











# **Developing Sustainable Solutions for Apartments Workshop Outcomes**

18<sup>th</sup> May 2011

**City of Melbourne** 

The Developing Sustainable Solutions for Apartments workshop was run as part of the **Hi-RES** (Higher density Residential Efficiency Solutions) project, which aims to develop and test solutions to help transform Victoria's apartment buildings to become more sustainable.

The Hi-RES project is an initiative of the City of Melbourne, Owners Corporations Victoria, Yarra Energy Foundation, Moreland Energy Foundation, and Cities of Yarra and Port Phillip and is supported by the Victorian Government Sustainability Fund, managed by Sustainability Victoria.





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### **Summary**

On 18<sup>th</sup> May 2011 the City of Melbourne convened a workshop to discuss the important issue of increasing the sustainability of the higher density residential building stock in Greater Melbourne. Sixty-four representatives from a diverse range of stakeholder groups attended. These groups included:

- owners corporation managers
- owner-occupiers of units
- property investors
- architects
- property developers
- real-estate agents
- sustainability consultants
- building maintenance/upgrade contractors
- Property Council
- Dept. of Planning and Community Development
- Consumer Affairs Victoria
- local governments
- community organisations

The outcomes of the workshop were:

- I. The identification of the major issues inhibiting the move to sustainability within higher-density (i.e. multi-unit) residential buildings.
- II. The engagement of the different stakeholder groups in participating in the Hi-RES project to develop solutions to those issues.

Whilst a variety of issues were identified as contributing causes to the inaction within the area of sustainability, seven major issues were selected for further discussion (a number of which were connected). These issues were:

- Lack of quality knowledge in the area of sustainability and apartment buildings
- Physical limitations of the existing building stock
- Owners corporations don't see sustainability as a priority
- Lack of standards to encourage the retrofit of apartment buildings
- Perception that costs of sustainability outweigh the benefits
- Split incentives between owner-occupiers, tenants and investors
- Sustainability is not high enough on the agenda

The group examined each of these major issues and identified the key contributing factors to those issues. Whilst the causes and *potential* solutions discussed on that day are explored in more detail in the body of this document, some significant themes for possible solutions were identified:

- Development of best practice/case studies to demonstrate how sustainability can be achieved and the positive benefits that result from investing in upgrades
- Workable tools to assist building owners/owners corporations to become more sustainable and compare sustainability performance between buildings
- Development of a database which identifies good quality sources of information
- Use of media to demonstrate the importance and benefit of sustainability
- Financial support to help building owners transition to sustainable solutions
- Financial support to develop economies of scale to make sustainability more affordable.



## **Obstacles to sustainability**

During a general discussion about the barriers to implementing sustainability in existing higher density residential buildings, the following obstacles emerged. These were then grouped into the major obstacles discussed in more detail in the next section.

#### **Financial**

- The expense of retrofitting
- Split incentives between investors, owner-occupiers and tenants
- Access to funds by owners corporations for retrofitting projects

#### Other priorities

- Profits driven, decision making
- Differing parties with differing priorities

#### Governance

- Subdivision issues (i.e. ownership boundaries within buildings)
- Owners corporations decision making and funding requirements
- Gaps in legislation and policy supporting and incentivising sustainability in Class 2 buildings

#### Knowledge

- Lack of clear communication, and therefore lack of understanding, of the benefits and process for retrofits
- Lack of education about owners corporations and owning in strata
- Confusion about available technology and best practice for retrofitting
- Inability to verify information due to the sheer multitude of it

#### **Behavioural**

- Sustainability is often outside people's comfort zone
- People can be change resistant if they don't perceive a genuine personal henefit
- Absentee ownership means disconnection with the issues



A group mapping out the causes to a major barrier



### Removing the major obstacles

During the workshop, attendees were grouped and asked to map the causes of each major obstacle and brainstorm potential solutions to those causes. Attendees were told to be as creative and open minded as possible in devising solutions. For this process attendees were encouraged to think 'outside the box'. The following are the results:

#### 1. Knowledge Barrier

#### Causes

- There is a lack of national leadership in the area of sustainability and strata
  - Sustainability is an emotional issue
  - The political cycle
  - No one wants to be the first (perceived cost impost)
- There is a lack of quality knowledge of good sustainable practice (the destination)
  - Lack of agreement about quality sources
  - Lack of agreement between sources
  - Lack of real and comprehensive examples
  - The sheer quantity of information makes it difficult to determine the quality of the information
- There is a lack of quality knowledge of how to become more sustainable (the journey)
  - We need good knowledge about the current state of our buildings in order to develop a strategy for sustainability
  - There is a lack of skill in the area of sustainability and strata
- There is a lack of motivation to learn about sustainability
  - Lack of perceived benefit/incentives by owners and investors

- Develop case studies to demonstrate good practice
  - Sustainability leadership acknowledged and promoted
  - Quantify the benefits of sustainability
  - Action plans for implementing sustainability
- Develop a database of reputable sources
  - Academic
  - Industrial
- Strategy Development
  - Audits of current buildings from a sustainability perspective
  - Action plans for becoming more sustainable
  - Free consultants to guide/manage the strategy development process



# 2. Physical limitations of existing building stock

#### **Causes**

- Lack of tools for existing buildings
  - Focus on new builds
  - Lack of consensus on how to move forward
- Buildings aren't adaptable
  - They are old
  - They were designed for functionality, not sustainability (built for profit)
- Improvements are expensive
  - Not enough players in the game
  - No focus on existing stock
  - No economies of scale
  - No standardisation in sustainability assessments
- Buildings are very different
  - Not built to a bigger plan
  - No standard solution i.e. limitation in building-based case studies for this sector

