

VCCCAR

think tank report

Adapting housing aspirations and
expectations on the coastal suburban
and regional fringe



Editors

Dr Susie Moloney, Research Fellow, Global Studies, Social Science and Planning, RMIT University

Dr Yolande Strengers, Research Fellow, Centre for Design, RMIT University

Dr Cecily Maller, Senior Research Fellow, Centre for Design, RMIT University

Contact

Dr Susie Moloney, Lecturer, Global Studies, Social Science and Planning

RMIT University

GPO Box 2476

Melbourne VIC 3001

Tel: + 61 (03) 9925 9887

Email: susie.moloney@rmit.edu.au

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victorian centre for climate change adaptation research

Victorian Centre for Climate Change Adaptation Research

University of Melbourne

221 Bouverie Street,

Carlton, Victoria, 3010

enquiries-vcccar@unimelb.edu.au

+ 61 (03) 8344 3095

www.vcccar.org.au

Contents

Executive summary	4
Introduction	6
Climate change adaptation challenges in the south-east region	8
Event description	10
Opening presentation and panel discussion	12
Discussion, key themes and recommendations	14
Think tank conclusions and policy implications	20
References	21
Appendix A: Invitation, agenda and snapshot sent to participants	22
Appendix B: Participant evaluation and feedback	27
Appendix C: Opening presentation from the conveners	32

Executive summary



Key findings

The trend towards larger, detached, energy intensive dwellings in poorly serviced, low-density, urban fringe locations, leaves governments, households and communities vulnerable to the impacts of climate change. The planning and design of new outer urban areas, and the retrofitting of existing ones, affects the extent to which communities can adapt to changing climactic conditions.

The think tank focused on the south-east peri-urban and coastal growth region of Melbourne, which contains a large amount of low density greenfield development. This area is potentially highly vulnerable to temperature increases, rainfall decreases, increased bushfire risk and sea level rises as a result of climate change.

Given the multiple and competing objectives of the stakeholders involved in housing provision, the challenge to build communities' capacity to adapt to change is more complex than attempting to change the attitudes, behaviour, barriers and choices of individuals. What is needed is better understanding of the dynamic and integrated processes involved in shaping expectations and aspirations for housing across a range of stakeholders.

Research need

There is a need for research to strengthen theories and models that address gaps in urban design and policy between factors such as supply-demand or technology-behaviour relationships and ways to assess the role that multiple actors play in shaping housing expectations and aspirations. There is also a need to build stronger links between that type of research and the policy development process.

Policy needs

1. Government housing and planning policy needs to reconsider the relationship between supply and demand in the housing sector. The persistent belief that 'builders provide what the market demands' was expressed but heavily disputed amongst participants. Building standards, housing and urban design should anticipate future changes in climate and the need for current and future homes to be increasingly efficient in water and energy efficiency. This should include incentives and regulation for rental properties.
2. Adapting to a variable and changing climate presents significant problems for current models of planning and housing delivery in growth areas. These can be addressed through stronger regulation of the urban growth boundary, incentives to increase housing densities (while maintaining open space and urban 'green infrastructure') and to offer a variety of housing types, and provision of important infrastructure and services such as public transport in outer areas. These recommendations are particularly pertinent for the State Government as they are in the process of preparing the next metropolitan strategy for Melbourne.
3. House pricing policy and claims of improved 'affordability' need to reflect the long-term running costs of housing as well as cost of land development and construction. Government policy should encourage home buyers and those who finance, build and market homes to factor in the long term costs of climate change in their decision making. Simply shifting responsibility onto consumers and encouraging them to make better housing 'choices' is unlikely to achieve significant change regarding the types of housing people expect and aspire towards.
4. Planning and policy development by State and local governments needs to involve collective engagement with the community in its broadest sense (general public, developers, investors, householders, etc.) to assist in transitioning to meet challenges presented by climate change. What it means to have a 'good life' is often not compatible with the long-term sustainability of those lifestyles or broader community resilience and resolving these differences will require difficult conversations with the wider community. This engagement needs to provide spaces where people are open to the views of others from different sectors and fields of practice, where people can relax their grip on certainty about right and wrong and listen to the possibilities that emerge from open dialogue.

Introduction

The 'Adapting Housing Aspirations and Expectations on the Coastal Suburban and Regional Fringe' think tank was developed to establish a dialogue between local and state government, academics, communities and the housing industry around the changing aspirations and expectations associated with residential development on the coastal suburban and regional fringe, and the implications for community resilience to climate change impacts. This paper introduces the contention around which the think tank was based, and provides an overview of the proceedings of the day, including the discussions and recommendations by participants. It concludes with a discussion of some of the key themes and tensions that were uncovered beforehand and discussed on the day.

The trend towards larger, detached, energy intensive dwellings in poorly serviced low-density locations leaves governments, households and communities vulnerable to the impacts of climate change, and poses a key challenge for adaptation. If we are to build resilience and adaptive capacity in our communities, aspirations and expectations must also be adaptive and able to shift towards new ideals, such as smaller and/or more efficient dwellings with much lower energy requirements, in higher density developments. The ways in which we design and construct new homes and subdivisions, and retrofit existing ones, including the provision of infrastructure and services such as public transport, energy and water infrastructure, are critical in creating cities that can both mitigate and adapt to the impacts of climate change.

The planning and design of new outer urban areas, and to a lesser extent the retrofitting or redesign of existing ones, does not necessarily reflect what the market demands. Furthermore, demand, or the expectations and aspirations that shape demand, is not independent of, but shaped by, what is being provided. In the context of climate change

and the imperatives to adapt in the short and long term, we need to examine the roles of all actors involved in the planning and design of housing and community infrastructure and recognise the interconnections and disconnections that exist between sectors.

Part of that process involves recognising the role that urban environments, housing design and infrastructure provision plays in shaping our everyday lives and the extent to which we can live more sustainably and adapt to changing climatic and resource conditions. The current direction of development in outer metropolitan and coastal regions is creating 'maladaptive' homes and suburbs which means that a growing number of people will be increasingly vulnerable – economically, socially and environmentally – to the impacts of climate change.

Given the multiple and competing objectives of the stakeholders involved in housing provision, the challenge to build communities' capacity to adapt to change is more complex than attempting to change the attitudes, behaviour, barriers and choices of individuals – a strategy that has dominated climate change policy and decision making. Rather, if we can better understand the dynamic and integrated processes involved in shaping expectations and aspirations then we can identify ways to adapt and change in the short and long term.

The challenges discussed above illustrate the need for wholesale shifts in the way built environments are planned, designed, retrofitted, marketed and constructed. think tank participants considered the potential for a new policy paradigm to achieve change of this magnitude; one that requires all stakeholders to be engaged in developing new ways of thinking about the problem in order to enable innovation in the housing market.

There are two dominant concepts or themes that the think tank intended to depart from. The first is what Shove (2010) calls the 'ABC model', which is based on the language of attitudes, behaviours, barriers and choice and which has dominated policy and research discourses addressing the relationship between 'lifestyles' and climate change. The ABC model '[frames] the problem of climate change as a problem of human behaviour (Shove 2010, p.1274)' and generates programs and policies which are based on the assumption that responsibility for climate change lies with individuals. In this think tank we challenged this assumption and sought to make explicit how people's adaptive and mitigative capacity is co-shaped by the housing and urban environments.

The second theme we sought to depart from is the notion of a linear relationship between demand and supply, or in other words that demand drives supply of housing. This argument is commonly used as an 'out' for the supply side (including planning and housing sectors) in taking responsibility for driving change. By arguing that suppliers are simply providing what the market demands, the debate and responsibility for change again lies with consumers. A key aim of the think tank was to demonstrate that both themes are interconnected and are contributing to the siloed approach to policy and innovation which separates planning policy and regulation from housing delivery and from lifestyles, resulting in inadequate responses to addressing the challenges presented by climate change and the sorts of social and industry transformations required in response.

