

February 2011

Seizing the Sustainability Advantage



**SUPPORTING COLLABORATION FOR COMPETITIVE ADVANTAGE,
AND A SUSTAINABLE BUILT AND NATURAL ENVIRONMENT**



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About Consult Australia

Consult Australia is the industry body of choice for consulting firms in the built and natural environment. The services offered by Consult Australia member firms include design, engineering, technology and management solutions for individual consumers through to major companies in the private and public sector including local, state and federal governments.

Consult Australia represents over 270 companies, from large multidisciplinary corporations to small niche practices, collectively employing over 50,000 staff. Consult Australia's vision is to drive business success for consulting firms in the built and natural environment through collaboration, education support and advocacy.



EXECUTIVE SUMMARY

Achieving sustainability is a challenge we avoid at our individual and collective peril. The need for immediate action to improve the efficiency of our economy, mitigate climate change and adapt to demographic and environmental change is clear. What remains uncertain are the best mechanisms to use to achieve these goals.

We must consider both how supply and demand can be managed through market-based mechanisms, as well as consider transformational changes in design, industrial processes, transport, land use, planning, consumption and production patterns. Recommendations for change in each of these areas are beyond the scope of this paper. Rather, we are proposing a whole of government approach that will create new opportunities for the more ambitious and detailed changes required in the longer-term.

Drawing on the unique expertise available to policy makers through Australia's leading firms consulting in the built and natural environment, this paper outlines the actions and next steps we believe are necessary to support a more sustainable Australia. We identify the barriers created through current approaches and advocate radical reform through collaboration. Strong leadership is required to drive practical action by governments in the short, medium and long-term to mitigate the risks of climate change and help ensure Australia's ongoing competitiveness in the global markets that we service and benefit from.

KEY RECOMMENDATIONS

Recommendations on how Australia can achieve a more sustainable future are numerous and constantly debated by a wide range of stakeholders. Consult Australia believes that, in what is a crowded policy environment, certainty on the role of carbon within the economy must be achieved. We recommend:

1. As a first priority, achieve a mechanism to put a price on carbon emissions within the next 12 months, for implementation before the end of the next electoral cycle.

But a price on carbon will not by itself achieve the industry transformation necessary to achieve a low carbon economy. We recommend that a wide lens be cast on the opportunities that exist in moving to a low carbon and more sustainable future. This requires us to acknowledge that responding to climate change is but one part of achieving a more sustainable future. In this context, high level governance reform must be prioritised to establish a clear mechanism to build consensus amongst stakeholders, evaluate policy initiatives, and achieve truly sustainable outcomes. We recommend:

2. COAG establish a Commission for a Sustainable Australia (CSA), reporting to the Federal Minister for Sustainability, to:
 - > Integrate the agreement for a price on carbon within a broader sustainability framework.
 - > Provide a vehicle for collaboration and alignment between research institutions, governments, consulting professionals, industry and community organisations.
 - > Evaluate, develop and advocate policy solutions and champion reforms that safeguard Australia against climate change and achieve genuinely sustainable outcomes.
 - > Be empowered to provide recommendations that, by virtue of the Commission's reputation and integrity and effective community and business engagement, are widely supported by stakeholders.

