

‘Greening the Antipodes’? Environmental Policy and Politics in Australia and New Zealand

TON BÜHRS

Lincoln University

AND

PETER CHRISTOFF

University of Melbourne

Processes of globalisation, initially in the form of European colonisation, have fundamentally shaped the environmental challenges faced by both Australia and New Zealand. The common heritage and proximate geographical position of these two countries explain many of the similarities in their environmental institutions and responses, and international interventions on environmental issues. But there are also important differences between the countries in environmental performance and their engagement with globalisation, differences for which disparities in domestic socio-environmental, economic and political-institutional factors can provide part of an explanation. The political-ideological orientation of governments appears to be one of the more significant factors shaping the countries’ environmental development and policies, nationally and on the international stage.

Introduction

The globalisation of environmental impacts and of institutional and cultural responses to those impacts has a long history, one which begins well before the late twentieth century. The nature of environmental globalisation has also changed significantly over time. Initially it was made up of the localised environmental impacts of global economic, cultural and political forces. To these have been added recent, more truly global environmental problems that are products of the intensification of industrial production and consumption around the world.

Ton Bührs is a Senior Lecturer with the Environmental Management Group in the Environment, Society & Design Division of Lincoln University, where he teaches and researches environmental policy. Peter Christoff is Coordinator of Environmental Studies at the School of Anthropology, Geography and Environmental Studies, at the University of Melbourne, and also Vice-President of the Australian Conservation Foundation. He has published widely in the area of environment policy, climate change and global ecological governance.

The rise of 'modern environmentalism' in the 1960s was also very much an international phenomenon. New forms of environmental concern, writing and action have spread across much of the globe and have become sufficiently strong to cajole governments into creating new environmental laws and agencies.

The dynamic of environmental globalisation has been reflected also in a rapid increase in the number of multi-lateral environmental agreements (MEAs) from 25 in 1960 to more than 500 at present. Many treaties, for instance the Climate Change Convention and the Basel Convention on trade in hazardous wastes, undergo periodic refinement through conferences of their parties, encouraging ongoing changes in national laws and regulations. From the release of the World Conservation Strategy in 1980 to the UN's Brundtland Report (*Our Common Future*) in 1987, and then the Earth Summit at Rio in 1992 and beyond, strategic thinking about national environment policy has also been marked by influence from 'above' and 'beyond'.

Studies and comparisons of national environmental performance increasingly require paying attention to international as well as domestic influences. This article explores the complex interplay of influences that provide the settings for Australian and New Zealand environmental governance, which shape their respective environmental outcomes. First, we identify some of the principal common factors and similar developments. Second, we take a closer look at the environmental performance of both countries, highlighting differences that may be indicative, in part, of different patterns of engagement with globalisation. Third, we explore the importance of underlying, domestic socio-environmental, economic and political factors in explaining these differences. We conclude that the differences in environmental efforts between both countries can be explained only by a combination of interwoven factors, domestic and international, structural and political-ideological, constituting different patterns of engagement with globalisation.

Common Driving Forces, Similar Developments

Many of Australia and New Zealand's worst environmental problems such as land degradation and biodiversity loss stem from the intensification of economic integration in the nineteenth century, from the conversion of indigenous landscapes to suit colonial export-oriented pastoral economies, and from the introduction of exotic species, the fellow-travellers of European expansion (Crosby 1986; Dovers 1994; Rolls 1969). Many Antipodean environmental institutions also have a long transnational history. Laws to protect species, and regulations, departments and agencies governing pollution, urban planning, and resource management, were modelled on European and American initiatives in the late nineteenth and early twentieth centuries. Ongoing transcontinental communication between natural scientists, resource administrators and environmental public advocates was also characteristic of these times (Bonyhady 2002; Christoff 1999; Tyrell 1999).