The think tank aimed to achieve the following objectives:

- Facilitate conversations and dialogue between diverse stakeholders, leading to new and stronger relationships between people across the sectors – this is a starting point and ongoing attention to conversations and relationship building will be required
- Identify short term collaborative actions required at various scales to address the long-term climate change challenges facing the housing sector
- Develop new collaborations between local and state government departments, NGOs, housing developers, the broader housing sector and the academic community
- Critically reflect on the role of government and the housing sector in shaping and changing aspirations and expectations
- Identify current assumptions, knowledge gaps and further areas for research
- Deliver a report to State Government to inform current research and policy development, particularly the Metropolitan Strategy and climate adaptation planning.

Climate change adaptation challenges in the south-east region

The think tank focused on climate change risks and impacts, and the short and long term adaptation responses required, for the south-east peri-urban and coastal region of Melbourne. Specifically, the discussion focuses on the eight South East Councils Climate Change Alliance (SECCCA) local government areas illustrated in Figure 1.

Figure 1: SECCCA Region local councils
(map from www.seccca.org.au)



The SECCCA growth regions feature a large amount of low density greenfield development (Goodman et al 2010). Most new houses are detached and larger than the average Australian home (Goodman et al 2010; Santow 2009; Wilkenfeld 2007). This trend presents challenges for community resilience to climate change in the SECCCA region and beyond.

According to an Australian Government Department of Climate Change and Energy Efficiency (DCCEE) position paper, there is reasonable certainty that Australia's future climate 'will be hotter, sea levels will rise [and] extremes such as heatwaves, droughts and storm surge will become more frequent and intense' (DCCEE 2010, p.6). A state government Department of Sustainability and Environment (DSE) study of climate change impacts in Port Phillip and Westernport found that the region became warmer and drier in the decade to 2007 (DSE 2008). Autumn and winter rainfall decreases contrasted with some increase in summer rainfall. Overall 30% less water flowed into Melbourne's main dams in 1998-2007 compared to the average of 1913-2007.

The DSE study indicated that these trends are likely to continue into the future with the following changes predicted for Port Phillip and Westernport:

Temperature. Average annual temperatures to increase by around 0.8°C by 2030, and up to 2.6°C by 2070 (compared with 1990 averages). The highest increases are expected to occur during summer, and the average annual number of days over 30°C is expected to rise.

Water. Decreased average rainfall and higher evaporation rates will result in drier soil, and up to 50% less water in our rivers by 2070. While the climate will be drier overall, when rainfall does occur it is likely to be more intense — that is, more severe floods, more often.

Bushfires. Bushfire risk is predicted to continue to grow, with the number of 'extreme' fire danger days predicted to increase by 12% to 38% by 2020, and 20% to 135% by 2050.

Sea level. A sea level rise of up to 0.59m by 2095 is predicted, with larger contributions from more rapid melting of polar ice sheets also possible. Sea level rise combined with increased storm events and storm surges will result in worsening inundation, 'damaging waves, wind and flooding, erosion and damage to infrastructure and coastal and marine ecosystems' for coastal areas of Victoria (DSE 2008, p.11). DCCEE also cautions that a rise of one metre or more is possible by 2100 (DCCEE 2010).

Adaptation cannot be achieved in isolation from mitigation of climate change impacts. Appropriate strategies to build community resilience will not exacerbate the very impacts to which they seek to adapt. For example, building dwellings that are not designed to be comfortable in high temperatures increases the need for air-conditioning and adds to the greenhouse gas emissions that drive temperatures higher. It is clear that if governments and other relevant stakeholders are to foster resilience, they need to address the practices that exacerbate climate change at the same time as we adapt to unavoidable impacts. The resulting interlinked challenges at the individual dwelling, housing development and municipal levels are summarised in Table 1 (adapted from DCCEE 2010 and DSE 2008).

Table 1: Adaptation challenges for Victorian peri-urban and coastal housing

<i>Dwellings</i>	<i>Neighbourhoods, suburbs and regions</i>
<ul style="list-style-type: none"> • Design to maximise comfort during higher summer temperatures, e.g. incorporating passive design principles • Increased security of water supplies, e.g. rainwater tanks and grey water recycling • Design to minimise burden on stormwater systems during flood and storm surge events, e.g. maximising permeable surfaces • Bushfire resistance, e.g. building design and materials • Reduced energy intensity, e.g. building size, design and orientation • Able to support low-emission lifestyles, e.g. passive heating and cooling and well served by sustainable transport options 	<ul style="list-style-type: none"> • New or upgraded stormwater systems to cope with increased flood events, e.g. water sensitive urban design • Planning and development measures which address risk of sea level rise and storm surges • Access to public transport services and design which facilitates cycling, walking and other forms of sustainable transport • Increased density while avoiding urban heat island effect and providing appealing homes • Sustainable energy and water supply systems, e.g. solar energy, cogeneration, recycled water and onsite water collection

Event description

This half day think tank, supported by VCCCAR, was held at the Frankston Arts Centre on Tuesday 22 November 2011. It was attended by 29 participants from local and state government, building companies, development companies, non-government organisations, industry associations and academic institutions. All participants received an agenda and 'Snapshot' as part of a personal invitation (see Appendix A). The Growth Areas Authority were considered to be a key stakeholder on this topic but were unable to attend. In addition, a number of participants identified additional stakeholders that were underrepresented, including community groups, householders and tradespeople from the building industry (see Appendix B).

Facilitation

The think tank was managed by professional facilitator, Geoff Brown, who worked closely with the RMIT conveners to ensure we achieved our intended objectives. The box below describes Geoff's approach.

The Art of Dialogue by Geoff Brown

In designing the think tank process, one of our key aims was to create the space for participants to gain a shared understanding of each other's perspectives. As facilitator, 'dialogue' is the key word here. For me, this means not just talking together, but 'thinking together'. Dialogue is a shared inquiry, a way of thinking and reflecting together. It is not something you do to another person – it is an experience of inquiry within and between people.

True dialogue happens when people come together into conversation and have insights that neither party could have imagined before starting. This is achieved by the 'glue' that links people together – a shared meaning and understanding of the issues and opportunities. From shared meaning, shared action arises.

Participants

Rod Anderson, DSE

David Bergin, DPCD

Lisa Brassington, Cardinia Shire Council

Emily Boucher, City of Kingston

Linda Bulner, Lend Lease

Rory Costelloe, Villawood Properties

Allan Cowley, Mornington Peninsula Shire Council

Tony Dalton, RMIT University

Hannah Duncan-Jones, Bass Coast Shire

Rob Enker, Building Commission

David Hodge, DPCD

John Houlihan, DSE

Greg Hunt, SECCCA

Andrew Inglis, Bayside Climate Change Action Group

Christine Kilmartin, DPCD

Joanna Leece, Kildonan Uniting Care

Erin Marslen, Baw Baw Shire Council

Fiona McKay, VicHealth

Kirsty Morieson, Heart Foundation

Charles Nielson, Monash City Council

Frank Perconte, Burbank Homes

Sharon Pfueller, Monash University

John Phillips, DPCD

Justin Ray, Stockland

Angelica Rojas, City of Kingston

Peter Steel, Moreland Energy Foundation

Janine Strachan, Housing Industry Association

Janene Vurlow, Cardinia Shire Council

Kathy Whitburn, Frankston City Council

Panelist profiles

Greg Hunt – Executive Officer, South East Councils Climate Change Alliance

Greg Hunt was a science and environmental studies teacher in secondary schools, became a bureaucrat in environmental education in the Education Department and was Principal at the Zoo Education Service and Education Manager at Melbourne Museum. He left formal education to work as an environmentalist with Waterkeepers Australia and now implements programs on climate change with the South East Councils Climate Change Alliance.

Rory Costelloe – Villawood Properties Founder & Executive Director

Rory Costello has over 25 years' experience in government, engineering and property development. He founded Villawood Properties 22 years ago. Villawood is responsible for almost 10% of Melbourne's greenfield growth as well as a number of projects in Geelong, Bendigo, New South Wales and Queensland. Rory is a current board member of the Urban Development Institute of Australia (Vic) and a fellow of the Vic Planning and Environmental Law Association (VPELA).

