Decarbonise Asia-Pacific Roundtable: Briefing Report

March 2015

Melbourne Town Hall
OVERVIEW

As the probability and risks of dangerous climate change continue to accelerate, so to do the opportunities for innovative business models to drive rapid decarbonisation, profitability and job creation. On the 12th and 13th of February 2015, we convened the Decarbonise Asia Pacific Roundtable (DAPR), a high-level, invitation only, business, policy, and research forum to address key decarbonisation trends, risks and opportunities. CEOs and corporate group heads of sustainability and carbon discussed strategies for decarbonising the Australian and Asia Pacific economies while continuing to grow profitably and sustainably.

The DAPR took participants through facilitated discussion to identify research and action priorities to assist business in this transition. The event explored the underpinning business practices and models that are driving and enabling rapid decarbonisation.

The roundtable explored three key areas:

- Low carbon industries, systems and regional cooperation across the Asia-Pacific region;
- Opportunities and priorities for investment;
- Disruptive business models to drive a rapid switch from fossil fuels to low carbon economic innovation.

Over an afternoon, dinner, and morning of closed-door discussions under the Chatham House Rule, the group of thought leaders in industry identified key requirements for moving decarbonisation forward in Australia:

1. Strengthening boardroom level understanding of both the increasing urgency and the opportunities of a rapid transition to a zero carbon economy.
2. De-risking low carbon investment to create new business opportunities and leverage financial resources for decarbonisation.
3. Encouraging business to lead public debate and policy innovation on decarbonisation priorities and strategies.

ROUND TABLE RECAP

1. Strengthening boardroom level understanding of both the increasing urgency and the opportunities of a rapid transition to a zero carbon economy

“2030 is the tipping point; industry needs to be decarbonised, cars need to decarbonised. We have about 15 years to get the second half of the challenge sorted out.”

Decarbonisation brings challenges. Making assets ready for a decarbonised world and identifying low carbon economic growth sectors are key requirements for action. Continued and rapid deployment of existing low carbon technologies and increased research and development on new technology is essential. Although there is increasing global commitment for low carbon agreements, government ambitions remain out of line with the reality of the carbon
Budget. This is evident in Australia, given the lack of robust policy and heavy reliance on fossil fuels and high carbon economic drivers.

Business leaders, however, are seeing the need to get Australia in line with decarbonisation patterns happening in the region. According to a recent Carbon Market Institute poll 74% of business said Australia will be disadvantaged if we don’t price carbon the same as its trading partners, 63% of business respondents noted they will need to adapt to changing carbon trajectories, and 97% say that business will have to pay for some of the emissions reductions. In addition, DAPR participants broadly welcomed and noted the conclusions of the Deep Decarbonisation Pathways report, recognising the scientific evidence that the 2°C threshold is both dangerous and near. Although these opinions are clear, the “often abysmal” levels of understanding at the CEO level about the reality of decarbonisation, and ability to communicate these issues effectively among business peers, poses significant barriers to constructive conversations on these issues.

There is still a gap in understanding what zero carbon means for the boardroom: the reality of actions and timeframes needed to hit the apex of carbon emissions and begin decarbonisation is still not well understood at the highest corporate levels. Likewise, clear and direct communication about the benefits and impact from investment in low carbon technology is not currently educating business leadership, even though it can bring potential investors into the fold for the opportunities that exist. There is a need to address this "blind spot" thinking that is preventing business leaders from collaborating on the problem and solutions.

A clear, long-term price on carbon through policy is clearly needed, but industry can help bring policy forward during uncertainty: major corporations matter when they tell government their position on the opportunities that come from low carbon investment. Many existing industry groups are taking action, from disclosure of emissions (e.g. CDP), to collaborative efforts (e.g. WBCSD), and commitment (e.g. RE100, which includes the large corporations committing to 100% renewable energy). Continued pressure from industry groups is important to assist in shaping policy makers’ actions, highlighting consumer demand, and assisting in policy changes such as removing fossil fuel subsidies and implementing supporting low carbon policy. Increasing understanding at the boardroom level about the momentum in the low carbon market, as well as consensus that investing in high carbon assets may not be compliant with fiduciary duties of company directors given the potential future climate risk, provide evidence of carrot and stick approaches that are creating the need for change. This understanding is critical to a broader movement for business action and policy on decarbonisation.