During the 1970s and early 1980s, in both countries, the push to exploit and export natural resources and to develop cheap sources of power led to a series of struggles over iconic natural landscapes. Catalysts for the local emergence of the new environmentalism included struggles to prevent oil exploration on the Great Barrier Reef, to stop sand mining on Fraser Island, to save native forests from logging for exported woodchips, and, most notably, to save Tasmania's Lake Pedder from being dammed for hydro-power. These campaigns transformed the Australian environment

movement's ideological orientation and practical focus from resource conservation to nature preservation (Hutton and Connors 1999; Bonyhady 1993; Walker 1992). In New Zealand, the proposal to raise the level of Lake Manapouri, one of the country's most scenic lakes, to enhance the capacity of a hydropower station, provoked the first wave of mass environmental protest there. The threat to native forest from government-backed logging led to many a battle (Wilson 1982, 56–62).

Australians and New Zealanders have been actively involved in the evolution of recent international environmentalism. However, environmental awareness and activism in both countries has been marked by a focus on nature conservation and 'wilderness preservation' in the face of globally derived pressures for intensified exploitation of natural resources. Compared to European countries, industrial pollution, the management of waste and hazardous substances, and environmental issues associated with urban planning such as transport congestion and air and noise pollution have received little attention.

This Antipodean contribution to international environmentalism extends to the formal political domain. Australia and New Zealand vie for the title of birthplace of the world's first Green Party in 1972. Both the United Tasmania Party and the New Zealand Values Party expressed an early critique of the dominant materialist culture and development pattern (Dann 1999) and provided initial inspiration for the more successful German Greens. Meanwhile, the reorientation of the Australian and New Zealand environmental movements towards nature protection issues was accompanied and reinforced by the development of an 'ecocentric' perspective by Antipodean environmental writers and theorists, who brought a 'deeper green' view to environmental matters, less 'anthropocentric' in orientation, assigning greater importance to the intrinsic value of the environment (Eckersley 1992; Fox 1990; Hay and Haward 1988).

At the national government level, governments of both countries have also often been active participants in the internationalisation of environmental issues and policies. Australia and New Zealand played key leadership roles in several issues of management of the 'global commons', including the protection of the Antarctic, opposition to whaling, protection of the ozone layer, and of the South Pacific from nuclear pollution. It can be argued, however, that their shared leadership in these issues was governed by a common realist interest in the protection of these countries' own 'backyards' rather than an 'ecocentric' concern about the global environment.

The common interests of both countries in environmental matters are also reflected by their co-operation at the bilateral level. In 2001, the Natural Resource Management Ministerial Council replaced ANZECC, a non-statutory Ministerial Council formed in July 1991 by the amalgamation of the former Australian Environment Council (AEC) and the former Council of Nature Conservation Ministers (CONCOM). The AEC and CONCOM were established in 1972 and 1974, respectively, by agreement between the Australian Prime Minister and the State Premiers. New Zealand was admitted to full membership of the AEC and CONCOM in July 1989. Another example of close co-operation between the countries can be found in the establishment of the Australian and New Zealand Food Standards Authority.

It should be clear that environmental globalisation is neither a uniform, uni-directional or uncontested affair. Australia and New Zealand are not just recipients or victims of globalisation but have actively engaged with the political, economic, ecological and social processes that constitute it. Both countries take an active role

in driving the forces that are behind globalisation and that also affect their environmental policies and performance. Although both countries share some common characteristics in their engagement with both economic and environmental globalisation, there are some important differences. To what extent these differences are accompanied by or lead to differences in environmental performance is the next question to address.

Environmental Performance

Whilst environmental policy developments in Australia and New Zealand share a range of characteristics, there are also some important differences. Some environmental problems have been more prominent in one country than the other, leading to differences in emphasis in the political arena and in policy development. On some environmental issues the governments of both countries have taken different stances, also internationally, indicative of somewhat different patterns of engagement with globalisation.