Tony Dalton – Distinguished Research Fellow, RMIT University

Tony Dalton is a professor in the RMIT Australian Housing and Urban Research Institute Research Centre. The focus of his work in recent years has been on changing housing markets, distributional outcomes in a period of social and economic restructuring, the housing industry and housing renovation. Throughout his research he has also maintained a focus on the making of housing policy. He has recently retired from the position of Deputy Pro Vice Chancellor, Research and Innovation in the RMIT College of Design and Social Context.

David Hodge – Executive Director, Department of Planning & Community Development

David is the Executive Director, State Planning Services & Urban Development of the Department of Planning and Community Development overseeing the State Planning Services, in the areas of Metropolitan Planning and the Urban Development Divisions. This is best described as the operational side of the planning system and major urban renewal initiatives, including investment and planning for Activity Centres and Urban Design.

Frank Perconte – Health, Safety and Environment (HSE) Manager, Burbank Homes

Frank is the HSE Manager at Burbank Homes. Frank and his team provide input, advice into product design and development, through to construction planning and auditing. As a HIA GreenSmart Professional, Frank encourages a holistic approach to sustainability looking beyond the thermal performance of good building design to include sustainable material procurement, construction methods and waste reduction strategies.

Opening presentation and panel discussion

Opening presentation

The think tank conveners presented an introduction and overview to frame the day's discussions (see Appendix C). The presentation began with the following contention:

'Climate change adaptation and mitigation necessitates a wide-scale shift towards better designed and planned residential communities that are more efficient, less energy intensive, denser, and more resilient to climate change impacts; and, communities' ability to adapt and mitigate against climate change is to a great extent dependent on those changes being made.'

The presentation then set the scene for the discussions by outlining the following:

- Context of growth focusing on south-east corridor
- Various risks and impacts likely under a changing climate
- Likely adaptations required to dwellings and suburbs under a changing climate
- Trends in house design that are negating policies, regulations and other actions designed to decrease the environmental and social impact of housing
- The complexity of housing aspirations in a market based system and the importance of understanding how this is shaped.

Panel discussion

Following the opening presentation, each panel member was asked to briefly respond to the following questions designed to stimulate open conversation:

1. What changes are needed in how we plan, develop and design growth areas in the context of climate change?
2. What progress is happening? Is this adequate?
3. Who is being blamed for the problems we have identified and why?

A brief synopsis of panel member responses to the questions is provided below.

Greg Hunt:

Greg highlighted the need to increase the rate of change to address climate change. He highlighted the need to change perceptions and argued that regulation has an important role to play in affecting change at a broad scale. He likened the multidimensional approach to reducing the road toll to that needed to address climate change issues, ie. there is a need for a co-ordinated multi-pronged approach. He indicated that social norms can be changed and new social norms can be created, such that people 'see more "mock" than "Tudor" in a mock Tudor building'. Greg noted that current housing does not respond to the Australian conditions and the limitations in existing infrastructure. There is a need for government to drive adaptation but current governments tend to avoid regulation. Greg raised several further questions for discussion such as, how do we drive changes in expectations and preferences? And, to what extent will regulation assist this?

Frank Perconte:

Frank argued that prospective home owners can 'have their cake and eat it too', meaning that through good design builders can build sustainable homes at an affordable price. He suggested the combination of good design and technology can also take into account lifestyle and still maintain an environmentally sustainable package (e.g. zero emission housing). However, Frank noted that the current sustainability framework needs to go further than the fabric of the home to address how it is used by occupants. Good community planning is also needed, particularly infrastructure. Frank suggested we are moving towards higher efficiency buildings that are designed and constructed to reduce the environmental footprint. Builders need to continue to work closely with developers to present innovative products to the perspective home purchaser and to encourage developers to maximise orientation of building sites in the design phase (i.e. north). Frank also indicated that as we see a steady increase in build densities in developments, an increase in assessable community space and infrastructure is required.

Tony Dalton:

Tony discussed the complexity of living in a highly urban system where systems are already established and people are set in their ways. He suggested we need to develop a policy framework to guide the different types of changes required over different levels of government. Control and regulation, with an integration of national and state government objectives, will lead to reform of land use policy at local level. Tony argued that the national government has power in this area, and could (if they wished) make an impact. He highlighted the role of market-based instruments, and suggested that markets do not exist without a government sponsored framework. Therefore, government has the moral right and the obligation to shape these markets, through policy mechanisms such as the carbon tax and other possible direct expenditures and tax system considerations. Tony concluded his brief response by calling for support and funding for behaviour change programs, such as cultural programs that enable us to envision alternative future realities and keep the debate open.

David Hodge:

David raised a critical tension between ideas of good taste and personal choice in housing, and how we think others should choose to live. He used the example of the 2009 Victorian bushfires homes, where architects designed excellent bushfire resistant homes that did not get built because they did not look the way householders expected. David suggested that a key challenge is in shifting what people want, because providing solutions is not enough to drive demand. In its role as the chief regulator, David said the government must often 'take the line of least resistance' when it comes to these issues. The existing housing stock must also be adapted and this in itself is a huge task.

Rory Costelloe:

Rory stated that both the urban and ecological footprints of housing settlements must be reduced. He discussed the role of the drought in being instrumental in raising awareness of limits to water as a resource and inducing behaviour change. Rory also noted the successes of campaigns in previous decades, such as 'Don't litter', 'Life be in it', and 'Stop smoking', which are also needed to raise environmental awareness in this decade. Rory suggested that 'we don't need 245m² houses', arguing that consumers need to be encouraged to accept more lightweight housing construction without 'bells and whistles'. He referred to a disposable consumer society and TV as drivers of the aspirations for large homes, and called for changes in building regulations to assist with innovation and change.

Panel member responses were followed by table discussions and an open question session through which key themes were developed for further discussion. The next section of this document elaborates on these themes.

Discussion, key themes and recommendations

The convenors and facilitator identified five key themes emerging from the discussion following panellist comments. They were:

1. Diversity and flexibility in housing design
2. The 'good life' and what it means
3. Reframing affordability
4. The urban growth boundary
5. Policy and regulations

The five themes were used as the basis for the following 'world-café' discussions that took place at participant tables. The panellists each took on a role as facilitator for 15 minute discussions around one of the themes. After 15 minutes discussing one theme, participants moved to another table to discuss a different theme of interest. This allowed each theme to be discussed by two different groups.

Towards the end of the group discussions, table participants were asked to identify the top five issues or recommendations that emerged from their discussions. These were written on separate sheets of paper and arranged on the wall by the facilitator. Through this process, and the associated whole of room discussion, additional elements of the picture emerged. These elements predominantly focused on key sites to target policy or practice change and issues that needed further exploration.

The outcomes from those discussions are represented in Figure 2, which includes comments from participants that illustrate the particular thinking around each theme, and the key recommendations and responsibilities identified by participants against each theme. The recommendations are grouped into the interrelated areas of policy, regulation, collaborations, research, and advocacy.

