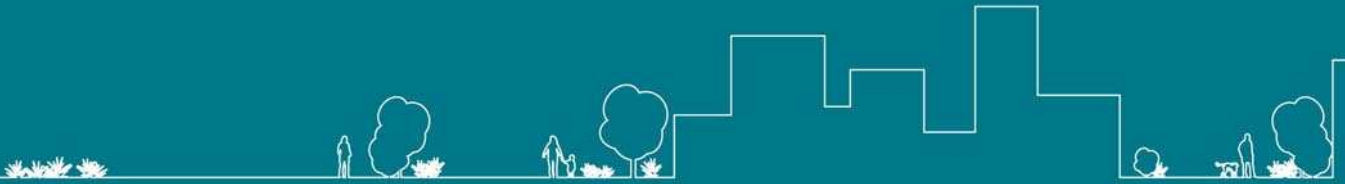


DEVELOPING AN AUSTRALIA NET ZERO ENERGY HOMES COALITION – SEPTEMBER 10 WORKSHOP OUTCOMES



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BACKGROUND

A Workshop was held on 4 March 2009 in Brisbane with representatives of the Canadian Net Zero Energy Home Coalition. A series of presentations were undertaken which focused on the value and scope of establishing a Net Zero Energy Homes Coalition in Australia. The following questions were discussed:

- ▶ Is there scope in Australia for an initiative similar to the Canadian model?
- ▶ How would this initiative be approached in an Australian context?
- ▶ Would there be value in establishing an Australian coalition?
- ▶ What could the scope of the coalition be and what could it aim to do?

Following the workshop discussions, volunteers were sought to drive this initiative forward in Australia. A leader to convene a follow-up meeting was not identified and the Department of the Environment, Water, Heritage and the Arts suggested they would speak to the Australian Sustainable Built Environment Council (ASBEC) as the relevant peak body to facilitate the follow up meeting with key stakeholders.

ASBEC developed a brief discussion paper which included the development of a draft Vision, road map/action plan and proposed funding model which was then discussed at the September 10 2009 workshop. This was given to participants before the event via links to the ASBEC website.

The workshop was over subscribed over 10 days before the event with a wait list of nine people.

The workshop was facilitated by Monica Vandenberg, Executive Director of ASBEC who was supported by four table hosts, from industry and government.

36 representatives attended the September workshop representing the following sectors

- 8 Property Development
- 2 Industry Practitioners
- 4 Product Suppliers
- 11 Industry/professional associations
- 6 Government
- 4 Research and Education
- 1 NGO

AGENDA OF WORKSHOP

Lunch and introductions

SESSION 1 – 20 MINS

Around 12.20 people were asked to take their lunch to their designated table.

Participants introduced themselves at each table and were encouraged to discuss

- Why they were attending the workshop
- What they are doing in the Net Zero homes space
- Expectations of the workshop

WELCOME

Monica (ASBEC) and Gordon (DEWHA) gave the welcome and introduction to provide context.

SESSION 1 (CONTD) 15 MINS

Each group presented back to the larger group and provided a brief overview of introductions, and key expectations of the workshop.

PRESENTATION

Selwyn Tucker - Swinburne University of Technology's Hybrid Building Project

SESSION 2 – VISIONING – PLAUSIBLE FUTURE FOR NET ZERO BUILDINGS

Participants were encouraged to think of a plausible future for Net Zero Energy Homes.:

- Weight of the Future – generally deep patterns that are resistant to change. What is likely to continue?
- Push of the future – (new technologies, policy etc.) What are the most important change processes? (discuss what is going on behind the scenes) What are the most serious problems?
- Pull – the future is not fixed what are the competing images of the future? What are the new factors in the pipeline? What are the main sources of inspiration and hope?

Following from this discussion what should the vision for a zero net energy coalition look like?