In Australia, permanent land clearing and water extraction, with their attendant destruction of habitat, have been and remain the greatest immediate and longer-term threats. Clearing accelerated over the decade 1992–2002 and still continues, although the rate has recently declined. It continues to be a significant contributing factor to the decline of native species. Water usage in Australia, the driest inhabited continent, is among the world's highest per capita. There is poor water use efficiency and conservation in the irrigated agriculture, industry and domestic consumption sectors. Total water use increased by 65% between 1985 and 1996–97. Over 25% of Australia's river systems are either close to or have exceeded the sustainable limits of use. These problems have caused water management to be one of the most important issues on Australia's environmental agenda, and have led governments to develop innovative policy responses, such as tradable water schemes.

In New Zealand, land clearing for agriculture has fallen out of government favour since the mid-1980s, when agricultural subsidies were virtually all abolished. The clearing of native bush declined rapidly from the early 1980s, and came to a virtual halt in the 1990s following the government's adoption of the Forest Amendment Act that allows logging of indigenous forests only under approved sustainable management plans. By contrast, water usage and pollution, issues in which agriculture also plays a major role, have been much slower to reach the political agenda in New Zealand. Although many inland aquatic ecosystems have deteriorated for reasons that include reduced flows, use of draw off for irrigation, the expansion of dairy farming, increased fertiliser use and production of sewage effluent, water pollution control remains woefully inadequate, whilst overarching policies for water allocation and use are still in the process of development (TerraNature 2005).

Although mining and its environmental effects have been an issue in both countries, this has been more the case in Australia. In Australia, the mining boom of the 1970s and 1980s led to conflicts over sand mining and uranium mining at critical sites. The Resource Assessment Commission and the national Ecologically Sustainable Development (ESD) strategy were established as government attempts to resolve these battles. Whilst mining for gold and coal in New Zealand, especially in national parks, is the subject of conflict, it has not provoked a similar policy response, and continues to be dealt with on an ad hoc basis.

The most important differences between Australia's and New Zealand's environmental policies and performance, however, lie in their handling of critical global environmental issues, notably nuclear power and climate change. Although nuclear policy, broadly defined, extends into other policy realms including national security, resource development, and human health, it is strongly linked with environmental policy and is a major issue for green politics. Since the mid-1980s New Zealand has been a vociferous advocate of a nuclear-free world. By contrast, Australia has become a major participant in the global nuclear cycle as a uranium exporter, and in the 1980s and 1990s provided America with critical assistance in its global deployment of nuclear arms.

Australia and New Zealand contribute significantly to climate change through their greenhouse gas emissions. Australia uses much more coal for electricity generation than New Zealand, which manifests itself in higher emissions of SO₂ and CO₂ per capita, six times and two times, respectively (OECD 2004b, 40–5, 48–51). At 27.9 tonnes, Australia is the world's highest per capita producer of CO₂ equivalent emissions, while New Zealand is seventh with 14.4 tonnes. Australia, with only 0.3% of the planet's population, is its 10th largest producer of total CO₂ emissions (1.4%) while New Zealand is 20th (0.14%). Both Australia and New Zealand increased their total CO₂ emissions by 22% between 1990 and 2002. This was well above the OECD average increase of 7% (OECD 2004a, 56). Although New Zealand was initially thought to be able to meet its target set under the Kyoto Agreement, recent recalculations reversed New Zealand's expected surplus of carbon credits derived from carbon sinks into a deficit (New Zealand Ministry for the Environment 2005).

Australian and New Zealand governments have taken divergent stances on the issue of climate change. Whereas the New Zealand government has endorsed the Kyoto Protocol, Australia actively opposes it (Christoff 2005). Internationally, unlike Australia, New Zealand sides with most high-income countries in its support for specific and binding targets to reduce greenhouse gas emissions. The Howard government has rhetorically accepted generous emissions targets determined under the Kyoto Protocol but it refuses to make even these targets mandatory and instead continues to expand Australia's economic reliance on fossil fuels using the justification of its comparative economic advantage in coal and gas reserves. However, it should be noted that there is no political consensus on this matter within either country. In New Zealand, some opposition parties, including the National Party, have expressed their opposition to the Kyoto Agreement. In Australia, Labor, in opposition nationally, favours ratification of Kyoto, advocates greenhouse gas emission reduction targets and adoption of alternative energy sources. The New Zealand Labour government has backtracked on the introduction of a carbon tax, as demanded by some of the minor political parties on whose support it has relied since the 2005 election. This is indicative of the strongly contested nature of policies in this area. A change of national government in either country, or sharply deteriorating conditions related to global warming, could well bring about a shift in energy and climate policies.