Figure 2: Outcomes of the wall discussion activity



Table 2: World-café discussion outcomes

Theme	Comments and Discussion	Recommendations
Diversity and flexibility in design	<ul style="list-style-type: none"> Limited understanding of housing variety and sustainable design in some parts of the design community. This situation limits offerings in the market place and as a result consumer choice. Need for provision of smaller and more affordable homes in urban growth areas Potential for most homes to be more naturally energy efficient and comfortable if design relates to orientation and seasonal solar gain benefits and disadvantages, e.g. use of eaves and well-designed fixed shading on north face Home designs to consider impact on solar access for own and neighbouring homes Lack of skills regarding sustainable materials, products, and how to install them, in the broader building industry Discussion should move beyond the building fabric and also consider the interaction between humans and technology Terraced housing with well-designed public space should be considered Examples of '3 storey walk up' give a good sense of community and use of space Better use of space needed to allow other/more people to live in one house Design of homes needs to allow for future changes in needs, e.g. modular designs. Encourage 'detachable' features of homes that can be removed and resold, e.g. removable kitchens Attitudes to renters and rental properties need to change Need for jobs in growth areas and better opportunities for home businesses Design to consider space and services in a neighbourhood Consideration of need for large open outdoor green spaces and potential for rooftop open space Improve capacity for developers to include energy and water efficiency measures in estate infrastructure Notions of 'neighbourhood character' are limiting opportunities for densification 	<p>Policy:</p> <ul style="list-style-type: none"> Devise policy that allows developments to conform to new design standards released by COAG <p>Regulation:</p> <ul style="list-style-type: none"> Performance-based planning, urban design and building; Requirements for more sustainable materials in building and construction; Provide better capacity for multiple occupancy housing and rooftop open space; Improve standards of efficiency for rental properties; Mandate professional development to build 'green skills' in building industry professions and trades people <p>Collaborations:</p> <ul style="list-style-type: none"> Re-design homes to match the site and orientation to facilitate energy efficiency and householder comfort; Expand social rental sector and housing associations model; Explore and invest in strategies to provide employment opportunities locally; Blend the interface between public and private space and shift focus away from risk management; Improve depth of training regarding sustainable housing products in building-related trades qualifications <p>Research:</p> <ul style="list-style-type: none"> Investigate the points in the supply chain that underpin the lack of diversity and flexibility; Research more case studies on the outcomes of mixed use and mixed tenure housing to build a case; Review levies and regulation which act as disincentives to home businesses and entrepreneurship <p>Advocacy:</p> <ul style="list-style-type: none"> Encourage interest groups to advocate for best practice urban design; Upskill and train professionals throughout the building supply chain

Theme	Comments and Discussion	Recommendations
A 'Good Life' (tension between range of housing aspirations)	<ul style="list-style-type: none"> • Current ideas around 'good life' not particularly compatible with sustainability outcomes; sustainability needs to play an integral part • Large homes are commonly used as displays of affluence • There is incomplete consumer understanding of the benefits of sustainable design and the need for marketing and campaigns that support consumer understanding of the longer term financial and environmental impacts • What are people getting out of big houses and how does this align with what is considered to be a good life? • Current focus on 'frivolous' and energy intensive spaces such as theatre rooms and alfresco areas • Media is influencing perceptions of the 'good life', often without highlighting the hidden negative impacts. Consumers need to become more media savvy • Building industry is offering mainly larger homes with very few small homes available. This scenario contributes to a feedback loop in the market for new homes whereby even larger homes are offered and sought by more consumers • Attempts to have houses provide for every possibility have led to more isolated living and is related to badly designed public space and resulting disconnection • Current perceptions of the 'good life' often disregard the challenges to providing services to low density developments • Reduction in gap year travel limits young people's experience of other places and the benefits of higher density living, such as more services, vibrancy, reduced travel time • The economic and social 'crush' cannot be addressed by individuals alone. There is a need for collective action and strong government action • A good life is a healthy life and well planned dense neighbourhoods are conducive to health and wellbeing • Greater consideration of the journey to work required • We need variation in land uses in public space, such as community gardens, to foster community connection • Identity may be created on a smaller scale than the suburb • Urban design can be a means to indicate appropriate behaviour and foster communication, e.g. community gardens 	<p>Policy:</p> <ul style="list-style-type: none"> • Prioritise policy which aims to limit the social and economic impacts of pressures arising out of climate change and resource impacts; • Work towards best practice for open space in urban design that increases community interaction; • Establish clear roles for local government, state government and non-government organisations in supporting education of consumers and suppliers about home lifecycle costs and impacts <p>Regulation:</p> <ul style="list-style-type: none"> • Adopt Community Title legislation to allow communities to own open space, buy and provide services; • instigate changes that allow use of roof space on more buildings <p>Collaborations:</p> <ul style="list-style-type: none"> • Innovative local planning and development processes to improve redevelopment and densification; • Enable public-private partnerships to deliver better open spaces; • Provide opportunities for social interactions such as sharing food and cooking; • Provide community learning spaces for skill sharing; • Seek ways to increase consumers' capacity to critically analyse media and advertising messages <p>Research:</p> <ul style="list-style-type: none"> • Investigate how big houses serve people and how they are being lived in; • Explore the privately expressed aspirations and meaning of space to identify effective ways to communicate benefits of smaller homes to consumers; • Review of best practice policies and laws for community title <p>Advocacy:</p> <ul style="list-style-type: none"> • Educate sales staff to advise buyers with a life cycle perspective in mind; • Encourage the media to portray a sustainable version of the 'good life' through role models; • Build capacity for social diversity that leads to housing diversity; • Re-direct designs away from 'gold plated' homes with homes theatres, etc.

Theme	Comments and Discussion	Recommendations
Reframing affordability	<ul style="list-style-type: none"> • Reframe point-of-purchase question from 'can I afford to buy it?' to 'can I afford to run it?' • Quantity is privileged over quality in building design • Australian dream is being sold to migrants who often come from densely populated places but alter their aspirations according to Australian norms • Use marketing, social media and education campaigns to alter aspirations around housing; build in genuine lifecycle affordability to decision making • Pensioners are often advised to build unnecessarily large homes to reduce cash assets and access pension. This can result in unexpectedly high bills and other financial pressures • Lending institutions should factor ongoing operation costs to purchaser in lending decisions, and offer discounts to borrowers that opt for more efficient homes • Potential downwards impact on value of large home, and potential associated financial stress, in a setting of energy and/or fuel shortages • Discussion around how we value land and how this is linked to human and ecological health, e.g. soil based agriculture as a special land use zone • Sales people on commission likely to encourage larger houses. This powerful position could be better used informing householders about the longer term financial benefits of smaller, more efficient housing 	<p>Policy:</p> <ul style="list-style-type: none"> • Encourage flexible house design, e.g. USA Fonzi model being used in Queensland <p>Regulation:</p> <ul style="list-style-type: none"> • Streamline planning system to allow more closely matched supply and demand <p>Collaboration:</p> <ul style="list-style-type: none"> • Foster projects that bring affordable housing to the urban growth boundary; • Enable professional development and changed incentive structures for salespeople; • Engage financial planning industry in representing possible future financial or other implications of 'upsizing' to access pension <p>Research:</p> <ul style="list-style-type: none"> • Develop tools for home buyers to explore long term costs of different home choices; • Test methods and outcomes of modular house design to increase flexibility and affordability <p>Advocacy:</p> <ul style="list-style-type: none"> • Develop a program to increase understanding of life cycle affordability throughout the market; • Work with financial institutions to encourage borrowers to consider longer term affordability of homes; • Encourage innovative thinking, e.g. promoting broader model

Theme	Comments and Discussion	Recommendations
Urban growth boundary (UGB)	<ul style="list-style-type: none"> • UGB not a true 'hard edge' but a 'bleeding edge' • Stop moving the UGB to allow councils and other agencies plan for denser, healthier and more accessible communities • A permanent urban growth boundary will send the right signals to developers and increase density • Consider issues around peak oil, mobility and land for growing food when increasing urban sprawl • Right time to fix the UGB is when people become accustomed to living in denser environments; perhaps that time is not now 	<p>Policy</p> <ul style="list-style-type: none"> • Position the UGB to incorporate the integrated system of activity centres and regional centres to remove pressure on boundary <p>Regulation:</p> <ul style="list-style-type: none"> • Maintain UGB and decentralise Melbourne growth to regional centres; • Collaboration; • Encourage state-wide consideration of appropriate places for growth that considers all land uses not just residential; • Consolidate land parcels around activity centres with State Government and land agencies. <p>Research:</p> <ul style="list-style-type: none"> • Not only was there no consensus on this topic but the ideas were extremely divergent. More needs to be done to understand the needs of all stakeholders regarding the UGB and its movement.