2. **De-risking low carbon investment to create new business opportunities and leverage financial resources for decarbonisation.**

The DAPR focused on how to create new opportunities and leverage financial mechanisms that already exist: de-risking low carbon investment is essential to enable this. There is more than enough private capital in the world to

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1 The Climate Change Authority's recommended national emissions budget for the period 2013–2050, based on Australia’s fair share of the global budget, is 10.1 Gt CO2-e. At current rates of Australian emissions, and there were no imports or exports of emissions rights, this budget would be exhausted in 17 years. See Climate Change Authority, 2014 (p. 117) - http://climatechangeauthority.gov.au/files/files/Target-Progress-Review/Targets%20and%20Progress%20Review%20Final%20Report.pdf

2 This includes four pillars of decarbonisation for energy in Australia: structural change (changes in economic and/or industrial structures that occur in response to domestic and global macroeconomic trends), energy efficiency, electrification and fuel switching, and decarbonisation of energy transformation (100% renewable grid connected energy sources). It also includes decarbonisation of non-energy emissions in industry (fugitive emissions), land use, agriculture, and forestry.

3 [https://www.cdp.net](https://www.cdp.net), [http://www.wbcsd.org/vision2050.aspx](http://www.wbcsd.org/vision2050.aspx), [http://there100.org](http://there100.org)
finance the energy transition, but perceived high risks leads to under investment in renewable energy from this source. New products such as green bonds are coming online, and as low carbon technologies and companies mature, this opportunity is opening up, but the scale of this finance is tiny at present. Building in the risks into high carbon asset investment and improving investment risk for low carbon by de-risking are two sides of the same coin.

Building in the risks for high carbon

Current perceived barriers to accessing private capital include decision-making processes and traditional risk management approaches that treat carbon emissions as free and ongoing in perpetuity. These approaches do not deal with the existential threat of increasing emissions. For example, super fund members’ equity asset class allocation is heavily weighted to Australian listed companies. The majority of this allocation is invested primarily “in a small number of financial institutions, a couple of grocers and miners, and a data/mobile phone service provider”. Except for potentially telecommunications, most of these companies are significantly dependent on carbon for their earnings. This creates a concentration of risk and a potential barrier to the working community understanding and addressing the threat of rising greenhouse gases. In addition to communication and awareness, the development of risk assessment tools for assessing climate risk (e.g. to infrastructure) and carbon risk exposure (e.g. to finance and investment) is key to address this issue. The risks of non-disclosure and lack of corporate action on climate change also need to be taken into consideration.

Despite a range of business leaders and laggards in the movement to decarbonisation, considering rising carbon emissions as “the” existential threat to future company value is not often well understood. DAPR participants noted that investment decisions should be more closely tied to the reality of their company’s carbon budget. Although a carbon price may be considered, in many cases boards and management are not pricing carbon or carbon risks into investment decisions. This raised analogies to investments in asbestos thirty years ago. Communication of this reality needs to be at the top of the agenda for the boardroom: why are companies and governments purchasing equipment that is high carbon when the science tells us these will have high compliance liabilities in the future? As seen in asbestos, the DAPR highlighted the growing understanding that high carbon assets, including countries and companies investing in them, will become stranded. The growing awareness of the legal liabilities for directors’ duties due to inaction on climate change, and increasing scientific ability to attribute emissions to specific climate-related impacts, is set to provide an ever-sharper stick for taking decarbonisation seriously in the boardroom.

Improving investment risk for low carbon

The long-term goal and short-term action challenge is not unique to climate change: investment decisions are made any time infrastructure is created, a hospital built, or super funds invested, but climate change doesn’t have a level playing field. Opportunities to level up the field include explanation and education for investors. Currently low carbon assets, such as renewables, are devalued because investment analysts don’t take into account any future carbon risk, highlighting the perceived barriers for new investment. Each business and investor has their own model for investment risk, but inserting the reality of the decarbonisation budget – i.e. that carbon has to go to net zero by 2050 – into

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investment decision-making can be supported by effective communication associated with the reality of the challenge, and opportunity for the adoption of low carbon technologies and processes.

Linked to de-risking low carbon investment was the inevitable discussion on policy and regulation. The need for policy stability and a carbon price for investment in technology was noted, especially within the context of potential declines in the value of high carbon-intensive companies due to their carbon liability. Examples of successful low carbon policy are being driven in regionally connected economies, especially in California, where fuel standards and renewable energy targets are the norm. Showcasing the industry opportunities of policies, like fuel standards and renewable targets, can foster innovation and communicate the benefit of climate policy stability on the economy. Likewise policies in China and India are shifting the low carbon landscape, including potentially softer coal demand in the future, lowering the cost of renewable technology, and promoting more widespread renewable use. However, they also both pose paradoxes given high consumerist aspirations in their populations (including a population in India that is predicted to be 1.6bn by 2030) and still a very small percentage of renewables in the energy mix.