- Do we need to look beyond homes to Net-Zero Energy Buildings?
- Do we need to look beyond buildings and look at Net-Zero Energy Precincts?
- Do we need to look beyond Net-Zero Energy to Carbon Positive?
- Do we need to look at Green Infrastructure (i.e. the regenerative capacity of the landscape) and how it can support a Net-Zero goal?
- Is there a real need for such a coalition or are there enough projects/groups that are working in this space?

Each table presented their findings to the larger group.

COFFEE BREAK

PRESENTATION

Joanne Kentish - PricewaterhouseCoopers – Zero Emission Housing Policy

SESSION 3 – DEVELOPING TARGETS FOR A COALITION

Discussion on:

- Should an Australian net zero energy homes coalition set targets?
- Does a coalition want to be a policy taker or a policy maker?
- In the context of the COAG National Strategy on Energy Efficiency should a coalition set a stretch goal?

Discussed and developed a target that is plausible (referred back to futures triangle)

Group/table presented findings to the larger group

PRESENTATION

Stephen White – CSIRO Zero Emission House Consortium

SESSION 4 – FUNDING MODEL AND ACTION PLAN

Presented model from the NZE Buildings discussion paper and participants were encouraged to discuss and debate proposed structure.

- What other links need to be included?
- What are the other potential sources of funding?
- Is Coalition membership the best way forward?
- Is there overlap with other organisations and if so how can they support one another?

SESSION 5 – STAKEHOLDERS PROGRESSING FORWARD

Stakeholders sought to progress the formation of coalition/further discussions.

WORKSHOP OUTCOMES

WELCOME

Gordon McAllister from the Department of the Environment, Water, Heritage and the Arts welcomed everyone and spoke about the one-off funding from the Department to enable industry to meet together to determine if it wanted to develop an Australian Net Zero Homes coalition to drive demonstration projects, as a follow-up to the visit by representatives of the Canadian Net Zero Home Coalition earlier in the year.

Any further meetings/action to progress the coalition would need to be funded by stakeholders.

Monica Vandenberg, who facilitated the workshop, encouraged all participants to put aside their own agendas and preconceptions to create a progressive and productive workshop.

VicUrban and DEWHA were thanked for their financial support of the event.

Participants were allocated a different table for each of the sessions, enabling them to meet all participants.

SESSION 1 - INTRODUCTIONS

The general message that came across from the introductions session was that each table had broad representation in their group, including at the very least, representatives from industry, product suppliers, professional associations and government.

People in attendance all had a professional interest in the topic of discussion, but many also shared a personal passion to see progress in areas such as net zero emissions.

Not everyone was simply interested in environmental sustainability; some were also considering the balance between affordability and sustainability.

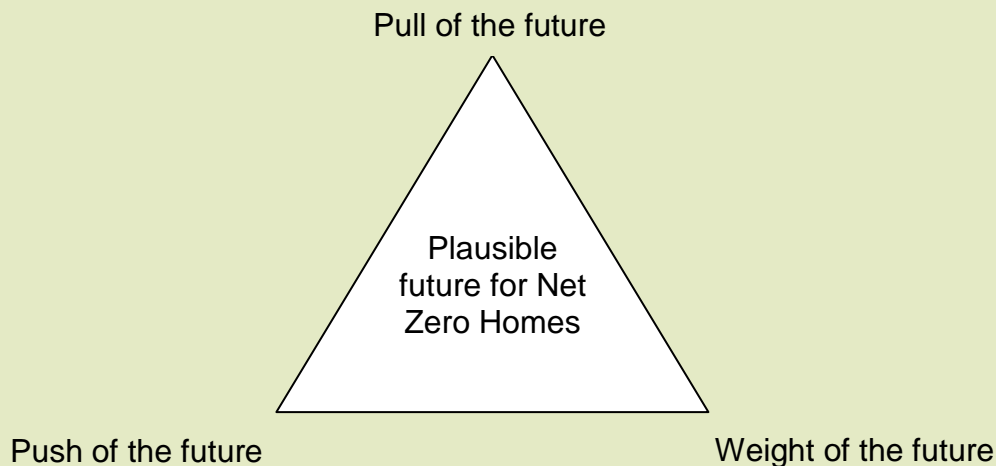
Key outcomes for the workshop and questions raised by the participants included:

- ▶ Who is working in this space and what are they working to achieve?
- ▶ Where does the work coincide and how can we collaborate?
- ▶ Do we need another body or can we fit this within an existing agenda?
- ▶ How do we educate and influence the market?
- ▶ What policy is needed?
- ▶ How do we educate occupants to gain value from sustainable housing?
- ▶ How can we identify and remove barriers to change?

SESSION 2 – VISIONING – PLAUSIBLE FUTURE FOR NET ZERO BUILDINGS

Focus Questions for Session Two:

- Weight of the future – generally deep patterns that are resistant to change. What is likely to continue?
- Push of the future – (new technologies, policy etc.) What are the most important change processes? (discuss what is going on behind the scenes) What are the most key issues confronting industry?
- Pull – the future is not fixed. what are the potential images of the future? What are the new factors in the pipeline? What are the main sources of inspiration and hope?
- What should the vision for a zero net energy coalition look like?
 - Do we need to look beyond homes to Net-Zero Energy Buildings?
 - Do we need to look beyond buildings and look at Net-Zero Energy Precincts?
 - Do we need to look beyond Net-Zero Energy to Carbon Positive?
 - Do we need to look at Green Infrastructure (i.e. the regenerative capacity of the landscape) and how it can support a Net-Zero goal?
 - Is there a real need for such a coalition or are there enough projects/groups that are working in this space?



These questions were considered by each of the groups

Weight of the future

- ▶ Scepticism relating to benefits outweighing costs.
- ▶ Social norms regarding the traditional balancing of spending when building a home.
- ▶ Lack of market signals.
- ▶ Confusion about the need for change and what can be done on an individual level.
- ▶ Risk aversion; the disconnection between sustainability principles and the traditional method of making money off building being associated with low up front costs.
- ▶ Fragmented approach by government.
- ▶ Lack of overarching goals in Australia.
- ▶ Sheer volume of associated government policy.
- ▶ Being a part of an aging industry which lacks motivation to up skill or change business models.

- ▶ Current housing stock, precinct layouts and planning processes do not make change simple or easy.
- ▶ Homes are getting larger and using more energy.

Push of the future

- ▶ Increasing public awareness.
- ▶ There is not enough clarity in government policy.
- ▶ There is not enough focus on the demand side; government policy focuses on supply side.
- ▶ The renovation market/existing housing is currently a problem however it poses a large opportunity.
- ▶ People are becoming more aspirational for “more stuff”
- ▶ Getting people to buy into the solutions.
- ▶ Taking discussions beyond homes, to zero carbon lifestyles.

Pull

- ▶ Changes to disclosure requirements
- ▶ Precincts are moving towards integrations
- ▶ Increasing public awareness and an awareness of required change amongst the informed audience
- ▶ Expectations regarding the need for change to ensure a viable future on our planet
- ▶ Resilience, adaptability and especially a desire for autonomous power supplies
- ▶ Green jobs
- ▶ Whole of government approach

Vision for net zero energy coalition

- ▶ Focus initially on housing and residential precincts as there is a big gap in the residential area and otherwise we may get lost in the complexity of the issues.
- ▶ Could focus on carbon rather than energy but no need to move beyond zero energy to carbon positive.
- ▶ Rather than a coalition being a new association, it could simply be a formal collaboration between various groups.
- ▶ A coalition should engage positively with the residential sector, not simply force another ratings scheme on them.
- ▶ Develop the new retrofitting and renovation market, potentially with government incentives.
- ▶ Aim for 60% reduction of carbon use in the existing built environment by 2030.
- ▶ Don't be blind to the fact that most buildings are not captured in existing regulations.

