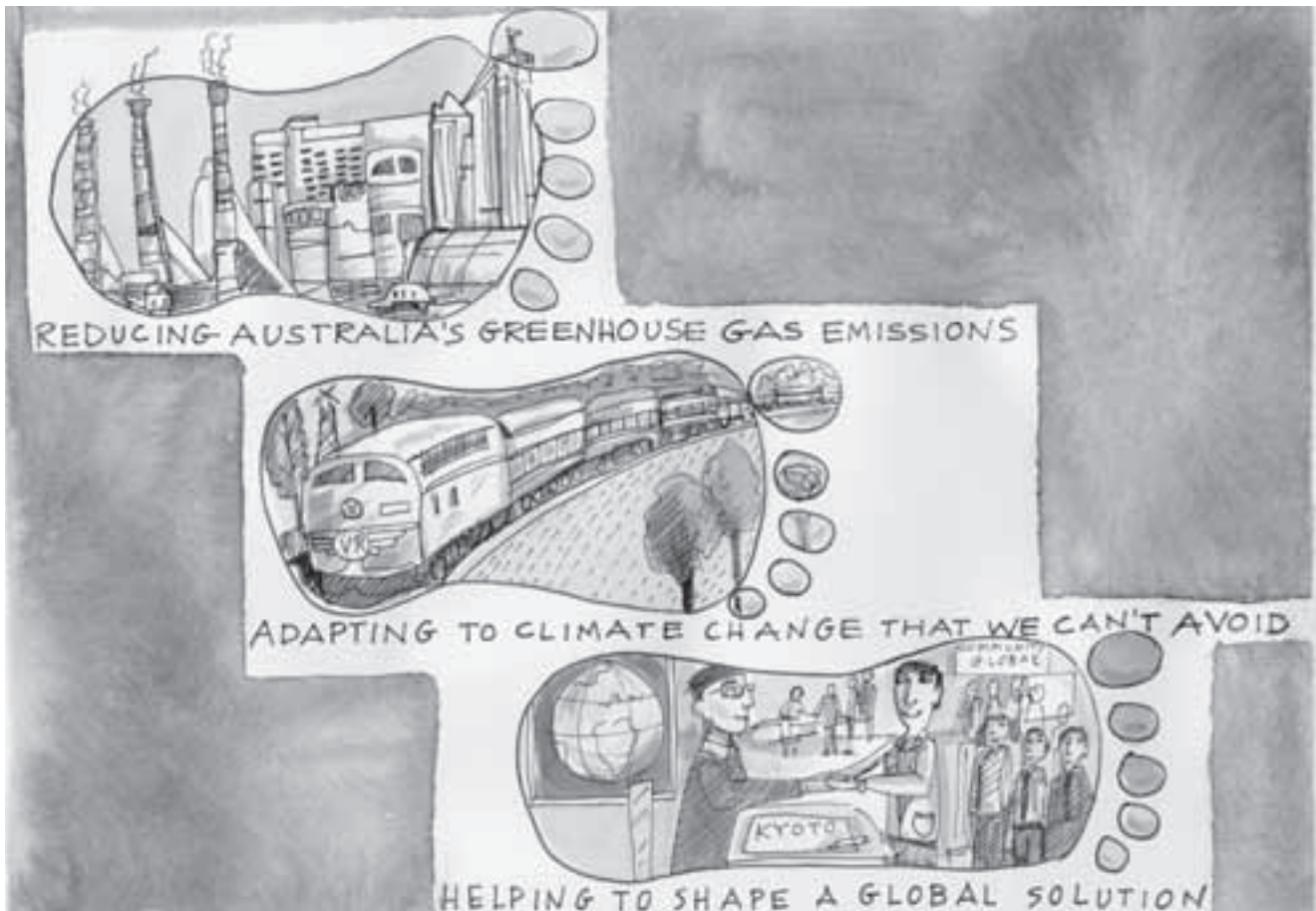


Climate change policy — driving transformational change

Martin Parkinson



Despite common perceptions, Australia is not alone at the head of the pack in responding to climate change. Yet, because of our unique natural environment and industrial structure, Australia is especially vulnerable to the impact of climate change and to poorly designed policy responses implemented elsewhere. This means it is in our national interest to pursue an effective global solution now and to begin the necessary domestic transformation.

Climate change is a global issue, requiring a global solution. It represents a unique challenge for Australia and the world, with Professor Ross Garnaut¹ describing it as a ‘diabolical policy problem — harder than any other issue of high importance that has come before our polity in living memory’.



The Australian Government's climate change framework has three key pillars:

- reducing Australia's greenhouse gas emissions;
- adapting to climate change we cannot avoid; and
- helping to shape a global solution.

