**

New Sustainable Living

Victoria Harbour residents can have a smaller carbon “footprint” due to their use of public transport, cycling and walking

Journey to work
Journey to shop
Journey to leisure
Sustainable living

Sustainable residential projects complete the picture



CONVESSO 8 WATERSIDE PLACE

Growth in Established Areas

Based on current growth
and supply patterns we
believe that Docklands will
be fully built out in less than
15 years

Environmental standards for
Docklands need to balance
performance and cost in
order to encourage this
alternative living model

VIVAS  **Lend Lease**
BATESSMART™



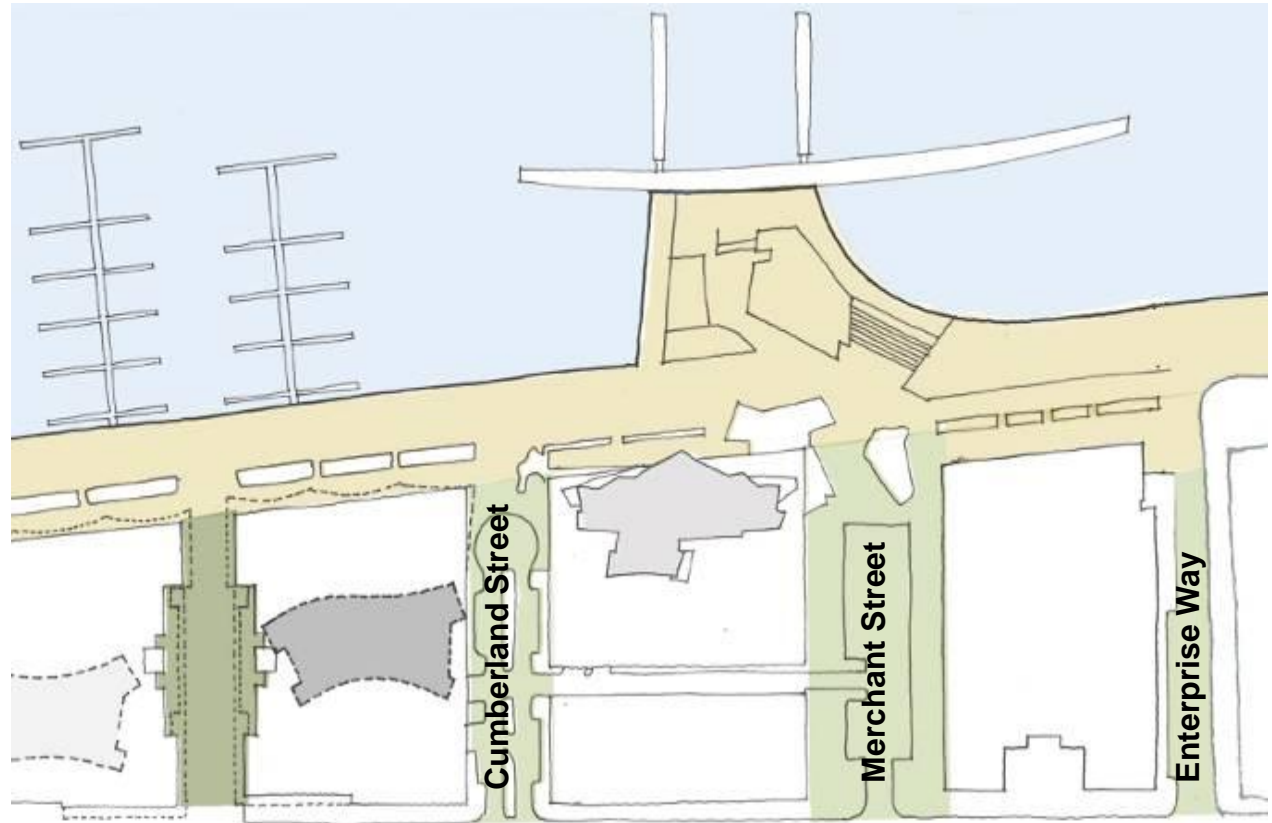