SESSION 3 – DEVELOPING TARGETS FOR A COALITION

Focus Questions for Session Three:

- Should an Australian Net Zero Energy Homes coalition set targets?
- Does a coalition want to be a policy taker or a policy maker?
- In the context of the COAG National Strategy on Energy Efficiency strategy should a coalition set a stretch goal?

These questions were considered by each of the groups, with the following points being made in the group summaries:

- ▶ Coalition should set stretch targets.
- ▶ Drive policy (policy makers not policy takers).
- ▶ We need to set challenges that people can aspire to achieving, challenges that will be original and allow for people to offer vision and leadership e.g. “Towards zero carbon homes”.
- ▶ Don’t just focus on new homes; we need to have a focus on the renovation market.
- ▶ Operational and outcome targets both provide opportunities.
- ▶ Need to look at a precinct level so that we can also include land and transport usage.
- ▶ There are many different scales on which targets could be imposed; individual buildings, precincts, local government, inclusion or not of transport.
- ▶ Have a flexible approach, e.g. carbon accounts allowing people to have their own approach to the problem.

SESSIONS 4 & 5 – FUNDING MODEL, ACTION PLAN & STAKEHOLDERS

Focus Questions for Sessions Four & Five:

In response to the NZE Buildings discussion paper:

- What other links need to be included?
- What are the other potential sources of funding?
- Is Coalition membership the best way forward?
- Is there overlap with other organisations and if so how can they support one another?
- Who can provide time and resources to progress formation of coalition?

Participants were given the proposed actions steps (Figure 1) and the Proposed Funding /Support Links (Figure 2) and discussed the questions outlined above.

Figure 1 Proposed action steps for progressing NZE Coalition

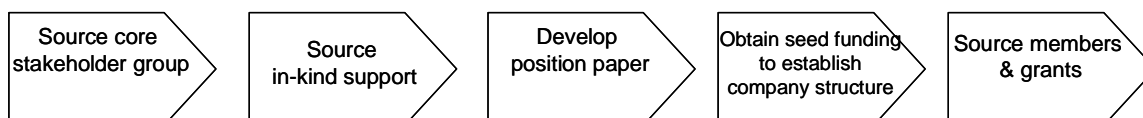
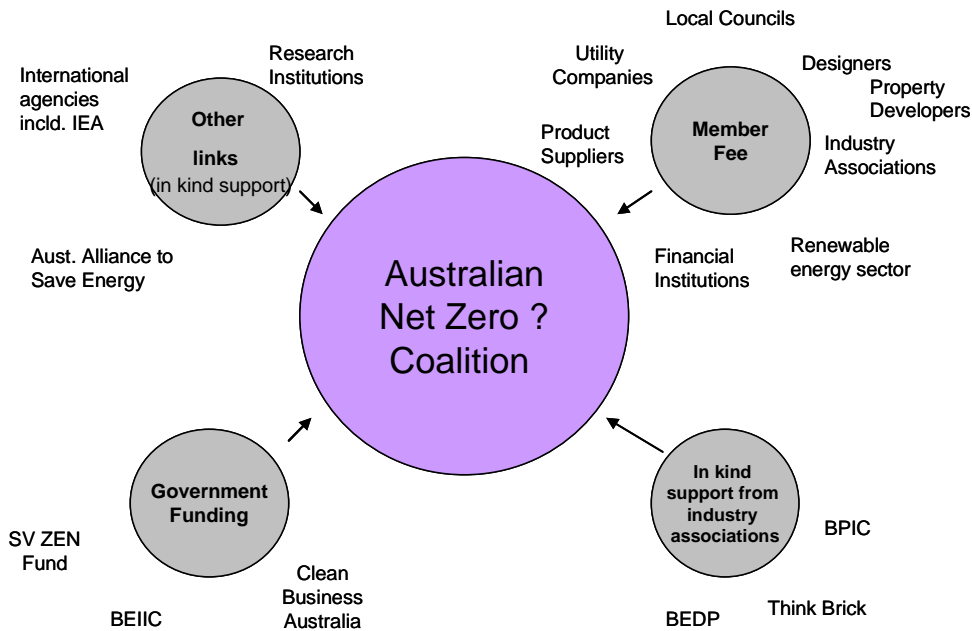