3. Encouraging business to lead public debate and policy innovation on decarbonisation priorities and strategies

Being clear on company positions on climate change is still a major barrier in the broader movement to gain business confidence in a low carbon future. Scientists and the activist community may have reached the limit of their influence: communication of the issue from the boardroom level of the risks associated with carbon assets is needed as a first step toward broader understanding of zero carbon business. Encouraging senior business leaders to ‘come out of the climate closet’ — and be prepared to speak publicly about the full extent of climate and carbon risks and opportunities — presents an important lever for public and policy support for decarbonisation. Just as the fossil fuel industry has led government policy, so now too can the decarbonisation industry.

For the most part the acceptance of the climate change science and the social and business risks it entails by leading businesses is not communicated as widely and publicly as it should be. Corporations may be undertaking thorough risk assessment on potential climate policy and may factor in a carbon price to their investment forecasts. AS it stands, however, this has not significantly changed investment decision-making.

As the broader climate movement takes hold, some businesses are recognising that their social license to emit carbon in a carbon-constrained world will be at risk, and so it is important to generate trust and an understanding that they will be a constructive partner in the transition to decarbonisation. Practical steps also include “intensive care” management that can help turn businesses around to profitability in the context of a decarbonized future. More specifically, taking action and being transparent about their position on climate change demonstrates leadership as well
as de-risking the approach to shareholder value and return on investment (ROI).\(^7\) Examining what carbon- or climate-related common ground is shared by businesses unaware or agnostic about the existential threat of increasing greenhouse gases is also important to bring them into the conversation on low carbon solutions. Similarly, multinationals represent over 50% of total global R&D, and can be disruptive by pushing and pulling change along their supply chains. In the absence of political leadership, this business lead can define the economic outcomes from setting a low carbon policy path, thereby creating the opportunity for policy makers to follow. Indeed, climate policy is largely a blank slate in Australia from 2020 onwards, creating opportunities for companies with low carbon products to shape markets for themselves and show policy opportunities to government.

The broader understanding and communication of the reality of a zero carbon future assists both business and government in advancing low carbon innovations. New disruptive innovations in business models are also emerging, not by ‘selling on green’ (although this is in the total value proposition) but by marketing well, being competitive on pricing, and providing the opportunity for greater control over energy use by individual consumers. This is disrupting the incumbent market business models enough to create momentum and change, and in combination with leading businesses stating their positions on climate, a broader movement is created. In addition, the momentum for broader movement in impact investing and decentralised solar power (in Australia, but also for example in communities in India) are illustrating that alternative energy business models are viable, popular, and driving change. Participants noted that profitable business decarbonisation means a whole of industry, society, and government approach and acting in concert, such as this, accelerates decarbonisation.\(^8\)

### Key Priorities and Gaps

A key aim of the DAPR was to identify key priorities and gaps for applied research on the issue. Improving policy and pricing carbon were seen as the highest priority to accelerate investment, followed by a better understanding of the psychology and communication of decarbonisation. In terms of where knowledge is lacking, communication was the most cited issue followed by a better understanding of how collaborative governance mechanisms could assist in gaining traction. 95% of respondents wanted future collaborations through the Decarbonise research series based on small groups working on key issues and theme specific roundtables. Formalising the network, and including the ‘non-converted’ (e.g. current thermal energy generators, high emissions companies), more policy makers, a narrower focus, and in smaller groups, were all seen as good opportunities.

<table>
<thead>
<tr>
<th>Highest Priority to improve investment</th>
<th>Sample comment</th>
<th>% Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing carbon / policy</td>
<td>&quot;Stop all perverse incentives&quot; &quot;Pricing carbon properly&quot;</td>
<td>34%</td>
</tr>
<tr>
<td>Psychology/Understanding/communication of the issue at boardroom</td>
<td>&quot;Psychological understanding&quot; &quot;humanise story - shame and pride&quot;</td>
<td>28%</td>
</tr>
</tbody>
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\(^7\) The Carbon Disclosure Project report from 2014 highlights that corporations that are actively managing and planning for climate change secure an 18% higher return on investment (ROI) than companies that aren’t, and 67% higher than companies who refuse to disclose their emissions. See: https://www.cdp.net/CDPResults/CDP-SP500-leaders-report-2014.pdf

\(^8\) [http://www.ft.com/intl/cms/s/0/cd519de0-55e1-11e3-96f5-00144f6abdc0.html#axzz3TBmeC2pN](http://www.ft.com/intl/cms/s/0/cd519de0-55e1-11e3-96f5-00144f6abdc0.html#axzz3TBmeC2pN)
Re framing of Carbon in investment decisions / directors duties

"As a driver of future value loss" “understanding the real cost of carbon”

10%

Having new governance models that highlight opportunities

"Collaboratively" "Diverse coalition of political and business leaders incl. media to identify risks" “economic opportunities for growth from low carbon initiatives”

10%

Leadership

"Go beyond perceived constraints – take leadership”

7%

Engagement with consumers

"Inspire and engage consumers”

7%

Engineering / technical solutions

3%

The outcomes of the discussions were to create this document and, more importantly, set the applied research agenda to identify the business models, challenges, and opportunities for connection and decarbonisation across the region. The DAPR was created to better understand business needs, requirements, and issues for fostering
decarbonisation in the region. We welcome your feedback on these options and ideas. As a result of the discussions around the table, and the analysis here, we propose a number of potential avenues as a roadmap for collaboration.