CONVESSO
8 WATERSIDE
PLACE

Sustainable Movement Systems

Direct access to water promenade and Cycle paths

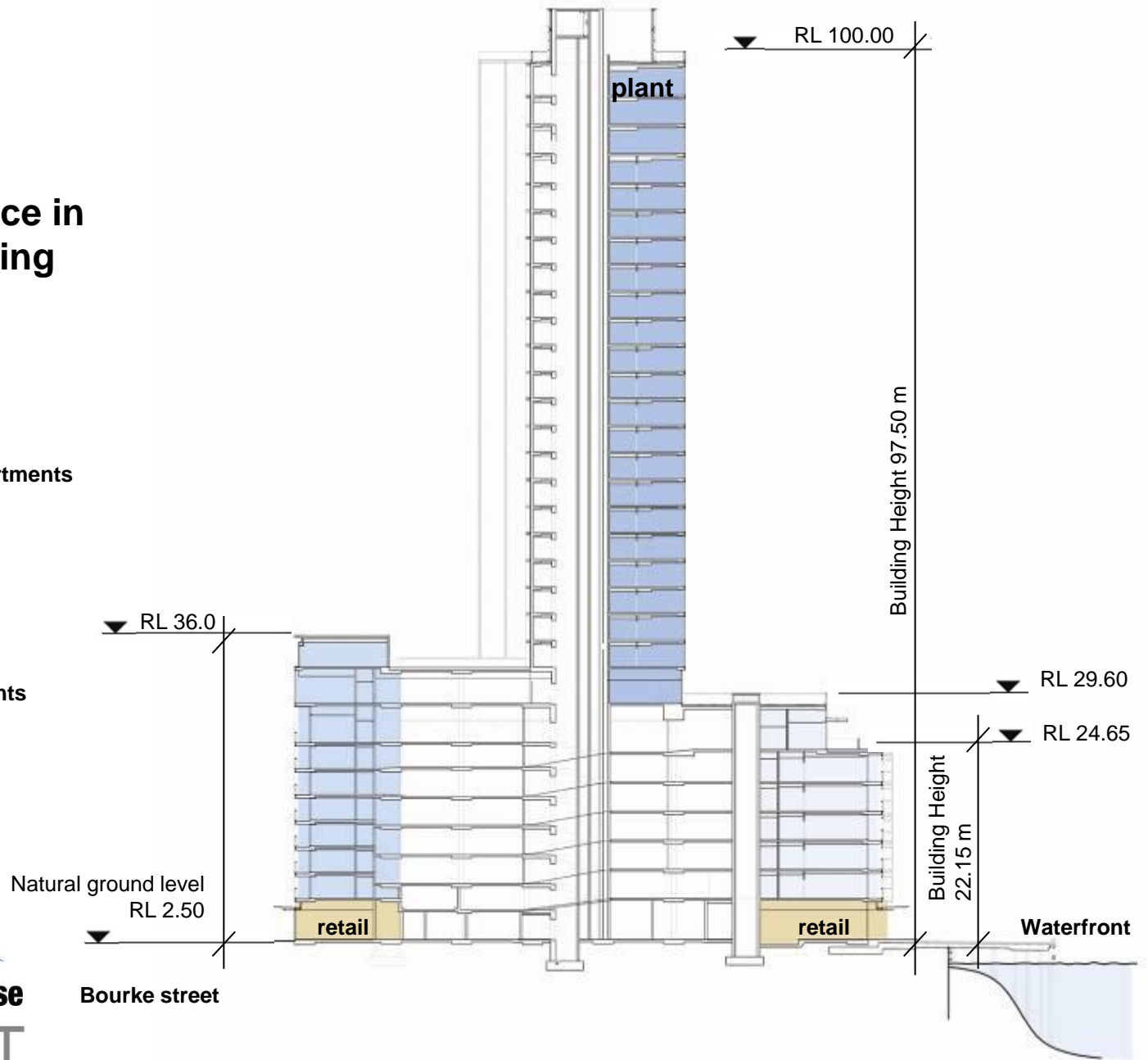
Shopping and child care within easy walking distance

Nearby public transport routes



CONVESSO 8 WATERSIDE PLACE

Diversity and Choice in Higher Density Living



CONVESSO
**8 WATERSIDE
PLACE**

View from Waterfront

Local retail along waterfront encourages exploration on foot

Parked vehicles are fully concealed from view

More affordable Bourke Street apartments are contained in same building

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CONVESSO
**8 WATERSIDE
PLACE**