Theme	Comments and Discussion	Recommendations
Policy and regulation	<ul style="list-style-type: none"> • There is a lack of political will to change • A range of 'blockers' make implantation of meaningful regulations and policies difficult • Regulation and policy need to be viewed as a safety net rather than change facilitator • Star rating system only deals with house, not its suburban context, or use of energy by occupants • Not difficult to achieve 7 stars but consumers are unaware that significant inefficiencies remain • Harder line by federal government needed • Cities are evolving without complementary policies • Need for improvement in energy and water efficiency of existing housing stock and lack of incentives for this to occur in rental properties • Innovation doesn't arise out of current state government policy and regulation; it is restrictive and users haven't 'bought in' • Need incentives rather than disincentives (tax/pension) to downsize • Lack of movement in current policy and regulatory environment comes from lack of agreement about what is needed (density, diversity, resources) and blocks by RESCODE and VCAT • Building code encourages planners to focus on compliance and avoid innovation or leadership • Lack of skills for sustainable design, building techniques and use of materials • Performance-based policy and regulation needed rather than current prescriptive-based policy • Building Code is outdated, not flexible enough to incorporate sustainability and innovation • Need for improved best practice and to add 'future-proofing' to priorities 	<p>Policy</p> <ul style="list-style-type: none"> • Require federal government leadership to drive state government policy; • need a policy process that incorporates whole supply chain; need policy that articulates the relationship to humans; • introduce policy to encourage housing density and 'future-proofing' of housing <p>Regulation:</p> <ul style="list-style-type: none"> • Develop tax options that encourage downsizing, e.g. retirees; review third party appeal rights at tribunal stage; • make energy star rating system more stringent; provide incentives for improved efficiency of rental properties; • improve response to innovation in planning process such that innovation is encouraged; • amend 'overlooking' to improve privacy and parking regulations to allow innovation and densification <p>Research:</p> <ul style="list-style-type: none"> • Develop ways to properly value land outside UGB to include uses such as agriculture <p>Advocacy:</p> <ul style="list-style-type: none"> • Encourage a process that engages communities with policies and regulations concerning housing growth; • enable better use of social media to engage community about policy and regulations

Think tank conclusions and policy implications

The think tank successfully stimulated dialogue and highlighted the complexities associated with adapting housing aspirations and expectations to increase community resilience to climate change on the suburban and coastal fringe. The opening presentation (Appendix C) raised a number of key challenges for participants to address, in particular the need to rethink the relationship between supply and demand in the housing sector and the relationship between built form and people's capacity to adapt to changing climatic and resource conditions. While the belief that 'builders provide what the market demands' was expressed by some participants, it was heavily disputed by others, indicating a clear recognition of a need to move beyond these common silos.

There was some disagreement regarding the scope and impacts of climate change, and the adaptation challenges facing the coastal and suburban fringe, there was broad agreement that climate change adaptation presents significant problems for current 'business-as-usual' models of planning and housing delivery. The need for more directive policy was highlighted, with calls for stronger regulation to contain urban growth, incentives to increase densities and offer a variety of housing types, and provision of infrastructure, like public transport, in outer areas. These recommendations are particularly pertinent for the State Government as they prepare a metropolitan strategy for Melbourne.

The discussion and recommendations outlined in Table 2 also highlight a clear need to go beyond the 'ABC' (attitudes, behaviour, choice), and recognised the role of multiple players in shaping housing expectations and aspirations. Shifting responsibility onto consumers and encouraging them to make better housing 'choices' is unlikely to achieve significant change regarding the types of housing people expect and aspire towards. This finding shows a need for new theories and models that combine or account for gaps between common policy silos (e.g. supply-demand or technology-behaviour) when addressing this complex issue.

Participants also recognised that the concept of affordability needs to be reframed to account for the long-term running costs of housing. Climate change

adaptation opportunities exist in the short term to encourage home buyers and those who finance, build and market homes, to factor in the long term costs of climate change in their decision making.

Alongside the opportunities for change identified for planning policy, discussions about building regulations and design also coalesced around the importance of understanding what it means to have a 'good life'. The question of how compatible current notions of the good life were with sustainability outcomes was raised.

We conclude with a recommendation is a call for further dialogue on this issue and the need to engage multiple stakeholders in order to question current ways of framing and responding to the challenges of climate change adaptation in the housing sector. This need was supported by participant feedback (Appendix B). This think tank is only the first step in a longer-term process of dialogue and collaboration with multiple stakeholders who are both directly and indirectly involved in shaping housing aspirations and expectations. However the need for concrete actions and outcomes at the policy level is of most importance.

Participant evaluation and future directions

Twenty-five percent of think tank attendants responded to an evaluation questionnaire. The small sample size ($n = 7$) must be noted when analysing the findings. Approximately 60 percent of respondents thought the mix of participants and presenters was appropriate, while 100 percent rated the scope and relevance of the issues discussed as 'good' or 'excellent'. The level of planning of the event, problem solving activities, range of interests of participants and quality of round table discussions were all rated highly. Issues that might have been given emphasis included more discussion of climate adaptation challenges, the role of public transport in urban housing development and behaviour change strategies. Some respondents would have liked to see more representation from community groups. Respondents identified the importance of targeted follow-up activities involving representatives from the building industry, and the need to disseminate the think tank findings as widely as possible.

References

Department of Sustainability and the Environment, 2008, Climate Change in Port Phillip and Westernport, Victorian Government, Melbourne, viewed 19 December 2011, http://www.climatechange.vic.gov.au/__data/assets/pdf_file/0003/73029/PPWP_WEB.pdf.

Department of Climate Change and Energy Efficiency, 2010, Adapting to Climate Change in Australia: An Australian Government Position Paper, Commonwealth of Australia, viewed 19 December 2011, <http://www.climatechange.gov.au/publications/adaptation/position-paper.aspx>.

Goodman, R, Buxton, M, Chhetri, P, Taylor, E, & Wood, G 2010, Planning and the characteristics of housing supply in Melbourne, AHURI Final Report No. 157. Australian Housing and Urban Research Institute, Melbourne.

Santow, S, 2009, 'Australians live in world's biggest houses', ABC News, 30 November, viewed 19 December 2011, <http://www.abc.net.au/news/2009-11-30/australians-live-in-worlds-biggest-houses/1162630>.

Shove E 2010, 'Beyond the ABC: climate change policy and theories of social change', *Environment and Planning A*, vol. 42, pp. 1273-85.

Wilkenfeld, G, 2007, Options to reduce greenhouse emissions from new homes in Victoria through the building approval process, Wilkenfeld & Associates with Energy Efficient Strategies, Sydney.

Appendix A: Invitation, agenda and snapshot sent to participants



Dear <First Name Last Name>

RMIT University and the Victorian Centre for Climate Change Adaptation Research invite you to a Think Tank focusing on:

“ADAPTING HOUSING ASPIRATIONS AND EXPECTATIONS ON THE COASTAL AND SUBURBAN FRINGE”

**Tuesday 22 November 2011, 9.00am-1.30pm
Frankston Arts Centre, Rotary Room
(Crn Young and Davies streets, Frankston)**

Format:

- 9.00** Arrival
- 9.15** Welcome and context setting
- 9.45** Session 1: Panel discussion with:
 - ❖ **Mr Greg Hunt**, Executive Officer, South East Councils Climate Change Alliance (SECCCA)
 - ❖ **Mr Rory Costello**, Executive Director, Villawood Properties; Director, Urban Development Institute of Australia (UDIA)
 - ❖ **Professor Tony Dalton**, Distinguished Research Fellow, RMIT University
 - ❖ **Mr Frank Perconte**, Health, Safety and Environmental Manager, Burbank Homes
 - ❖ **Mr David Hodge**, Executive Urban Development, Department of Planning and Community Development
- 10.30** Morning tea
- 10.45** Session 2: Exploring the issues
- 11.30** Session 3: From Problems to solutions
- 12.30** Outcomes and next steps
- 1:00** Lunch
- 1.30** Close

RSVP to Nicole McGrath, nicole.mcgrath@rmit.edu.au, (03) 9925 3484 by **Friday 4 November**, including any dietary requests.

Please note: To enable constructive discussion on the day and a balanced representation of stakeholders, this is an invite-only event. You are invited to delegate your invitation to an appropriate colleague if you are unable to attend. Please advise us of any changes in representation when sending your RSVP.



THINK TANK SNAPSHOT

What is the purpose of this Think Tank?

The challenge of climate change adaptation necessitates a wide-scale shift towards better designed and planned residential communities that are more efficient, less energy intensive, denser and more resilient to climate change impacts. Communities' ability to adapt and mitigate against climate change is to a great extent dependent on those changes being made.