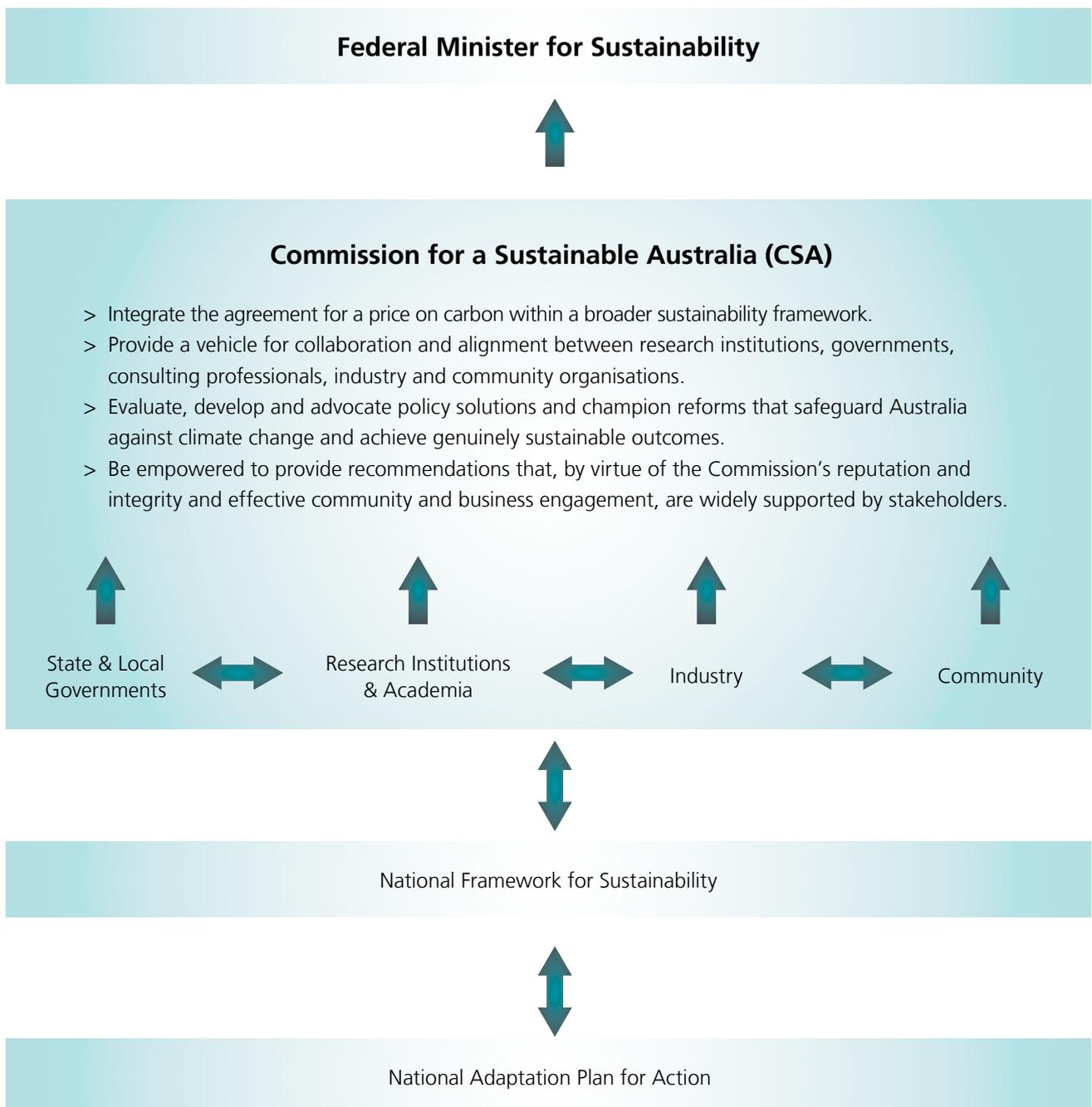
As part of this governance reform more substantial action is required to:

3. As a matter of urgency develop and implement (through the CSA):
 - > A National Sustainability Framework to build on the complementarities of programs in the economic, environmental and social spheres to create a cohesive agenda for sustainability operating across governments.
 - > A National Adaptation Plan for Action to ensure that the standard of adaptation is adequate across all areas of Australia.

Alongside governance reform, we endorse existing policy development and advocacy supporting a range of policy initiatives which, if implemented now, could realise substantial changes in the short-term. Work undertaken by the Australian Sustainable Built Environment Council (ASBEC) and its member organisations—including the Australian Institute of Architects, the Green Building Council of Australia and the Property Council of Australia—provide authoritative, evidence-based policy supporting clear mandates for action:

4. Implement widely supported initiatives now to ensure that we continue to minimise risks and seize the advantage from our existing opportunities, for example:
 - > A National White Certificate Scheme.
 - > Green Depreciation.
 - > Develop and continue to implement policies that support the efficient use of water, waste and energy resources.

FIGURE 1: SEIZING THE SUSTAINABILITY ADVANTAGE – KEY RECOMMENDATIONS



As sustainable design, innovation and practice become important drivers of domestic and international business, the consulting industry will play a key role in driving, promoting and delivering sustainable outcomes for clients and the broader community.

WHY CONSULT AUSTRALIA?

Seizing the Sustainability Advantage has been developed by Consult Australia's Sustainability Roundtable. It is a first response to growing concerns amongst leading firms consulting in the built and natural environment that Australia is not currently positioned to respond appropriately to climate change and reap the rewards and opportunities created by a sustainable future.

Australian governments' fragmented responses to climate change, and diluted incentives towards achieving a sustainable built and natural environment, reduce our competitive advantage in the global economy and increase the risks to which the Australian community are now exposed.

It is from this perspective that this paper strongly advocates the achievement of a more holistic agenda. While the information and analysis provided by the most commonly heard voices in the current policy debate is important, this should not be to the detriment of broader business and community perspectives that in conjunction present a more complete picture on which governments can build policy.

Consulting firms have a profound effect on the natural environment and society; through their actions and designs the built environment is formed, and our natural environment preserved. Consult Australia's members provide design solutions that seek to either repair environmental damage, or plan adequately for a sustainable future. Our industry plays a constructive role in helping to raise and address these issues with clients and the wider population. As sustainable design, innovation and practice become important drivers of domestic and international business, the consulting industry will play a key role in driving, promoting and delivering sustainable outcomes for clients and the broader community.

This paper is a first step towards achieving a more integrated and comprehensive approach by government to sustainability. Drawing on the substantial expertise of Consult Australia's member firms, our recommendations reflect the wide array of professional services disciplines Consult Australia now represents. This broader representation uniquely positions Consult Australia to consider opportunities and threats associated with climate change and sustainability from multiple perspectives.

Our member firms' own business advantage is based on harnessing Australia's best minds in design, engineering and new technologies. The environmental, social and economic challenges to which our firms develop innovative, tailored and efficient solutions are the very same challenges currently dominating the headlines and exercising the minds of policy makers and elected representatives across the country.