View from Bourke Street

Strong urban presence of
Bourke Street façade

Cost parameters closer to
popular price points

Need to maintain
appropriate natural light and
views

Design tools are leading to
higher percentages of solid
walls

VIVAS  **Lend Lease**
BATESSMART™



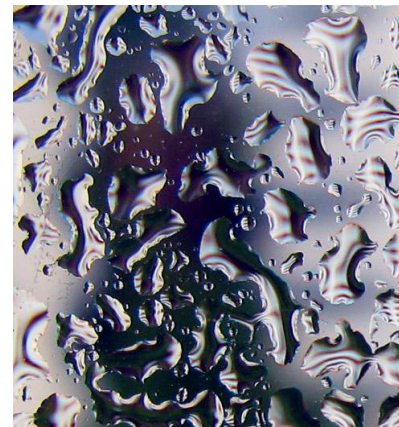
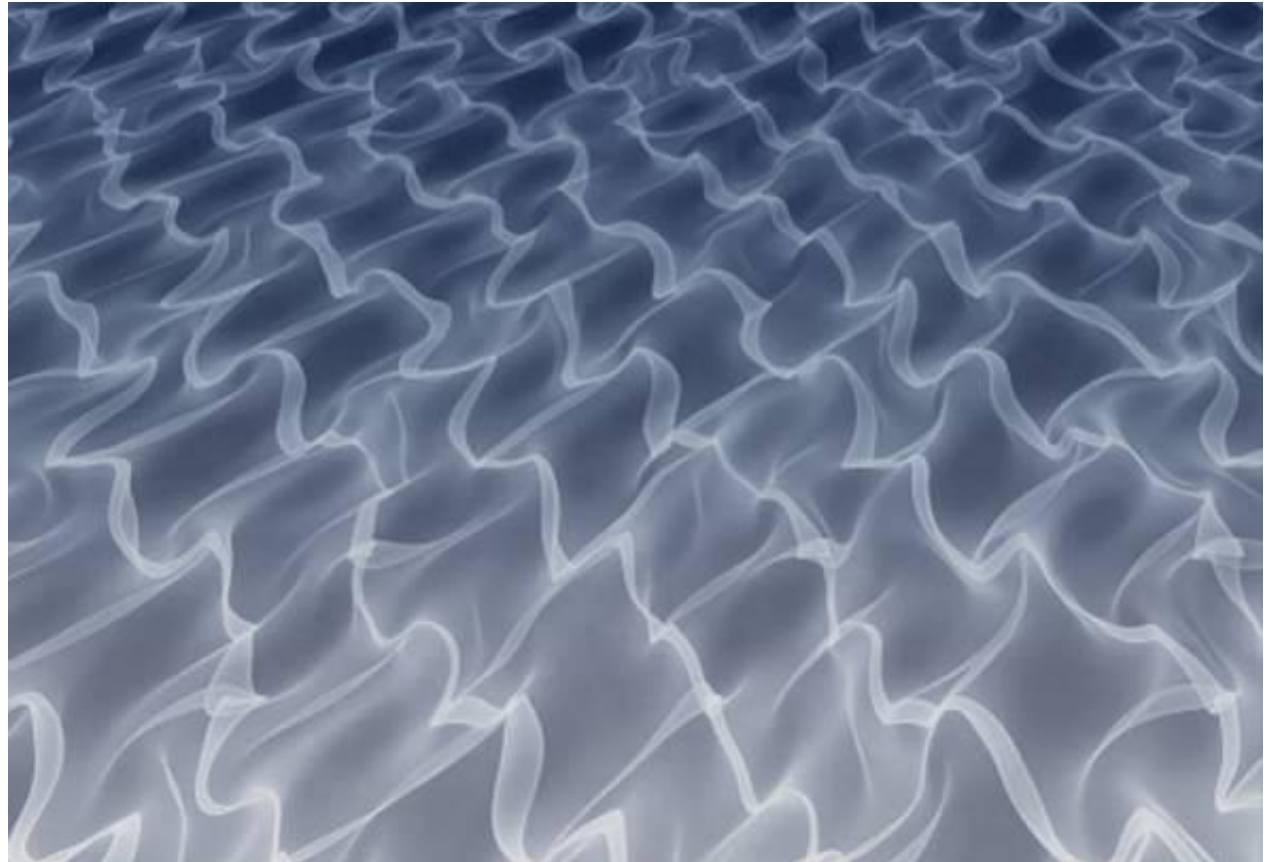
CONVESSO
**8 WATERSIDE
PLACE**

Living Near the Water

Evidence-based design research reveals that living near water increases our sense of well being

We feel comfortable living near the intersection of water and land

This is the location which has sustained life since pre-historic times



CONVESSO 8 WATERSIDE PLACE

Well-being + Street Activity

A vibrant 24-hour district promotes more sustainable behaviour based on diversity and choice within a “village” atmosphere

Street activation encourages wide participation, increasing safety and comfort

Greater local choice discourages the use of motor vehicles for recreation and shopping

VIVAS  **Lend Lease**
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CONVESSO
**8 WATERSIDE
PLACE**