- Developers
  - Developers accountable for their building defects (from a sustainability perspective) for two years (or more)
- Owners corporations
  - Compulsory sustainability training for all committee members
  - Time to become sustainable or else mandatory standards implemented
  - Responsibility for the footprint of the building (all sustainability measures)
- Tools for sustainability
  - Re-invest carbon tax in retrofitting programs
  - Ethical standards for buildings
  - TV show with a sustainability slant (The Green Block)



# 3. Owners corporations don't see sustainability as a priority Causes

- The role of the chair of committee does not contribute to action on sustainability
- The owners corporations have a responsibility to owners which can be seen as a conflict
- The owners corporation decision making process is complex and contributes to a failure to make decisions around sustainability
- There is a lack of knowledge around sustainability, particularly around what is possible, the associated costs, and the return on investment
- The owners corporation committee members do not have the skill to deal with complex issues such as sustainability effectively
- Owners corporation legislation requires a quorum to act on decisions
- A few 'blockers' can block the entire process
- There is a lack of incentive for investment in sustainability
  - "Better things to spend money on"

- People who buy into an owners corporation must complete mandatory training in order to be eligible to participate
- The chair of the owners corporation must be rotated (as with committee membership) in order to ensure balance in decision making
- Develop a database to share information between owners corporations
  - Promotes best practice
  - Educational capacity
- A failure to respond is considered assent



# 4. There is a lack of suitable standards to encourage the retrofit of apartment buildings

#### Causes

- Inconsistency with government policy/programs
  - Duplication
  - Mixed messages
- The stakeholders are not equal in a strata plan environment
  - Power
  - Eligibility to receive funding
- Current building stock is diverse and complex
  - Hard to have a "standard" when there is not standard stock
- Lack of funding to retrofit
  - It is expensive
  - There is a perception it is expensive
- Government lacks the technical competence to set standards
  - Complex task
  - Industrial expertise required
- There is a focus on new builds because they are easier

- Make politicians personally and financially responsible
- Benchmark the industry & recommended kWh usage per person or apartment e.g. Target 155
- Penalise people/apartments which over use electricity (increased cost/shut off)
- Real time capture of usage i.e. In-home displays (IHD)
- Star rating for the greenness of apartments affects rates/rent discounts
- Identify best practice in other countries and then educate in Australia



# 5. The perception that the costs outweigh the benefits & split incentives Causes

- Investors don't see the value
  - Perception that tenants won't pay higher rent for green buildings
- There are a variety of spending priorities and sustainability is just one of them
  - There is a finite pool of funding maintenance funds lacking completely or not sufficient
  - Loans to owners corporations are perceived as risky and too expensive
  - Investors want a return on investment
- People don't understand or appreciate the benefits of sustainability
  - Values and benefits of sustainability are only measured in money terms
- Lack of confidence in future projections
  - Current technology costs are too prohibitive
  - There is no return on investment from sustainability spending

- Government grants including incentives for investors i.e. tax/rates holiday?
- Make people do it i.e. regulate and enforce
- Energy allotment per person
- Massive education program
- Real estate agents to value properties on their sustainability
- Allow buildings to rate and compare sustainability performance
- Bring in technology from overseas
- Accreditation for owners corporation managers to become 'sustainability specialists'
- Government funded initiatives i.e. flagship case study



# 6. Inertia in the market - sustainability is not high enough on the agenda <u>Causes</u>

- People don't know enough
- Lack of exemplars
- There is a perception that sustainability costs a lot
- The market doesn't sufficiently value sustainable buildings
- The time and effort required is too hard and complex for the ROI

- Giant apartment building on wheels showcase best practice
- Health professionals making the business case for 'green' buildings
  - Savings on health costs
  - People understand broad benefits, not just about the environment
- Pre-fabricated products to allow cheaper retrofits (like IKEA)
- Multi-media campaign



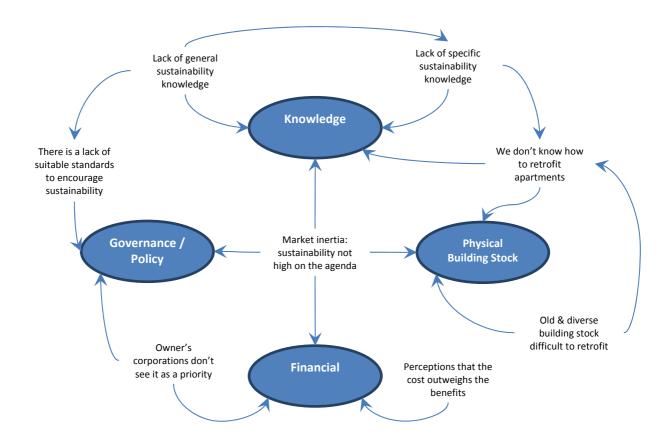
Workshop attendees brainstorming solutions



### **Exploring the connections**

It is clear none of the key obstacles, or barriers, identified during the workshop are mutually exclusive. Therefore, no idea for a solution to overcome any one of the barriers should be developed in isolation.

The diagram below explores the many connections between identified barriers.



#### Next steps

The Hi-RES project team is now moving focus from barriers to solutions. It is our aim that the suite of solutions ideas brainstormed during the workshop and over the course of the first phase of this project will be further developed and refined into a short-listed group of robust, practical and scalable solutions that can be tested in the field.

We want to work with interested stakeholders within government, the community and private sector to help co-create solutions that deliver sustainable change to this sector.

Please contact the Hi-RES project manager, Brenden Carriker, at Brenden.Carriker@melbourne.vic.gov.au or (03) 9658 8406 to find out more.