Seizing the Sustainability Advantage:

1. Sanctions urgent action by governments to support a more sustainable Australia through policies that demand the better use of our built and natural environment.
2. Identifies the barriers created through our current approach to sustainability, and advocates reform through collaboration to overcome these challenges.
3. Supports practical action by governments in the short, medium and long-term that mitigate the risks of climate change and helps ensure Australia's ongoing competitiveness in the global markets that we service and benefit from.

The next steps are for governments, industry and the community to put these recommendations into action; collaborate, and tap into the expertise available in our own backyard; to seize the advantages offered by a more sustainable future.

THE CONSULT AUSTRALIA SUSTAINABILITY ROUNDTABLE

Consult Australia's Sustainability Roundtable (the Roundtable) was established in 2006 to provide a forum to position Consult Australia member organisations as innovators and delivery agents for sustainable development in the built and natural environment.

The Roundtable membership encompasses a range of senior industry leaders who are key members of national and international professional services organisations. The Roundtable supports collaboration, discussion and thought leadership on best practice and policy development in response to climate change, and to achieve sustainable development in Australia and overseas.

The Sustainability Roundtable has established itself as a leading voice on sustainable development in the built and natural environment that is called on by governments to provide input and feedback on new policy issues. The Roundtable has developed Consult Australia's submissions to the Prime Ministers' Task Group on Energy Efficiency and the development of the National Building Energy Standard-Setting, Assessment and Rating Framework. The Roundtable contributes to Consult Australia's advocacy through the Australian Sustainable Built Environment Council and informs Consult Australia's representation on the Australian Building Codes Board.

Sustainable development was defined as 'development that meets the needs of the present world without compromising the ability of future generations to meet their needs.'

THE CHALLENGES IN ACHIEVING SUSTAINABILITY

Sustainability is not a new concept and can be applied to the use, but not degeneration, of financial, economic, social or environmental resources. Environmental sustainability has been brought to the forefront of the discussion as advancement in scientific knowledge has highlighted the damage we are able to do, and have done, to the natural assets and resources of our planet. It has brought us to a critical juncture between our approach of exploiting these resources to the maximum extent, and attempting to find the pathway towards practices necessary for a prosperous and sustainable future.

Sustainability has been continually defined and developed since it was first placed on the international political agenda by the UN World Commission on Environment and Development (WCED) in 1987. Sustainable development was defined as 'development that meets the needs of the present world without compromising the ability of future generations to meet their needs.' Much progress has been made in the last 23 years in developing sustainable practice and culture; however, as our understanding of the natural environment increases, the extent of damage we have caused through unsustainable practices, and the essential need for change, has become apparent.

References to 'sustainability' and 'climate change' are often made interchangeably without drawing a distinction between these two issues. Climate change, referring to current and forecast changes in weather patterns, can be considered just one of the consequences of unsustainable practices adopted by past and current generations.

Climate Change in Australia

The Australian Government has recognized climate change as a critical environmental and economic issue. The Garnaut Climate Change Review in its Final Report of September 2008 states:

'Even at the levels of mitigation that now seem to be the best possible, the challenges could be considerable. In the absence of mitigation, we can be reasonably sure that they would be bad beyond normal experience.'

We know that immense shocks unsettle basic institutions, with unfathomable consequences.

We know that the possibilities from climate change include shocks far more severe than others in the past that have exceeded society's capacity to cope, and moved societies to the point of fracture.'

Climate change poses a significant and immediate threat not only to Australia but the entire world. Shortages in water supplies and the depletion of non-renewable natural resources demand an unparalleled degree of collaboration and innovation to safeguard our current and future prosperity.

Our responses to climate change must be considered as just part of a more substantial move towards achieving a sustainable future. If we see sustainability only through the rubric of climate change then we risk failure in responding to broader systemic issues (for example, demographic change, affordability, health and social equity) that also demand sustainability as an end goal.

In recent times, basic economic survival after the global economic crisis has placed the higher ideals for sustainability on the backburner for much of the developed and developing world. But now is not the time to take a step back. We need to transform our approach to this issue. As we enter a period of increasing uncertainty in responses by governments, it is more important than ever to find a path through the politics.

The challenges are real and must not be underestimated, but the solutions—and a sustainable future—are readily achievable: provided we seize the advantage.

BARRIERS TO ACTION

The approach advocated in this paper is a first response to the barriers and frustrations experienced by Consult Australia members, and others attempting to develop tangible solutions towards a sustainable future. These barriers demand the consideration of an integrated economy-wide and spatial approach to sustainability. Some of those more commonly encountered barriers are outlined below to help contextualise the need for urgent reform:

- > Environmental, social and economic sustainability principles are not appropriately and consistently recognised in decision making across all levels of government. The absence of a clear commitment to all aspects of sustainable development, enshrined in legislation at a national level, has contributed to uncertainty as to how to put sustainability into practice at all levels of government, in business and in the community.
- > Fear campaigns and scaremongering foster ill-informed public opinion that influences and distorts policy development. Policy debate needs to focus on ‘How?’ rather than ‘Should we?’ For example, ongoing political debate about the merits of an emissions trading scheme and carbon pricing distract from the development of the best possible economic model required to achieve a sustainable future.
- > Complacency and a perspective that we should not lead best practice but ‘follow the leader’ guides public opinion and policy development.
- > Policy and program development for sustainability tends to follow the traditional approach of delivering policies through discrete ministries. As a consequence it is fragmented across multiple ministerial portfolios, government departments and agencies, with no clear leadership, collaboration or coordination to avoid duplication and help ensure appropriate prioritisation.
- > Policy and programs that incentivise industry development risk distorting sustainable outcomes where businesses focus more on bottom-line savings.
- > Where policies and programs are implemented, they appear unsupported by any comprehensive process evaluating their costs and benefits (or lessons learned) against higher level objectives for sustainable outcomes, complementarities with other policies and programs, or overseas experience.
- > The need to promote adaptation in the built environment to achieve sustainability in the face of future economic, demographic and climate change is not sufficiently prioritised or incentivised through existing policy settings.

Delivering sustainable outcomes is a complex undertaking that challenges the conventional approaches of government and demands a new way of working collaboratively rather than in silos. To remain globally relevant and competitive, it is essential that Australian governments at all levels move as quickly as possible towards a more integrated, collaborative approach.

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In cities all over the world people are facing the same challenge, how to accommodate growth, maintain appropriate economic vitality, community health and well being, whilst mitigating and adapting to climate change. Of course regional/state and central/federal governments around the world also understand this challenge – but it seems that only a few nations have overcome the governance impasse, and found a way of achieving policy alignment and the appropriate enablers so that all three levels of government can work together. At the City of Sydney, in the absence of clarity from above – we decided we would work out exactly how we would tackle sustainable city planning and see how far we could get by managing up.

We decided that in order to become a credible and capable partner in change – we needed to do the work, have the evidence and build our capacity. So with a great deal of help we developed our Sustainable Sydney 2030 plan. Essentially we have taken it upon ourselves to be the mediators of change – which is probably the most important thing Local Government can provide – but it is extremely difficult in an unaligned, or absent, policy framework.

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Monica Barone
CEO, City of Sydney
February 2011

A low carbon economy should incentivise business R&D, innovation and investment in new technologies. However, a carbon price must also be set that accounts for the needs of smaller businesses and emissions-intensive trade exposed (EITE) industries.



A PRICE ON CARBON

Consult Australia believes that certainty on the role of carbon within the economy must be achieved. We recommend as a first priority that the Australian Parliament achieve a mechanism to put a price on carbon emissions within the next 12 months, for implementation before the end of the next electoral cycle. To be effective, a price on carbon must be set at such a level that it achieves the behavioural changes required to achieve a more sustainable future. For example, from a design perspective a price on carbon will drive low carbon solutions through cost benefit analysis and the demand for value for money outcomes. A low carbon economy should incentivise business R&D, innovation and investment in new technologies. However, a carbon price must also be set that accounts for the needs of smaller businesses and emissions-intensive trade exposed (EITE) industries.

Businesses that are typically the most affected by administrative burdens and compliance costs are small to medium enterprises (SMEs), which make up the majority of Australia's business sector. SME's will be affected by a price on carbon through the supply chain by higher prices for electricity, fuel and some goods. It is apparent that some SMEs will struggle more than others to find the resources and expertise to cope with additional costs. Consideration should be given as to how assistance can be provided for the SME sector by considering a mix of incentives and assistance measures to drive behavioural changes which embrace low carbon business practices.

Emissions-intensive trade-exposed industries will also face a great number of challenges. We believe that it is appropriate to offer assistance to EITEs but, as with the SME sector, it is important to consider assistance in a mix of incentive-based measures which have the ability to drive behaviour change towards more sustainable and climate friendly practices.

However, a price on carbon will not, by itself, achieve the industry transformation necessary to achieve a low carbon economy. We therefore recommend that a wide lens be cast on the opportunities that exist in moving to a low carbon and more sustainable future. This requires us to acknowledge that responding to climate change is but one part of achieving a more sustainable future. In this context, high level governance reform must be prioritised to establish a clear mechanism to build consensus amongst stakeholders, evaluate policy initiatives, and achieve truly sustainable outcomes.

We propose the establishment of a Commission for a Sustainable Australia (CSA). The development of the CSA will be a turning point for Australia, transforming our existing approach, establishing a clear commitment, and cultivating a new culture supporting a sustainable future.

A COMMISSION FOR A SUSTAINABLE AUSTRALIA

- > Who do governments turn to for authoritative, independent advice on sustainability?
- > What single government agency or authority is responsible for evaluating the costs and benefits of policy proposals aiming to achieve sustainable outcomes?
- > Does the current advice to governments on issues associated with sustainability come with the assurance that policies are avoiding duplication, are nationally consistent, and will achieve the desired outcomes as efficiently as possible?

Australia's policy responses to climate change and the wide range of initiatives implemented in pursuit of a more sustainable future are currently fragmented across governments and agencies. Our current approach is susceptible to red tape and a tick-box culture that inhibits tangible outcomes.