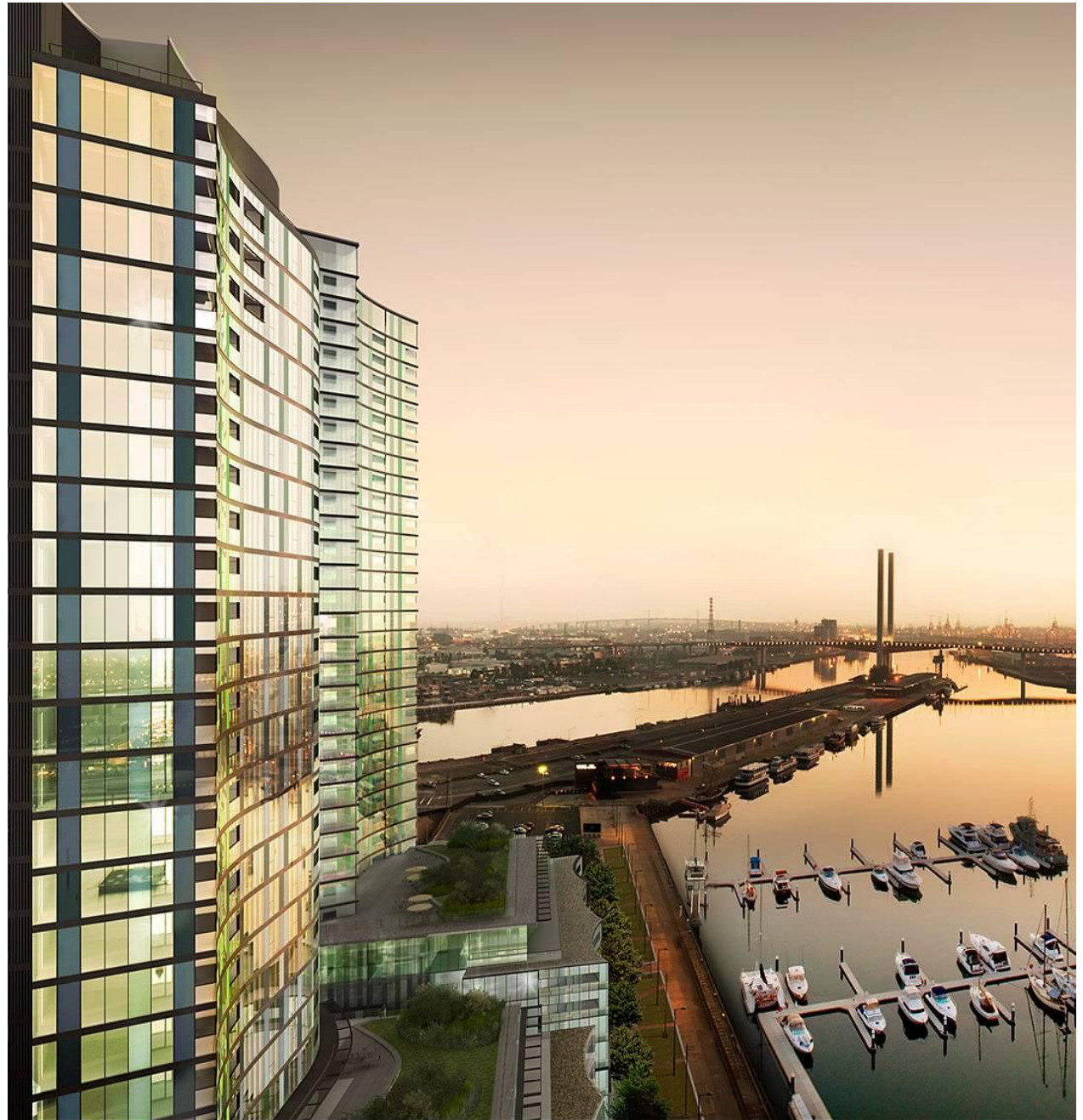
**Meeting the Challenges of
Growth and Change**

Melbourne is set to grow by
one million people over the
next fifteen years

Millions of new Melbourne
households will need to live
at higher densities to meet
environmental benchmarks

We need to make these
options relatively attractive
and affordable

VIVAS  **Lend Lease**
BATESSMART™



Thank You

TO OUR SPEAKERS.....

Emma Woodhouse

Development Manager, Vivas Lend Lease

Matthew Williams

Consultant Sustainable Design, Lend Lease design

Roger Poole

Architect, Bates Smart



Certified Projects

Good Shed North

5 Star Green Star Office Design V2
Equiset

Convesso 8 Waterside Place

4 Star Green Star Multi Unit Residential Pilot
Bovis Lend Lease



Certified Projects

Hassell Studio Melbourne

4 Star Office Interiors V1.1
Hassell



Certified Projects

Convesso 8 Waterside Place

4 Star Green Star Multi Unit Residential Pilot
Bovis Lend Lease



GREEN STAR COURSES

Class: Green Star Accredited Professional

Date: 12 November 2009

Level: Melbourne Convention Centre

State: Melbourne



THE EVENT

Leading Green Thinker
Sustainability Expert
Rob Adams

Date: 25 August 2009

State: Melbourne



green building council australia





GREEN CITIES 2010

people places performance

Melbourne Convention Centre
21 - 24 February 2010



Australia's Leading Green Building Conference
greencities.org.au

Thank You

Further information
available on website
www.gbca.org.au