This Think Tank will establish a dialogue between local and state government, academic experts, communities and the housing industry around the changing aspirations and expectations associated with residential development on the coastal and suburban fringe, and the implications for community resilience to climate change impacts.

The primary outcome of the Think Tank will be a report for state government to inform policy on these issues.

Why is this important?

A significant number of new housing developments are being built on Melbourne's suburban and coastal fringe. The trend towards larger, detached, energy intensive dwellings in poorly serviced locations leaves governments, households and communities vulnerable to the impacts of climate change, and poses a key challenge for adaptation.

A critical challenge for developing climate change adaptation strategies is to identify the scales of changes required, from the design and supply of dwellings, to the planning of subdivisions and regions, to the provision of infrastructure and services, and to co-ordinate and assign responsibility for those changes to the relevant sectors and organisations involved.

Why focus on aspirations and expectations?

The impetus for this Think Tank arose from the inaugural VCCCAR Annual Forum, where the panel of policy makers identified how aspirations and expectations for detached, open-plan and large homes with energy-intensive appliances were adding to the challenge of adapting to climate change.

Building on research conducted by the Think Tank conveners, changing aspirations and expectations for housing are viewed as a dynamic and interconnected process rather than the product of any one group of stakeholders (e.g. consumers, developers, builders, governments). Therefore the supply and demand for particular housing types, sizes, design and fixtures are interlinked and co-constructed by a range of stakeholders and practices.

While changing housing expectations and aspirations are acknowledged as critical to climate change adaptation strategies, they are often considered 'too difficult' or beyond the scope of any one group of stakeholders.

This Think Tank directly explores these issues by considering what role local and state government and the housing sector should play within this changing context, whether these stakeholders can afford not to play a role, and what avenues exist for altering or facilitating expectations and aspirations to improve communities' adaptive capacity.

Why have you been invited?

Urban expansion on the coastal and suburban fringe cannot be reduced to a simple discussion about supply meeting demand. No single actor or group of actors has the answer to these issues. This Think Tank provides a unique opportunity to hold a facilitated and proactive discussion amongst multiple stakeholders on these critical issues. You have been selected by the conveners and steering committee because of your important role and ability to make a significant contribution to this topic. Approximately 50 key stakeholders are expected to attend this event.

What is the context?

The Think Tank will be located in, and focus on, the south-east Melbourne coastal suburbs covered by the South East Councils Climate Change Alliance (SECCCA), where rapid housing development is currently occurring. The SECCCA region, which includes City of Casey, Bass Coast Shire Council, Frankston City Council, Cardinia Shire Council, Mornington Peninsula Council, Shire of Baw Baw, Bayside City Council and the City of Kingston, faces unique adaptation challenges resulting from climate change, particularly in relation to the housing sector. These include the increasing likelihood of storm surges, sea rises, heat waves and bushfires.

What are the desired outcomes?

- Delivering a report to State Government that will inform current research and policy development, particularly the Metropolitan Strategy and climate adaptation planning.
- Facilitating conversations and dialogue between diverse stakeholders, leading to new and stronger relationships between people across the sectors — this is a starting point and ongoing attention to conversations and relationship building will be required.
- Identifying short term collaborative actions required at various scales to address the long-term climate change challenges facing the housing sector.
- Developing new collaborations between local and state government departments, NGOs, housing developers, the broader housing sector and the academic community.
- Critical reflection on the role of government and the housing sector in shaping and changing aspirations and expectations.
- Identifying current assumptions, knowledge gaps and further areas for research.

RMIT University Think Tank Conveners:

Dr Susie Moloney, susie.moloney@rmit.edu.au, Lecturer, Global Studies Social Science and Planning

Dr Yolande Strengers, yolande.strengers@rmit.edu.au, Research Fellow, Centre for Design

Dr Cecily Maller, cecily.maller@rmit.edu.au, Senior Research Fellow, Centre for Design

Travel Information for Frankston Arts Centre:

Frankston Arts Centre, Davey Street, Frankston, 3199
Telephone: 03 9784 1060 | Email: artscentre@frankston.vic.gov.au

Public Transport:

The Centre is less than a five minute walk from Frankston Railway Station.

Frankston Railway Station is located on the Frankston Line in Zone 2.

Peninsula Bus Lines service stops at the front door.

Car and Parking:

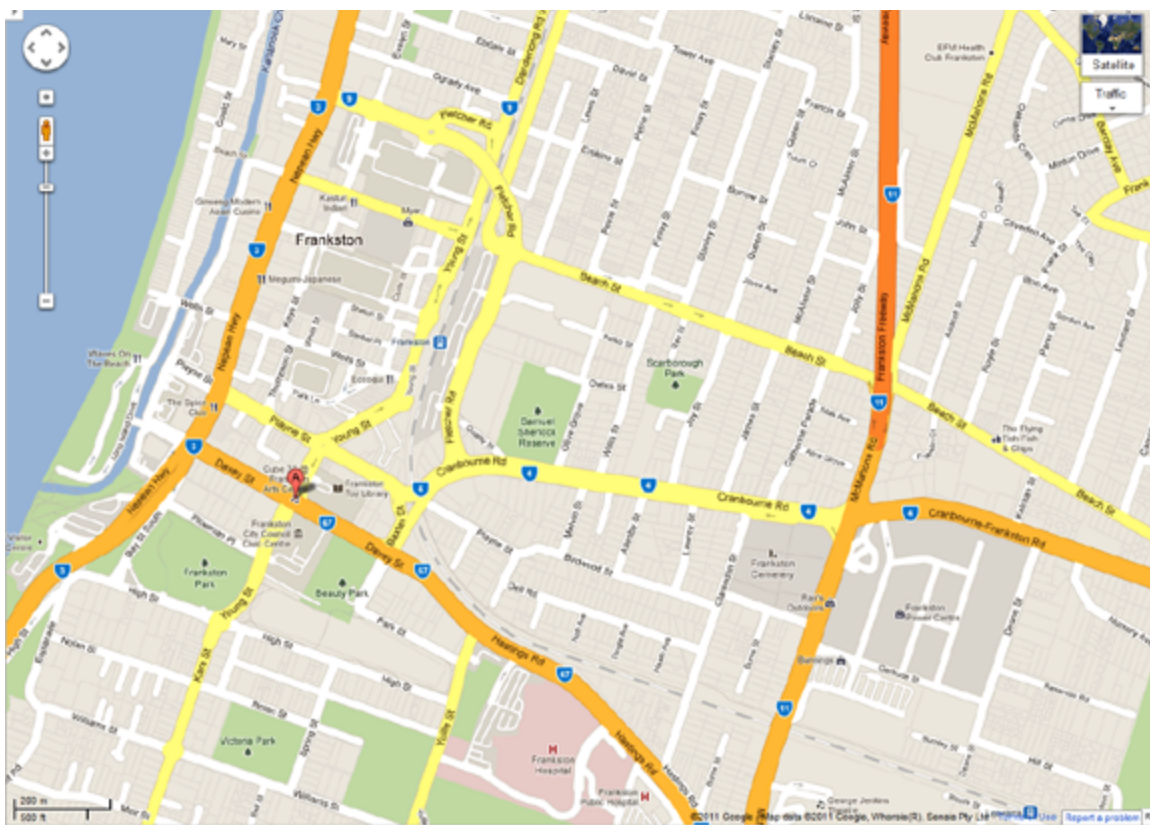
Frankston Arts Centre is approximately 55 km from Melbourne, which converts to approx. one hour drive.

Melways Ref: 100A D8

The Centre has a 330 space underground car park open from 6am to 1am daily, tickets are available from machines located on yellow posts in the car park at a cost of 70 cents per hour to a maximum of \$3.50 per day. Tickets must be purchased on arrival and be placed visibly on the dashboard of the vehicle.

Taxi:

From Melbourne C.B.D. it will take approximately an hour and cost about \$110.