We propose the establishment of a Commission for a Sustainable Australia (CSA). The development of the CSA will be a turning point for Australia, transforming our existing approach, establishing a clear commitment, and cultivating a new culture supporting a sustainable future. We believe the establishment of this body is a necessary next step to help overcome the barriers outlined in Chapter 2, and provide the governance required to implement more detailed policy reform.

The Commission would establish its own remit against high level goals for a sustainable Australia. Reporting to the federal Minister for Sustainability, this body would:

- > Integrate the agreement for a price on carbon within a broader sustainability framework.
- > Provide a vehicle for collaboration and alignment between research institutions, governments, consulting professionals, industry and community organisations.
- > Evaluate, develop and advocate policy solutions and champion reforms that safeguard Australia against climate change and achieve genuinely sustainable outcomes.
- > Be empowered to provide authoritative recommendations that, by virtue of the Commission's reputation and integrity, garner wide community support.

Including leading representatives across disciplines—from industry, academia, government and the community— this body will have a dedicated funding stream providing the necessary resources to support a leading role in holistic policy development, research and evaluation. The individuals nominated to representative positions on the CSA will be crucial to its success. Government cannot achieve the scale of change required of its own accord. Individuals nominated to the CSA will represent expert opinion, drive support, and champion reform across their sectors, in collaboration with their peers and in partnership with government.

The strength of this body will lie in the integrity of its advice. Performing a much needed 'critical friend' role to provide evidence-based policy development through independent research, the CSA will become an essential resource for government. Through best practice policy development the CSA will remove challenges for government departments that currently both develop policy and manage program implementation. The objectives set for the CSA would be accomplished through rigorous cost benefit analysis that identifies the most efficient means to achieve maximum value for money for the taxpayer.

A Commission for a Sustainable Australia will be well positioned to drive: innovation and new technology pathways for a sustainable future (see the box on the following page); a National Sustainability Framework; and a National Adaptation Plan for Action. These essential initial projects are set out in more detail in Chapters 5 and 6 below.

Incentivising innovation and new technology pathways

History shows us that innovation will extend accepted boundaries and lead to the emergence of new technologies. Innovation—whether in product form, system or delivery methodology— will be the key feature of future technological pathways responding to climate change. A Commission for a Sustainable Australia would perform a vital role in incentivising innovation and identifying new technology pathways to support sustainability. The CSA would:

Develop policies to incentivise innovation and new technology pathways

- > A price on carbon will support behavioural change leading to innovation and new technologies. But more ambitious change is required. The CSA will be charged to identify additional opportunities for regulatory reform and stimulus that facilitates Australia's competitive advantage through global leadership in the development of knowledge-intensive green industries and technology.

Set standards for 'cradle to grave' assessments of new technologies

- > There is no doubt that 'green' technologies have generated a high level of opportunism, resulting in the promotion of products or systems that have not been fully understood or tested. In some instances there is widespread misinformation, risking the integrity of other technologically valid solutions. A longer-term view needs to be taken when evaluating the sustainability (in the broadest sense) of new technologies. Increasing competition to achieve industry benchmarks and ratings for sustainability can distort the market and confuse the end consumers.
- > Standards and guidelines need to be developed to provide a uniform approach to assessing sustainability that accounts for the life cycle cost (Net Present Value based on capital and operating costs over a defined period) of a given product or technology as well as life cycle analysis (evaluating aspects such as embodied energy).

Bridge the knowledge gap between innovators and operators

- > New technologies responding to climate change often require more technologically complex implementation and operation. In this context, to ensure success it is vital that the end-user of the technology is included in the concept and design phases of its development.
- > Similarly, sufficient education and training must be made available for end-users to learn about new technologies and their applications. For example facility managers are increasingly required to operate far more technically complex Heating Ventilation and Cooling (HVAC) and lighting systems. It is essential that the knowledge gap between the designers and the operators is as narrow as possible.
- > Universities and research organisations have an important role to play in this space. The time lag between research and the implementation of a solution on the ground needs to be compressed. Research organisations must operate in partnership with industry to develop and test systems and/or products prior to them being implemented.

Learn from unsuccessful technology

- > There needs to be greater dialogue in industry and in government on the case histories of technologies that have not delivered the anticipated results. A renewed research effort should focus on considering the causes of technology failures, and lessons learned for those involved. The results of this research should be communicated widely to those involved in current research, development and implementation.

COMMUNITY ENGAGEMENT

It will not be possible to achieve the changes advocated throughout this paper without the support of an informed community—hence our recommendation that community representatives be included on the CSA and supported through resources that achieve genuine consultation. Currently, the breadth of public debate on appropriate responses to climate change and policy initiatives seeking sustainable outcomes has clouded, rather than clarified these issues in the public eye. Community expectations about the production, transformation and use of energy and technology—and the social, environmental and economic impacts of these—need to be taken into account.

Community engagement in this context will only be successful where coupled with community education and an improved understanding of the challenges we face and the responses required. Community input should be sought using a wide range of tools and approaches. Polling and surveys are both informative and consultative; social media provides new opportunities to target specific demographic groups; and representative bodies can take a number of different forms depending on the issues being considered (e.g. the Australian Government Classification Board). Additionally, community engagement provides an important and necessary feedback loop for policy development: providing an opportunity to ‘road-test’ policy prior to implementation.