These three pillars recognise that Australia needs both to contribute to finding an effective global solution and to prepare now to manage the transition to a low carbon future. This approach is consistent with the findings of economic modelling which suggest that modest near-term mitigation enhances global welfare in the longer term. It also recognises that today's economic, social and environmental decisions have the potential to increase Australia's exposure to future climate conditions in ways that are substantially different from those experienced to date.

In recent months the Government has released its Green Paper on the Carbon Pollution Reduction Scheme and undertaken extensive consultation around scheme design. Detailed modelling of possible future emissions reduction trajectories for

Australia will be released shortly, to be followed by final details of the scheme, the medium-term emissions reduction target, and the design details of the expanded Renewable Energy Target. Although they will not altogether solve the diabolical

atmosphere that is important — not where they come from. Put simply, it makes no difference whether carbon dioxide and other greenhouse gases (often referred to in terms of their carbon-dioxide equivalent or 'carbon') come from Melbourne or Moscow

Climate change is likely to affect most Australians, particularly as a result of the increasing severity and frequency of extreme weather events. Unmitigated climate change brings increasing risk to coastal buildings, roads, ports and other infrastructure from storm events and sea-level rise, as well as localised coastal and flash flooding and extreme wind damage.

policy problem Professor Garnaut has identified, these and other initiatives will help drive transformational change in the Australian economy, providing business with clear price signals that will influence research and development, capital investment and production decisions over the decades ahead.

Why should Australia act on climate change?

Climate change is a global issue because it is the concentration of greenhouse gases in the Earth's

— the impact on Ottawa will be the same.

While the United States and China are the world's largest emitters, Australia contributes around 1½ per cent to total global emissions, making us the 12th largest globally. Although small in aggregate contribution, we are among the heaviest emitters in the world on a per capita basis, reflecting our emissions-intensive industrial structure and the vast distances across which our population is distributed.

These factors often lead people to ask why we should take early action if this is a global problem. Why shouldn't we wait for others to do the heavy lifting?

First, we should dispel the myth that Australia is somehow alone at the head of the pack in responding to climate change. Some 27 countries in Europe — both in the European Union and non-EU countries such as Iceland and Norway — are already engaged in emissions trading. The New Zealand emissions trading scheme commenced on 1 January this year, while Japan is discussing the introduction of a full-scale domestic scheme in 2010 or 2011, following earlier trials of voluntary schemes. Similar discussions are underway in Korea and Taiwan. The Canadian Federal Government and some 28 US states and Canadian provinces are also working to introduce emissions trading schemes, and both Democrat and Republican US Presidential candidates have committed to introducing a cap-and-trade scheme should they be elected. Even China, while not adopting emissions trading, is taking efforts to reduce emissions in some sectors.

Second, given our unique natural environment and industrial structure, Australia is especially vulnerable among the developed economies to the impact of climate change and to poorly designed policy responses implemented elsewhere. This vulnerability means that it is in our national interest to pursue and seek to shape an effective global solution now in order to protect our national interests, and to begin the necessary transformation of our economy.

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the costs of action — domestically and internationally. It sees early action to place our economy and society on a low-carbon pathway as opening up new growth



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By 2020, significant loss of biodiversity is projected to occur at some of our most treasured environmental sites, for example, through increased coral bleaching in the Great Barrier Reef. Changed rainfall patterns and drought are expected to intensify water security problems and reduce the production of key commodities such as wheat, beef and sheep by 11–29 per cent by 2030. The viability of rural communities in areas such as the Murray–Darling Basin could be under threat. The potential impact of climate change cuts across all sectors of the economy and all of Australia's regions, cities and communities.

The Government believes the cost of inaction on climate change exceeds

opportunities and minimising the risk for future generations.

Reducing Australia's emissions

The Government's main vehicle for driving a reduction in Australia's emissions will be the Carbon Pollution Reduction Scheme, which comprises emissions trading and support mechanisms to assist adjustment to the introduction of a carbon price. The Green Paper, released on 16 July 2008, canvasses options and preferred approaches on issues such as the industry sectors to be covered and how emission caps will be set. The Green Paper has provided a platform for extensive consultations with industry, community groups and other stakeholders, the results of which will be reflected in the final design of the scheme.

The introduction of carbon trading represents a fundamental economic reform, ranking alongside the market

deregulation of the 1980s. The Government recognises, though, that the decision to restrict emissions below business-as-usual levels involves costs. For the first time, we are valuing an item — carbon — that had previously been regarded (mistakenly) as free.

Yet, focusing on the costs of action is only part of the story. The costs of inaction exceed the costs of action, and the failure to act raises significant risks for Australia's future.