Figure 2 Proposed Funding /Support Links



Session 4&5 Conclusions

- ▶ There was a general consensus that at this stage formation of a coalition should not require the establishment of an entirely new organisation or association, but rather should be coordinated through an existing entity (i.e. ASBEC or other industry body)
- ▶ Rather than having a funding model, it could be supported via in kind donations
- ▶ In the future if it secures government funding it could be developed into a larger more independent coalition
- ▶ An initial stakeholder meeting should be held to establish who is involved and what skills are missing within the group
- ▶ Current work needs to be identified and the scope of the coalition's work formalised
- ▶ Could take the role of mobilising efforts, creating networking opportunities, promoting communication and providing an information hub
- ▶ Involvement of industry associations is important, industry leadership is required
- ▶ Could potentially be formed as an ASBEC task group
- ▶ Could have a sunset clause, with its success leading to its dissolution
- ▶ Since the Alliance to Save Energy maintains a link with the NZH Coalition work going on in North America, and to the extent that it is a purely energy saving objective with a focus on collaboration, the Australian Alliance to Save Energy may be an appropriate vehicle within which to house future discussions.
- ▶ There was a strong interest in taking the discussions forward with over 25% of attendees expressing an interest in being involved and others suggesting that a request go out via email so that they have an opportunity to discuss with their colleagues
- ▶ The PCA offered to host another workshop with the stakeholders.

PRESENTATIONS

Selwyn Tucker - Swinburne University of Technology's Hybrid Building Project

Selwyn spoke about this project and led the group through the summaries of various Hybrid Building Scenarios. The scenarios compared the energy usage and carbon output of a variety of combinations of appliance groupings and building types. It also looked at alternative local energy generation technologies, and the potential carbon savings they may each be able to produce.

Joanne Kentish - Zero carbon Buildings: A worthwhile aspiration?

Joanne spoke about the research she had done in preparation for this paper, which she put together on behalf of Price WaterHouse Coopers. Joanne approached a selection of various people and asked them the following questions;

- How do you define a zero carbon building?
- Should we be aiming for zero carbon buildings?
- What are the barriers?
- What should Government and other stakeholders do to help us in the direction of zero carbon buildings?
- Should zero carbon buildings be mandated?
- What role should low carbon buildings play in an international agreement?

Stephen White - AusZEH – Reducing the Energy & Carbon Footprint of Housing

Stephen spoke on behalf of Greg Foliente, covering some of the research CSIRO has conducted in this space and also talking about the construction of a ZE Home. Construction of the ZEH is currently underway; it will be used to demonstrate the potential savings which can be created with minimal additional costs in construction.

Link to Presentations: <http://www.asbec.asn.au/NZEbuildings>

STAKEHOLDERS

The following people volunteered to progress the discussions further

Alastair	Woodard	ALCAS & AusLCI
Caroline	Pidcock	PIDCOCK - Architecture + Sustainability
Caryn	Kakas	Property Council Australia
David	Parken	Australian Institute of Architects
David	Hood	QUT Rep to be advised by David.
Dr Chris	Reardon	Building Designer's Association of Australia
Dr Greg	Foliente	CSIRO
Felicity	Sands	Clean Energy Council
Janine	Armstrong	Henley Property Group
Joanne	Kentish	PricewaterhouseCoopers
Mark	Lister	Australian Alliance to Save Energy Limited
Matthew	Napper	Landcom
Monica	Richter	ACF
Monica	Vandenberg	Encompass Sustainability
Monique	Cornish	BlueScope Steel
Paul	Puhar	Burbank Group
Ramana	James	Stockland – as suggested by Glyn.
Roper	Tom	Australian Sustainable Built Environment Council
Ross	Maher	Think Brick