Generating business support

As community debate and education continues into the future, support must also be fostered within the business community, particularly within small to medium enterprises (SMEs), which make up the majority of Australia’s business sector. SMEs are strongly affected through the supply chain where government policy results in higher prices for electricity, goods, fuel and costs associated with adaptation. It is apparent that some SMEs will struggle more than others to find the resources and expertise to cope. Government must consider how assistance can be provided for the SME sector by considering a mix of incentives and assistance measures to drive behavioural changes which embrace low carbon business practices.

Closing the knowledge gap

Effective responses to climate change and incentives fostering more sustainable development are generating rapid changes. These in turn put increasing demands on our education and training system not just to keep pace, but to act as a catalyst for change. Our education system must close the knowledge gap between social needs, policy goals and business imperatives. This will demand ongoing investment in education and training, both of individuals directly involved in the generation of solutions (such as professionals consulting in the built and natural environment), and those required to properly implement those solutions in business and the community.

South Korea Green Growth Initiative

In 2008 the Government of South Korea announced a long-term plan for low carbon green growth as a central feature of President Lee Myung-Bak’s agenda. The Presidential Committee on Green Growth (PCGG) draws on experts from policy, finance, culture and the arts as well as ‘green growth’ related fields of climate change, energy, green technology and green industry. PCGG leads the Government’s reform agenda through an extensive green stimulus package (some \$38.1 billion USD, or four per cent of GDP to be implemented from 2009-2012).

A five-year plan for Green Growth supports the stimulus and seeks to embody three strategies of: tackling climate change and securing energy independence; creating new growth engines; and improving the quality of life and strengthening the status of the country.

www.greengrowth.go.kr

A National Sustainability Framework would build on the complementarities of programs in the economic, environmental and social spheres to create a cohesive agenda for sustainability operating across governments.

NATIONAL SUSTAINABILITY FRAMEWORK

In many instances, clear, decisive and effective policy is being implemented in parts of Australia. Several states have made measurable progress in many areas of sustainable development, carbon mitigation and climate change adaptation. At an intergovernmental level the Council of Australian Governments' (COAG) agenda for cities should be applauded insofar as it provides a national framework to assess the performance of our cities in achieving sustainable outcomes at both an economic, social and spatial level. Similarly, the National Strategy on Energy Efficiency and the Australian Government Green Lease Schedule are also positive steps. However, a more comprehensive approach is required that coordinates these initiatives alongside further more ambitious reform on a national level.

A National Sustainability Framework would build on the complementarities of programs in the economic, environmental and social spheres to create a cohesive agenda for sustainability operating across governments. A National Sustainability Framework would achieve a number of objectives:

- > Enforce guidance systems and decision-making with an explicit consideration of environmental, social and economic impacts, even in situations when it is difficult to evaluate;
- > Provide tools that help identify the environmental, economic and social costs of policy options;
- > Provide consistency across states and territories in the implementation of sustainability requirements;
- > Fully involve local and regional authorities, non-government organisations and industry;
- > Provide effective integration of national, state and local policy and planning;
- > Adopt long-term timeframes including intergenerational principles and indicators;
- > Identify and deter breaches of framework requirements;
- > Provide a clear strategy for monitoring, evaluation and assessment using clear and transparent indicators;
- > Apply positive state policy at a national level;
- > Mandate government leadership of sustainable outcomes through model government procurement and processes for approval and decision making.

The development of a National Framework should be led by the Commission for a Sustainable Australia and report through COAG.

United Kingdom National Strategy for Sustainable Development

The UK National Strategy for Sustainable Development - Securing the Future (2005) commits to:

'pursue the goal of sustainable development to enable people to satisfy their basic needs and enjoy an improved quality of life without compromising the quality of life for future generations, in an integrated way'.

The Strategy encourages a productive and innovative economy, a just society, the protection and enhancement of the physical and natural environment, efficient use of resources and a clear understanding and commitment to sustainable development. The Strategy includes the following key elements:

- Sustainability Principles
- Sustainability Indicators (international, national and regional)
- Government Buying Standards
- Priority Areas
- Partnerships for Sustainable Development

The UK Government has stated that sustainable development is relevant to the policies and operations of all government departments and bodies. Every department has created a Sustainable Development Action Plan detailing its commitments.

A nationally consistent adaptation plan needs to be developed, and kept constant across political cycles, to protect Australia against the threat of damage from climate change, and to help us manage other demographic and economic changes already forecast

FACILITATING ADAPTATION

Considering that *'some measures of climate change are tracking at or above the worst case scenarios considered possible just a couple of years ago'* (CSIRO, 2009), international consensus unreservedly *'stresses the need to establish a comprehensive adaptation program'* (UN Climate Change Conference 2009). Such action would look to avoid the widespread social, economic and environmental costs climate change would cause.

It is generally accepted by experts that even if a global mitigation agreement is reached, and successfully implemented, adaptation will be required to maintain the quality of life we currently enjoy. To be successful adaptation will entail significant public and private investment over a considerable period of time. It is no longer acceptable for cherry-picked and politically beneficial recommendations to be selected from climate change reviews. A nationally consistent adaptation plan needs to be developed, and kept constant across political cycles, to protect Australia against the threat of damage from climate change, and to help us manage other demographic and economic changes already forecast (for example, population ageing).