Australia and New Zealand are among the top 10 nations in terms of resource use, as indicated by their ecological footprint: 7.09 and 8.13 hectares per capita, respectively (Venetoulis, Chazan and Gaudet 2004). In addition, while Australians and New Zealanders produce about the same amount of household waste per capita, just above the average of the 24 countries for which data are available, Australians

are among the world's most wasteful overall, second only to the United States. In keeping with international trends towards growing and inefficient resource use, the volume of waste has been increasing over the past three decades in both countries, despite the growth of recycling. Data on waste and waste management for both countries are incomplete, especially with regard to hazardous waste (OECD 2004a, 166–94).

At a more general level, some differences in emphasis in environmental efforts can also be discerned. Whilst Australian governments have been more active in the development of environmental strategies of various kinds, New Zealand governments have put more effort into reforming environmental institutions. Australia was early to adopt a Biodiversity Strategy and since the 1980s has introduced many other national strategies addressing conservation, greenhouse gases, waste minimisation and recycling, ozone depletion, drought, and water quality. In 1992, the Commonwealth and State governments adopted the ESD strategy, which initially seemed to hold promise as a form of green planning. By contrast, New Zealand was much later with the adoption of a Biodiversity Strategy and many other strategies, and has been a poor performer in green planning (Bührs and Bartlett 1997). Although the adoption of strategies does not necessarily imply an improvement of environmental outcomes, it is significant, even if symbolically, as a sign of political commitment.

On the other hand, the commitment of New Zealand governments to the environmental cause has been expressed more strongly than in Australia through institutional reform. Between 1984 and 1990, the fourth Labour government instigated a wholesale reform of the state's institutions, including those important to the environment. At the national level, a Ministry for the Environment was created with a broad mandate for the development of national environmental policy, under the direction of central government. The creation of the Department of Conservation brought integration, and the establishment of a formal advocate, to the state's conservation efforts. The newly created Office of the Parliamentary Commissioner for the Environment, a world first, was given the combined functions of environmental ombudsman, auditor and systems guardian, providing an important feedback or learning mechanism for identifying shortcomings in the environmental management system as a whole and for assessing the environmental performance of other agencies. The Resource Management Act 1991, which was shaped largely under the fourth Labour government but adopted by the successor National government, introduced an integrated legal framework for environmental decision making at regional and local government levels, based on the principle of sustainable management of natural resources. These new institutions, especially the Resource Management Act and the Office of the Parliamentary Commissioner, attracted considerable international attention, have been the subject of several instances of emulation, and have established New Zealand's reputation as a world leader in environmental policy (Bührs 2003; Bührs and Bartlett 1993).

In Australia, the first department dedicated solely to environmental affairs—initially known as Environment Australia and now as the Department of Environment and Heritage—was created only in 1996. Over the past 30 years most Australian States have also established departments of conservation or environment, environment protection agencies, and a web of environmental laws and regulations, often informed by international examples. However, large-scale or fundamental institutional reform aimed at strengthening environmental capacity proves to be

much more difficult in Australia, for reasons that will be discussed below. It is not unlikely that this difficulty has been a significant factor behind the greater reliance of Australian federal governments on strategic policy development.

These differences in environmental policies and performance can be attributed, at least in part, to differences in the political-ideological stances between governments, between and within both countries. They can also be seen as elements of broader, and different, patterns of engagement with globalisation by both countries that relate to important structural differences between Australia and New Zealand. On climate change policy, for instance, Australia engages more with the United States and other countries that are looking at the development of technological innovations as an alternative to the approach taken under the Kyoto Agreement, as reflected in its participation in the Asia-Pacific Partnership on Clean Development and Climate. Australia's nuclear policy is also intertwined with its strong links with the United States, in defence and now also free trade, making the adoption of an anti-nuclear policy like that of New Zealand unlikely by *any* Australian government.