Appendix B: Participant evaluation and feedback

Participant evaluation

1. Which of the following best describes your affiliation?	Tally
Government (federal)	0
Government (state)	1
Government (local)	2
Industry	3
University/other higher education	1
Other, please specify	0
2. Why did you attend the think tank?	
To present	0
To network	3
To represent a workplace	4
For personal interest	1
Other, please specify: <i>to represent views on sustainability</i>	1
3. Which sessions did you attend?	
Welcome and context setting	6
Session 1: Panel discussion	7
Session 2: Exploring the issues	7
Session 3: From problems to solutions	7
Outcomes and next steps	7
4. Did the think tank improve your understanding of climate adaptation issues facing the development of housing in the coastal and suburban fringe?	
Strongly disagree	0
Disagree	0
Neither agree or disagree	3
Agree	4
Strongly agree	0
Total	7

5. Were there any regional climate change adaptation issues that you felt should have been included / given more attention by the think tank?	
Yes	3
No	2
Total	5
<ul style="list-style-type: none"> - New developments and the requirement by Melbourne Water to have land fill <i>INSTEAD</i> of Darwin NT type housing, to raise the floor level above 1:100 flood levels from Western Port inland. - I felt that the issue of climate change was not really addressed and the issue of sustainable housing and aspirations of buyer, developers etc., were all well presented and discussed. Much of the climate change discussion seemed to be more about reducing the carbon footprint and therefore more in tune with mitigation response. This was valuable all the same. - Lack of public transport options and frequency on the fringe - Behaviour change strategies 	
6. Were you introduced to any people, organisations or projects at the think tank that may assist you to improve your / your organisation's adaptive response to climate change?	
Yes	5
No	2
Total	7
<ul style="list-style-type: none"> - Most to all participants - The critical role that local government has in trying to meet the needs of state (and federal) government while also looking to the needs of their community in terms of jobs, regional economic opportunity and still trying to deliver the best environmental outcome. There is a tension that could see new housing opportunities go to a neighboring LGA. 	
7. How would you rate the scope and relevance of the issues discussed at the think tank?	
Very poor	0
Poor	0
Neither good or poor	0
Good	7
Excellent	0
Total	7
8. Which aspects of the think tank did you find most useful?	
<ul style="list-style-type: none"> - All, to be honest. It was a well planned and thought out day. - The forums around the tables - From problems to solutions section - Breadth of audience interests. Discussions on the topics and reporting back. - The variety of different options, intensification v green fields development - The discussions around the tables 	

9. Which aspects of the think tank did you find least useful?	
<ul style="list-style-type: none"> - Some key participants overtaking/overrunning the small table activities. The table needed a facilitator and an observer to balance the conversations and ideas. - Exploring the issues - More of a picture of the changes expected under climate change and how we can collectively engage with the community (in its broadest sense - general public, developers, investors, householders, etc.,) to assist in transitioning their aspirational change to meet the issue of climate change. - It was great to capture the different thinking around the think tank. What will be least useful is if nothing ever comes of it. - The panel presentations 	
10. How would you rate the level of discussion and input from participants of the think tank	
Poor	0
Undecided	0
Fair	0
Good	4
Excellent	1
Total	5
11. How would you rate the level of opportunity that you had to contribute to the forum	
Poor	0
Undecided	0
Fair	0
Good	6
Excellent	1
Total	7
12. Did you think the number and mix of participants and presenters was appropriate?	
Yes	6
No	1
Total	7
<ul style="list-style-type: none"> - Perfect - A few more householders or ratepayer groups would have been useful in the mix. I realise that no matter how hard you try to gain greater participation it all comes down to what happens on the day and competing and urgent demands as to the number and diversity of the participants. - Needed to have more people representing community groups as they are the ones who really need to address change and adaptation 	

13. How could the think tank have been improved?	
<ul style="list-style-type: none"> - Better advertising amongst the managers to get the right blend from their team there. - More closely trying to tease out just how the aspirations are different for climate change adaptation, as compared to cc mitigaion or in fact to sustainability. - Sticking closer to the timetable to get through the content 	
14. Do you have any suggestions of groups or people that didn't attend the workshop that would be interested in future work in this area? Please put names here.	
<ul style="list-style-type: none"> - Yes - can't think now!! Perhaps PPWPCMA/MW/SEWL/SRW - Ratepayer groups Sustainable housing groups - Urban Trans 	
15. Overall, how would you asses the value and importance of the "Adapting housing aspirations and expectations" think tank as a forum to discuss climate adaptation issues?	
<p>Very poor</p> <p>Poor</p> <p>Undecided</p> <p>Fair</p> <p>Good</p> <p>Excellent</p> <p>Total</p>	<p>0</p> <p>0</p> <p>2</p> <p>0</p> <p>5</p> <p>0</p> <p>7</p>
16. Do you have any other comments/suggestions regarding the "Adapting housing aspirations and expectations" think tank that may assist with planning future events?	
<ul style="list-style-type: none"> - I would like to see the summary and outcomes. And have a role/responsibility workshop, and what existing policies can accompany that. - I rated 15 as good, but I will be looking to see just what comes out of the workshop finding to make a definitive call on this one. - It would be good to have really focussed meetings which included more representatives of the building industry and tradesman involved. There is an extraordinary need to train tradies in how to build according to sustainable guidelines which are not yet enshrined in building codes. It seems that only mandatory compliance with codes actually gets standards implemented and even then (see the Age in the last few days) surveyors and building inspectors don't adhere to the codes and certainly have abysmal knowledge of sustainable building (my own experience from building a 7.6 star house and NONE of the trades of the builder seemed to know what was required) 	

Appendix C: Opening presentation from the conveners

THINK TANK: ADAPTING HOUSING ASPIRATIONS AND EXPECTATIONS ON THE COASTAL AND SUBURBAN FRINGE

Tuesday 22 November 2011, 9am-1.30pm

Convenors: Susie Moloney, susie.moloney@rmit.edu.au
Yolande Strengers, yolande.strengers@rmit.edu.au and
Cecily Maller, cecily.maller@rmit.edu.au

www.rmit.edu.au



Think Tank Contention

*Climate change adaptation and mitigation **necessitates a wide-scale shift towards better designed and planned residential communities** that are more efficient, less energy intensive, denser, and more resilient to climate change impacts; and, **communities' ability to adapt and mitigate against climate change is to a great extent dependent on those changes being made.***

Context – South East Growth Area

- Melbourne's South east growth corridor one of the fastest growing regions in Australia
- Focus on the eight local government areas that make up the South East Councils Climate Change Alliance (SECCCA), which are:



Climate Change Risks and Impacts – South East Region

- CC Trends and Risks (DSE 2008):
 - Increasing temperatures
 - Increase in number of days hotter than 30 degrees
 - Decrease in average rainfall
 - Bushfire risk
 - Sea level rise
 - Frequency of extreme weather events
- Impacts:
 - Land use and management
 - Damages and costs to public and private property and infrastructure
 - Human health
 - Water availability
 - Range of indirect and intangible consequences

Adaptation Challenges: Dwellings and Suburbs

Source: Adapted from DCC 2010 and DSE 2008

Adaptation Challenges - What is required?	
Dwellings	Neighbourhoods, suburbs and regions
<ul style="list-style-type: none"> • Able to withstand higher temperatures, especially in summer (e.g. passive design) • Connected to secure water supplies (e.g. rainwater tanks and grey water recycling) • Designed to minimise burden on stormwater systems during flood and storm surge events (e.g. maximising permeable surfaces) • Bushfire resistant (eg. building design and materials) • Less energy intensive (eg. building design and orientation) • Able to support low-emissions lifestyles (for example, passive heating and cooling and well served by sustainable transport options). 	<ul style="list-style-type: none"> • Developing new or upgrading existing stormwater systems to cope with increased flooding (e.g. water sensitive urban design) • Anticipating sea level rise and storm surges and planning development accordingly • Providing access to public transport services and facilitating cycling, walking and other forms of sustainable transport • Increasing density while avoiding urban heat island effect and providing appealing homes • Incorporating sustainable energy and water supply systems, such as solar energy, cogeneration, recycled water and onsite water collection.