Risk management has been identified as the predominant approach for adaptation. However, due to uncertainties with change, the fundamental information for a risk management approach is not available. For example, in relation to climate change, the level of mitigation, extent of change impacts, and probabilities of these impacts occurring cannot be quantified. Without this information, a full risk management analysis cannot be completed. Therefore, an overall precautionary approach needs to be relied on, in conjunction with risk management principles.

National Climate Change Adaptation Research Facility (NCCARF)

Consult Australia strongly supports the National Climate Change Adaptation Research Facility (NCCARF) recognising the potential value of interdisciplinary collaboration in the area of climate change adaptation.

The NCCARF role is to: identify critical gaps in the information available to decision-makers; synthesise existing and emerging national and international research on climate change impacts and adaptation; develop targeted communication products; and initiate integrative research against national priorities is vital in informing our approach to adaptation. NCCARF complements activities and projects currently underway in other institutions across Australia and demonstrates the potential for interdisciplinary collaboration, and the results this can generate

As adaptation requirements become more generally accepted, planners and designers, rather than climate change experts, are increasingly being relied on to include adaptation considerations in new design accounting for 'likely' climate change scenarios. These scenarios are redefining the services expected by clients and pointing to a rapid need for clear parameters against which to measure project designs.

Without clear guidelines, liability for future climate change impacts may be unintentionally placed on the designer or planner of the project. Without clearer policies, increasing levels of liability and ambiguity will push engineers, designers and architects to over-compensate and therefore over-design for protection against this and increase the costs of their services, and project construction costs. Continued collaboration between the private sector, the scientific community, and government is essential to establish clear parameters, on which to base industry standards for consulting in the built and natural environment.

Adaptation will take a long time to plan and implement, but needs to pre-empt forecast changes to our existing way of life.

A NATIONAL ADAPTATION PLAN FOR ACTION

It is essential that a nationally consistent adaptation plan for action is developed within the next 12 months. A National Plan will ensure that the standard of adaptation, and therefore protection, is sufficient in all areas of Australia. The requirements for adaptation are immense, and it is unreasonable to expect that we will be able to afford the cost of all action. Therefore, planning is vital to identify the cost of adaptation action against the potential cost of no action, to prioritise projects and initiatives and support evidence based policy development.

A National Adaptation Plan for Action will need to:

- > Establish how prepared the public and private sector are;
- > Establish value-at-risk in recommending scenarios outlining the impact of climate, economic and demographic change;
- > Include adaptation considerations in planning and construction approvals;
- > Consider changes to urban infrastructure;
- > Adjust regulatory and policy frameworks to account for required adaptation requirements;
- > Review social services and changing community needs;
- > Provide clear recommendations for the modification of planning frameworks, legislation and design guidelines; and
- > Prioritise the preservation of ecosystems which do not have the means to adapt.

Adaptation will take a long time to plan and implement, but needs to pre-empt forecast changes to our existing way of life. It cannot be a reactive policy, but must progress sufficiently to permit its evolution and the identification of lessons learned. In responding to climate change, adaptation to our changing natural environment needs to commence well before the full effects are known.

Prepare, Protect, Adapt and Innovate for Climate Change

In preference to the general classification of climate change adaptation, governments need to segment research and action into four distinct areas. All four need to be addressed individually, but together are all essential elements of a prosperous future for Australia:

Prepare

Climate change adaptation is still considered a distant and innocuous risk. Private and public institutions need to be educated, their preparedness established, and resources provided to assist them in becoming prepared. Adaptation needs to be considered now in Environmental Impact Assessments, local planning procedures and included through other appropriate standards.

Protect

Immediate action for protective measures on many assets—natural and human made—which will be under direct threat if climate change predictions eventuate. Either natural or built assets should not be lost by accident.

Adapt

Action needs to identify ways we can adapt to climate changes as they eventuate to minimise the impacts of climate change on Australia. In many instances there may be no alternative than to retreat or abandon in which case there will be emerging issues related to insurance and compensation.

Innovate

In order to maintain and improve the quality of life in Australia, and increase prosperity for the long term, we need a concerted effort to develop innovative responses. Government initiatives and incentives will be required to reduce the risk for the private sector and provide return on investment for government.

...while governance reform is taking place, there are a range of initiatives that can be progressed now to ensure that we continue to minimise risks and seize the advantage from our existing opportunities.

PRACTICAL ACTIONS FOR QUICK WINS

The delivery of a Commission for a Sustainable Australia, a National Sustainability Framework and a National Adaptation Plan for Action will provide the governance required to develop more effective policy and implement better programmes that move Australia towards a sustainable future.

However, while governance reform is taking place, there are a range of initiatives that can be progressed now to ensure that we continue to minimise risks and seize the advantage from our existing opportunities. There is no shortage of leading thinking providing possible solutions to many of the challenges and barriers we face. Work undertaken by the Australian Sustainable Built Environment Council (ASBEC) and its member organisations—including the Australian Institute of Architects, the Green Building Council of Australia and the Property Council of Australia—provide authoritative, evidence-based policy supporting clear mandates for action in a range of areas.