In summary, the analysis of environmental policy developments in Australia and New Zealand shows shared experiences, common efforts, similar developments and some important differences. Whilst the differences between Australia and New Zealand should not be exaggerated, neither should they be downplayed. Climate change and nuclear power, whether for peaceful or non-peaceful purposes, are both issues of the highest political order, and policies on these matters have significant ramifications for many policy domains. Understanding the underlying reasons for these differences in policies, and their associated different patterns of engagement with globalisation, is therefore important.

Towards Explanations

We do not pretend to be able, in a few pages, to do justice to the size and complexity of the task of explaining why environmental policy and performance in Australia and New Zealand differ in some important respects and are similar in others. All we can do here is discuss a range of factors that are likely to be of importance, or that already have been demonstrated to be of importance, often in other studies and contexts. To make sense out of the complex range of factors we structure these factors into three interdependent categories: socio-environmental, economic, and political factors.

Socio-environmental Factors

Socio-environmental factors include phenomena like a country's geography, its resource endowment, population size and distribution, and how people perceive, value, treat and shape their environment. In one recent study the combined effect of size and population density has been found to help explain differences in environmental performance between industrial countries (Scruggs 2003, 9, 74–5). Values, value change, and support for and strength of environmental groups are generally deemed to be important factors, although such a finding is not accepted universally (Scruggs 2003, 12, 109–21).

Differences in physical geography between Australia and New Zealand, combined with human intervention, no doubt have played a role in the kinds of environmental issues that have emerged. Above, reference has already been made to the difference in the importance of water resources, more abundant in most parts of New Zealand

compared with much of Australia. Australia's much larger endowment of mineral wealth, including coal and uranium, creates a basis for a significant role of these resources in Australia's economy, to be discussed below.

Ironically, low population density and a generous endowment of natural resources may help explain the exploitative histories and attitudes that have been so dominant, and that are still strong in both countries. Arguably, given Australia's much larger size and greater mineral wealth, such practices and attitudes hold greater sway in Australia than in New Zealand. Until recently, Australians have 'misperceived' their country. They have grown up with the sense of an uninhabited frontier land with endless resources. This has encouraged a culture and economy based on dispossession of its indigenous inhabitants, and expansive settlement that denies the significant limits to its arable and habitable land and the costs of transport and energy. The inefficiencies of Australia's sprawling cities are becoming a source of environmental and infrastructural concern, as are the dependencies of Australian agriculture on unsustainable levels of water extraction and artificial fertiliser use (HRSCEHA 2005).

New Zealand is often perceived as being 'clean and green'. Although this perception may once have been the dominant view amongst New Zealanders, this no longer seems the case. In a 2004 survey, less than 7% agreed with the view that New Zealand is 'clean and green', whilst more than 46% disagreed. However, most New Zealanders (79%) do think they are environmentally better off than people in other developed countries (Hughey, Kerr and Cullen 2004, 90–3). Although this view may be justified to some extent, this does not mean that New Zealand is free of such problems as pollution and 'human well-being' issues associated with urban expansion. Despite the fact that such problems receive growing recognition on public and government agendas, they seldom generate a sense of urgency, and are seldom assigned priority, compared with other, economic and social, issues.

A common feature in both countries is strong support for environmental issues and environment groups (ABS 2004). The strength of support for these values is also occasionally reflected in foreign policies, as in Australia's and New Zealand's stance on whaling and the Antarctic. However, the relative weight and power of environmental advocates in both countries should not be overestimated. In Australia during the past decade most environment organisations have been denied access to senior politicians in the Howard government and public funding to environmental NGOs has been savagely reduced (Commonwealth of Australia 1999–2005). In New Zealand, environmental advocates have probably enjoyed greater access to governments, and sometimes functioned as advisors to Cabinet ministers for the environment and conservation. But they have had much less influence with regard to the main non-environmental policy sectors that impact significantly on the environment, such as economic policy, energy, agriculture, and transport, where other interest groups are commonly given more of a hearing.