Because costs have arisen from the decision to reduce emissions below what they would otherwise have been, actions by all levels of government and by business over the past decade have already imposed costs on the economy. Many of these costs have been hidden, and the abatement achieved has been limited — a continuation of existing approaches cannot deliver the emissions reductions that will be needed over coming decades except at great cost to the economy. The decision to introduce the Carbon Pollution Reduction Scheme will

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make abatement costs explicit and, by using the market to find the cheapest sources of abatement now and into the future, ensure we achieve our emissions reduction goals at least cost to Australia.

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However, emissions trading is not a 'silver bullet'. It needs to be complemented by policies that reinforce its price signal and address continuing market failures. Market failures typically occur in the areas of research, development and demonstration of new technologies, energy efficiency and network systems.

Developing and implementing measures that truly complement the scheme's operation will be challenging and require a level of vision that is often not easily achieved within the constraints of the political environment. To help with this, the Government has undertaken a review of its own climate change mitigation policies, the Wilkins Review, to identify what can be abolished or phased out with the introduction of an explicit carbon price, and where there might be gaps in the existing suite of policies. The Council of Australian Governments has been developing a set of principles on the key determinants of complementarity and, hopefully, the states and territories will undertake exercises similar to the Wilkins Review within their own jurisdictions.

The Carbon Pollution Reduction Scheme and the Government's wider climate change policy framework will also create new opportunities for Australia — the need to abate will drive research and investment into new low-emissions technologies, opening up opportunities for existing and new growth industries. This, in turn, will create a demand for new skills and thus new jobs for Australians.



Adapting to climate change

Coincident with the Carbon Pollution Reduction Scheme, the Government will also develop and implement an equally important adaptation agenda to help Australia cope with the climate change that is already unavoidable.

Work on adaptation, including adaptation science, is in its infancy in Australia, as in most other countries. While our knowledge about the geographically localised impacts of climate change is inadequate, there is a need to start including adaptation in our planning even in the absence of full information.

Many decisions being taken now involve very long-lived assets — buildings, roads, homes and power stations. Failure to respond now to the growing climate stresses that these assets will face in the future would run the risk of making it more costly to adapt to future climate developments.

A planned approach to adaptation allows for changes in line with natural replacement cycles and

avoids costly retrofits or the abandonment of these assets before the end of their otherwise useful lives.

Planning now for climate change, and its potential risks, can help ensure Australian industries and communities are well placed to deal with the future. In some cases, even relatively simple measures could yield both short and long-term benefits.

Helping to shape a global solution

Australia has a strong interest in accelerating global action both to reduce the risks of adverse impacts from climate change and to reduce the costs of our mitigation efforts.

Our influence in international climate change negotiations is likely to be affected by what we do at home. Importantly, the introduction of an effective market-based carbon reduction policy in Australia would enable us to demonstrate the success of this policy approach to other countries, and this would also enhance Australia's economic welfare if it were adopted more widely.

A sustainable global solution will require actions by all major emitters, developed and developing. Australia is committed to an international framework in which advanced economies adopt binding economy-wide emissions reduction targets with efforts comparable to





ours, and where major developing countries make binding commitments on mitigation actions.

Global agreement will, of necessity, require stronger action initially by the developed nations. This reflects the relatively higher levels of per capita emissions in developed compared with developing economies and the significant divergences in income levels.

However, it will be impossible to stabilise the climate without a significant contribution from developing countries. Global emissions are increasingly being

driven by developing economies, which are projected to account for over three-quarters of the growth in carbon dioxide emissions to 2030.

Any viable global solution to climate change must therefore support the aspirations of developing countries to continue to raise their standards of living, while helping find less carbon-intensive pathways to development success.

Finally, it is in Australia's interest to shape the emerging carbon market. While we have to be realistic about our influence on the big decisions such as global emission

successfully operating our own emissions reduction scheme will help boost Australia's influence in these discussions.

We must be realistic, though, about what can be achieved in any one negotiation. Historically, there have been sharp differences between developed and developing countries in global climate change negotiations and gaining commitments on the part of developing countries to restrain their emissions growth is likely to require technology transfer, financing and investments from developed countries.



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reduction targets, a middle power can play a key role in designing the mechanics of the international system. Being actively engaged in designing and

Successful development of a comprehensive response to climate change is unlikely to come through a single breakthrough but will involve a sequence of international

agreements that incrementally move us towards deep cuts by all major emitters.

In summary

The impacts of climate change in Australia will touch all aspects of our way of life, our economy and our environment. Responses to climate change will involve cross-cutting issues and require new approaches to policy making domestically and internationally. The difficulties inherent in such wide-reaching reform only emphasise the importance of utilising all of the economy's skills — from business, academia, government and the wider community — to help achieve the transformational change required at home and to push for a truly effective global response. ■

ENDNOTE

- ¹ Professor Ross Garnaut was author of *The Garnaut Climate Change Review*.

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