BETTER WATER MANAGEMENT

The efficient use of water is a widely documented requirement and challenge for cities in Australia. Severe water shortages in the past have necessitated regulatory interventions to force a conservative approach to water use by the public. These water regulations have been widely adopted and accepted by the public and become part of the Australian culture. However, in some states, when the water shortage recedes, the regulations are relaxed and the progress made for behavioural change is lost and the culture gradually reverts back to higher water consumption. Relaxing these requirements increases the chances that more stringent regulations will be required in the future.

In Australia, the provision of water has evolved to include expensive, energy-intensive and potentially environmentally damaging desalination plants. It is important to ensure that these facilities are fully tested for maximum usage, that they operate to meet water requirements, and their existence does not incentivise the use of higher levels of water to justify the initial political decision to adopt desalination as an easy, short-term solution. Desalination facilities should remain flexible in their arrangements to allow stepwise scale up, or down as medium term water availability trends change.

State or federal intervention may be required to support local government in regions without the financial or technical capability to implement the required systems, for example, through the development of recycling centres and grey water reuse schemes.

RETHINKING WASTE & THE MARKET FOR RECYCLABLES

Management of waste (monitoring, collection, transport, processing, and disposal) is fundamental to ecologically sustainable development. Effective waste management strategies assist in minimising or avoiding adverse impacts on the environment and human health, while also providing scope for economic development and improvements in the quality of life.

Australia is a relatively large producer of household waste. The Organisation of Economic Co-operation and Development (OECD) Key Environmental Indicators Report in 2008 places Australia at seventh in municipal waste production per person. The readiness of the public to separate recycling from their general waste stream displays a willingness to reduce the waste being sent to landfill. A concerted effort is now required to educate the community and change the culture of waste production across Australia. The government needs to actively promote innovative technologies and cleaner processes, developing new remediation techniques, and educate the private and public sector on understanding waste stocks and flows.

Resource recovery is being identified by local government as a core area for improvement and financial mechanisms such as landfill levies are being implemented to facilitate the reduction of waste to landfill. However, timelines for improvement need to be established to ensure that consistently high quality waste management is being applied across the country. For example, enforcing the separation and composting of food waste and use of refuse as fuel. State or federal intervention may be required to support local government in regions without the financial or technical capability to implement the required systems, for example, through the development of recycling centres and grey water reuse schemes.



A NATIONAL WHITE CERTIFICATE SCHEME

White certificates—widely implemented internationally—provide businesses and a range of organisations with certification that a specified reduction of energy consumption has been achieved. As outlined in the Australian Sustainable Built Environment Council (ASBEC) Second Plank Report, a National White Certificates scheme could apply energy efficiency targets to electricity retailers. They would then be given flexibility in achieving this target by either implementing their own efficiency arrangements or purchasing efficiency certificates based on the performance of electricity customers in raising efficiency beyond a pre-determined benchmark. These arrangements essentially make energy efficiency a tradeable asset, and provides the building sector with an incentive to invest in additional energy efficiency measures.

Several states are in the process of implementing variants of a white certificate scheme: NSW's Greenhouse Gas Abatement Scheme (GGAS) was established in 2003. Having a national scheme that applies to residential and commercial elements of the building sector could minimise differences between the states, and enable a broad market on a larger, more efficient scale. GGAS requires NSW electricity retailers and certain other parties, collectively referred to as benchmark participants, to meet mandatory targets for reducing or offsetting the emission of greenhouse gases from the production of the electricity they supply or use.

GREEN DEPRECIATION

The Gillard Government's substantial investment in Tax Breaks for Green Buildings, commencing from 1 July 2011, is a welcome step towards a systematic approach incentivising building adaptation and retrofit to improve energy efficiency. Through this measure, businesses that retrofit certain commercial buildings to significantly improve energy efficiency between 1 July 2011 and 30 June 2015 will be able to apply for a one off bonus tax deduction.

A longer-term commitment to Green Depreciation of investment in our current building stock provides one of the few ways to influence investment in existing buildings. Targeting these buildings is essential to obtain a substantial change in the building sector (given that new buildings represent only two to three per cent of the stock of buildings). Analysis suggests that green depreciation would only need to bring forward a relatively small proportion of refurbishment investment to make a significant reduction in energy demand and greenhouse gas emissions (ASBEC Second Plank Report).

Alongside investments to improve the energy efficiency of our building stock, Consult Australia supports the development of the Australian Green Infrastructure Council (AGIC) rating scheme for infrastructure, and the widespread adoption of Green Star and the National Australian Built Environment Rating System (NABERS) as essential components supporting the development of a more sustainable built environment.

Consult Australia looks forward to facilitating discussions with government, industry and community representatives to identify how these recommendations might be implemented, and what further changes are required in the months and years ahead.

NEXT STEPS

These recommendations represent a first step to encourage a broader discussion about the reforms required now to achieve a sustainable Australia. Consult Australia looks forward to facilitating discussions with government, industry and community representatives to identify how these recommendations might be implemented, and what further changes are required in the months and years ahead.



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