Although socio-environmental factors and differences may help explain some of the similarities and differences between Australia and New Zealand in environmental policies and performance, they only do so in combination with economic and political factors, as already hinted at above.

Economic Factors

The type and scale of a country's economic activities clearly have implications for the environment. They are also closely tied up with a country's position in the global economy and with its pattern of engagement with economic globalisation. The importance of an economic sector to a country's exports is likely to have implications for its political weight and influence in both the economic and environmental policy arenas.

Primary resource exports have been and remain central to the economic viability of both countries. In New Zealand, for the year ended March 2005, agricultural products (including dairy, meat and wool) alone accounted for 54% of exports, whilst fish and forestry products added another 13% of commodity exports. Altogether, some two-thirds of Zealand's commodity exports are nature based (Statistics New Zealand 2005a, 28). However, tourism is now the single most important foreign exchange earner, bringing in NZ\$7.4bn in 2004 (or 18.5% of exports) compared to NZ\$5.7bn (or 14.3%) by the dairy industry (Statistics New Zealand 2005b, 7). In Australia, the share of agriculture in the total value of exports is significantly less than in New Zealand (less than 20% in 2002), and its contribution to total GDP is less than half than in New Zealand (3.6% and 8%, respectively). It has declined greatly in economic importance since the 1950s, when Australia 'rode on the sheep's back'. The relative share of industry is roughly the same in both countries (at 25.9% and 25.3%, respectively), whilst service industries are slightly larger in Australia (OECD 2004b, 22–5). Mineral exports, primarily iron and fossil fuels, have grown in value to the Australian economy over the last three decades. While of lesser economic importance at the national level, woodchip exports have also grown to be of considerable regional economic importance. Australia's importance as a major source and supplier of uranium makes it a crucial actor in the international network of countries and powers with a strong interest in nuclear power.

The salience of environmental issues in both countries appears to some extent to follow developments in the primary sector. In New Zealand, logging of native forests and their replacement by plantation forests was a cause of major environmental concerns during the 1970s and 1980s. These concerns have receded with the virtual halting of logging of native forests as a result of changes in government policy. A similar pattern, albeit slower to emerge, has been evident in mainland Australia, where forest-related conflict peaked in the 1980s and early 1990s. It persists in Tasmania where, based around woodchip exports from native forests, the timber industry continues to be one of the few major industries. But growth in global demand for minerals, woodchips and food have led to the intensification of primary resource extraction, and generated some of the most critical public debates and conflict over 'green' natural site-specific environmental impacts in Australia. There has been neglect of more diffuse 'brown' urban issues. In New Zealand, the shift from sheep farming to dairy and beef farming has had some positive environmental implications, such as the retirement of steeper lands from grazing. However, concerns about the environmental effects of the expanding dairy industry have grown (Barnett and Pauling 2005). The growth of the fishing industry, particularly aquaculture, has also raised concerns about the environmental effects and ecological sustainability of the industry, leading the government to introduce a moratorium on issuing new permits for marine farms in 2001. In both countries, the growth of the tourism industry is clearly reliant on the countries' environmental

attributes. This has also led to concern about social and environmental impacts of environmental exploitation.

However, whether and how the environmental impacts of an industry are addressed by governments does not only, or even primarily, depend on the scale and seriousness of those impacts, but rather on the political clout of the industry. In the past, both in Australia and New Zealand, the political strength of the farming lobby has been more closely tied to the importance of the rural vote to conservative governments than to the economic weight of the sector (Wood 1985; Curtin 2004). The tourism industry, a major contributor in both economies, seems to have failed to develop commensurate political strength because of the disorganisation of its operators. On the other hand, in Australia, the fossil fuel sector continues to have a demonstrable and disproportionate influence over the articulation of national energy and climate policy.