Current Trends: The Way we are Designing Homes and Building Suburbs

- **Increasing floorspace:** growth areas median size grew by 39% between 1990 and 2008 (Goodman et al. 2010)
- **Bigger house/smaller blocks:** peaked 245sqm on average (James 2011) ; larger than anywhere else in the world (7% more than US; double Europe and triple UK) (Santow 2009)
- **Increasing energy use:** with 5-Star Standard – new dwellings increase of 6% energy related emissions compared to existing dwellings (Wilkenfeld 2007)
- **Increasing land-use:** low density, urban expansion
- **Increasing transport emissions and costs:** poor public transport access
- **Increase in number and size of appliances:** e.g. growing dependence on air-conditioning
- **Increasing vulnerability** to higher energy prices, transport fuel costs, blackouts and heat stress



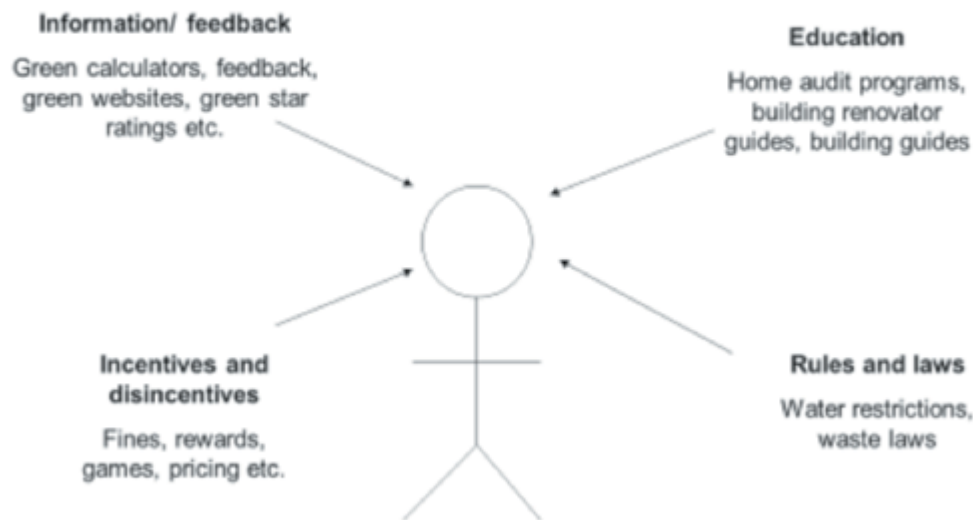
Blame and Responsibility



Siloes within Siloes



Targeting the Consumer



Targeting the Industry (Bypassing the Consumer)



Regulation
Planning guidelines
Building guidelines
Training programs

Missing Links and Gaps

Housing expectations and aspirations



Supplying homes

Consuming homes

Governing homes and people

What do we Mean by Aspirations and Expectations?

- The types of housing we expect and aspire to as a society and culture
- Collective society-wide expectations and aspirations for particular forms of housing – 'the Australian dream'
- Not the product of any one individual or group of individuals (e.g. consumers or developers)
- Shaped by historical and existing infrastructures and technological arrangements

How Have Aspirations and Expectations Changed?



Early Victorian [1840>1860]

SOURCE: Heritage Council of Victoria, Building Commission, and Heritage Victoria 2007 *What House is That?*



SOURCE: Australian Terrace www.australianterrace.com

How Have Aspirations and Expectations Changed?



SOURCE: Museum Victoria



Bungalow [1910>1930]

SOURCE: Heritage Council of Victoria, Building Commission, and Heritage Victoria 2007 What House is That?

How Have Aspirations and Expectations Changed?



Modern [1945>1970]

SOURCE: Heritage Council of Victoria, Building Commission, and Heritage Victoria 2007 What House is That?



SOURCE: Wikipedia



Post-war [1945>1965]

SOURCE: Heritage Council of Victoria, Building Commission, and Heritage Victoria 2007 What House is That?

What are Current Aspirations and Expectations?



SOURCE: Metricon Homes



SOURCE: Homes Now



Aspirations and Expectations *Inside* the Home are also Changing

- The home is a site of changing practices
- New aspirations and expectations for practices and the spaces they require are emerging



Why do Aspirations and Expectations for Housing Change?

Land and housing development

Built form

Resale value

Planning

Fashion

Social norms

Affordability



Global and national concerns (e.g. climate change; bushfires)

Infrastructure provision (transport & utilities)

Regulation and policy

Liability and risk

Historical context

New appliances

Ideas of modernity

Transport

Availability

Design

Profit

Summary Points

- Current climate change context requires that we rethink how we do things – from building houses to living in them
- Implications are cross sectoral and include increasing social, financial and environmental pressures particularly on growth area communities
- Need to break down conceptual and policy divide between supply and demand and recognise they are integrated
- Need to adequately attribute and share responsibilities for change

Aims of the Think Tank

- Facilitate dialogue between the broad range of cross-sectoral stakeholders grappling with this issue
- Explore this complexity without resorting to supply-demand siloes
- Identify the conditions through which housing expectations and aspirations can change to address climate change adaptation challenges
- Deliver a report to the Victorian State Government to inform current research and policy development, particularly the Metropolitan Strategy and climate change adaptation
- Develop new collaborations between local and state government departments, NGOs, the housing sector, and the academic community
- Identify current assumptions, knowledge gaps, and further areas for research

References

- Department of Climate Change 2010. *Adapting to Climate Change in Australia: An Australian Government Position Paper*, Commonwealth of Australia.
- Department of Sustainability and the Environment 2008. *Climate Change in Port Phillip and Westernport*, State of Victoria, Melbourne.
- DEWHA 2008. *Energy Use in the Australian Residential Sector 1986-2020*, Canberra, Australia, Australian Government, Department of the Environment, Water, Heritage and the Arts (DEWHA).
- Dodman, D. 2009. 'Urban Density and Climate Change' (revised draft) in *Analytical Review of the Interaction between Urban Growth Trends and Environmental Changes*, UNFPA.
- Dowling, R. and Power, E. (2011). *Beyond McMansions and Green Homes: Thinking Household Sustainability Through Materialities of Homeyness, Material Geographies of Household Sustainability*. R. Lane and A. Gorman-Murray. United Kingdom, Ashgate: 75-88.
- Energy Efficient Strategies 2008. *Energy Use in the Australian Residential Sector 1986-2020*, Department of the Environment, Water, Heritage and the Arts, Commonwealth of Australia.
- Goodman, R. et al 2010a. *Planning and the characteristics of housing supply in Melbourne*, AHURI Final Report No. 157. Melbourne: Australian Housing and Urban Research Institute.
- Goodman, R. et al 2010b. *Planning reform, land release and the supply of housing*, AHURI Positioning Paper No. 126. Melbourne: Australian Housing and Urban Research Institute.
- James, C. 2011. 'Housing market trends: Australian homes largest in the world' on website *Adviservice* 22/08/11 at <http://www.adviservice.com.au/2011/08/housing-market-trends-australian-homes-largest-in-world/>
- Kelly et al, J.F., Weidmann, B., & Walsh, M., 2011. *The Housing We'd Choose*, Grattan Institute, Melbourne.
- Norman, J., MacLean, H., & Kennedy, C.A. 2006. 'Comparing High and Low Residential Density: Life-Cycle Analysis of Energy Use and Greenhouse Gas Emissions' in *Journal of Urban Planning and Development*, ASCE.
- Santow, S. 2009. 'Australians live in world's biggest houses', on ABC News website 30/11/09 <http://www.abc.net.au/news/2009-11-30/australians-live-in-worlds-biggest-houses/1162630>
- Shove 2010. 'Beyond the ABC: climate change policy and theories of social change', *Environment and Planning A*, vol. 42, 1273-85.
- Strengers, Y. and Maller, C. J. (2011). 'Integrating health, housing and energy policies: social practices of cooling.' *Building Research & Information* 39(2): 1-15.
- Wilkenfeld, G. 2007. *Options to reduce greenhouse emissions from new homes in Victoria through the building approval process*, Wilkenfeld& Associates with Energy Efficient Strategies.



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