There are many groups working on specific issues of decarbonisation, from alternative technologies, Australian cleantech, to climate business research. There is certainly no need to reinvent the wheel, however it seems there is a desire to facilitate a more formal movement in this direction that links these organisations, business sectors, and policy. Ultimately, a widespread industry education campaign of what a response to the 2°C scenario actually looks like and means for the widest range of industries would assist in facilitating some of the required changes noted above. Ensuring this is non-partisan and applied to specific challenges within the broader goal is an important element of such communications.

We are exploring the creation of a collaborative group/nexus to address the issues raised through empirical analysis, research and expert issue-led discussion to address specific issues. Rather than just focusing on the upcoming Climate Change Convention conference in Paris in December 2015, we see this as a way forward up to and from Paris to assist Australia in the Asia-Pacific region to decarbonise profitably.

Proposed outcomes:

4. **Roadmap: To Paris and Beyond**

   4. A joint statement from Australian business illustrating the concerns and opportunities associated with decarbonisation. Linking this to emerging work with groups like the B-Team⁹ and be profiled to show commitment and opportunity in support of a productive Australian commitment at the COP 21 in Paris.

   **Specific events:**
   - Following the suggestion from the workshop, we propose a drinks event at the end of March (hosted by relevant organisation, TBC) to provide key players with opportunity to discuss, network, and highlight opportunities.
   - A series of smaller, issue-specific business roundtables items to address key themes, priorities and gaps highlighted here. We will develop these ideas and circulate for commentary amongst the participants.

5. Issue specific roundtable to be held close to Carbon Markets Institute Annual Conference (May 2015).
   - Small group day before conference to examine in depth analysis and discussion on key issues involved in de-risking investment / communicating the issue (industry specific and general approaches) / collaborative governance model
   - Decarbonise results and agenda are already to be presented at CMI conference.

These ideas will be developed further in collaboration with the DAPR participants and we welcome input and ideas.

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⁹ [http://bteam.org](http://bteam.org)
## PARTICIPANTS

The event used the 'Chatham House Rule' (all discussion is confidential and non-attributable). Specific organisations below were happy to have their participation known, all others are illustrated by sector.

<table>
<thead>
<tr>
<th>Alternative Technology Association</th>
<th>Australian / Sino CleanTech</th>
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<tr>
<td>Australian Superannuation Fund</td>
<td>Carbon Market Institute</td>
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<tr>
<td>Local Government Representative</td>
<td>Clean Energy Council</td>
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<td>Clean Energy Financing Organisation</td>
<td>CleanTek Market</td>
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<td>Government Department</td>
<td>Non-governmental research and think tank</td>
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<td>Governmental Research Body</td>
<td>Super Fund consultancy</td>
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<tr>
<td>Multinational technology company</td>
<td>The Grattan Institute</td>
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<tr>
<td>Hong Kong University of Science and Technology (HKUST)</td>
<td>Social impact investing organisations</td>
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<tr>
<td>Centre on International Energy</td>
<td>Representative of institutional investors</td>
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<tr>
<td>Melbourne Energy Institute</td>
<td>Melbourne Sustainable Society Institute</td>
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<tr>
<td>Monash University</td>
<td>Major retail bank</td>
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<tr>
<td>Renewable energy company</td>
<td>Pollinate Energy</td>
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<tr>
<td>Energy retailer</td>
<td>Major airline</td>
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<td>Responsible Investment Organisation</td>
<td>Small Giants</td>
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<tr>
<td>Sustainability Victoria</td>
<td>The Energy and Resources Institute (TERI)</td>
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<tr>
<td>Energy transmission company</td>
<td>Paper and packaging company</td>
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<tr>
<td>Superannuation Fund</td>
<td>University of California, Berkeley</td>
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<td>Victoria University</td>
<td>University of Melbourne</td>
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The roundtable was hosted by The University of Melbourne, in collaboration with international partners University of California, Berkeley; The Energy and Resources Institute (TERI), India; and the Hong Kong University of Science and Technology (HKUST), China; and industry partner CleanTek Market.

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