A country's degree of self-sufficiency and dependence on energy imports or exports is likely to strongly affect a range of policies: for example, the promotion of energy efficiency and conservation, the promotion of renewable energy, and climate change. In Australia, the abundance of cheap fossil fuels has been an impediment to reform and has encouraged the development of an energy-intensive and energy-profligate economy, with the greatest reliance on coal for electricity generation and among the cheapest electricity and petrol prices in the OECD (Christoff 2005; Tiffen and Gittens 2004). In recent times, the emergence of China as an international manufacturing centre has benefited the Australian resource sector via increased demand for coal and natural gas exports.

In New Zealand, hydro power still meets much of the country's energy needs for electricity generation, but its contribution is steadily declining with growing electricity demand and the existence of considerable political, economic and environmental hurdles for the exploitation of remaining opportunities. Whilst in the late 1970s the government adopted 'Think Big' energy projects to exploit the country's biggest natural gas field, the energy situation is now rapidly becoming more precarious with the impending exhaustion of that resource and, as a consequence, the increasing dependence on energy imports. In 2000, this led the government to adopt an Energy Efficiency and Conservation Strategy. The evidence suggests that, to date, the Strategy has not been particularly effective (EECA 2004). In terms of energy use and efficiency, neither Australia nor New Zealand compares favourably to European OECD countries, although the comparison with the United States and Canada is less invidious (OECD 2004a, 207).

It has been noted that GDP per capita 'is usually a good predictor of ecological deterioration' (Jänicke 1997, 14). In 2003, Australia's GDP per capita (corrected for purchasing power) was 30% higher than that of New Zealand, suggesting that environmental deterioration in Australia would be worse than in New Zealand. But there is also evidence to suggest that when a country's national income rises, its environmental performance measured in terms of emissions reductions (not necessarily the state of the environment) also improves, up to a point (Scruggs 2003). Australia's higher GDP per capita, in other words, also provides a higher economic platform for addressing environmental problems (OECD 2004b, 12–13). Yet emissions data for SO₂ and CO₂ in both countries, provided above, do not support this thesis. Based on our assessment that environmental pressures and problems in both countries are rising rather than falling, the difference in GDP between the countries may be less important than differences and commonalities in economic structure, such as Australia's higher dependence on coal, and the

relatively high dependence of both countries on extractive and resource-based industries, in which there may be less scope for 'ecological modernisation'. However, economic factors, including GDP, are not a *determinant* of environmental performance. We need to look to political-institutional factors for a more complete understanding of the differences in performance between both countries.

Political-legal Institutional Factors

The distribution of power through formal and non-formal political institutions, means and processes is a key determinant in 'who gets what, when and how'. The relative importance and weight assigned to environmental interests depends in large measure on whether and how such interests are embedded into a country's political-legal institutions, the opportunities environmental advocates have to promote these interests, and on their relative power and support in society. International influences and linkages can also play an important role in the 'power game' at the national level, and even in changing the distribution of power within countries (for instance, by institutional reform).

The difference in political systems—a federal system in Australia and a unitary and unicameral state in New Zealand—creates different political dynamics. Until the introduction of proportional representation in 1996, New Zealand could be characterised as an 'elected dictatorship', enabling one-party governments to impose policy unilaterally. By contrast, Australia's political system provides more checks and balances, because power is shared between the federal government and the States, and governments need to obtain majority support in both the House of Representatives and the Senate.

This difference has impinged significantly in the environmental policy arena. In New Zealand, the concentration of power in the Executive enabled the fourth Labour government to fundamentally change the state's institutions, including those relevant to the environment. By contrast, the Australian federal system has made radical institutional change very difficult, and has hampered the development of a uniform nationwide approach to environmental protection. Under Australia's Constitution, States have jurisdiction over resource development and use, a situation which, in the 1980s, offered the potential for endless conflict between spheres of government about appropriate environmental and development goals, targets and actions. Over the past three decades the Commonwealth government has gained greater formal control over environmental protection and resource development through the Constitution's provisions relating to external powers. These enable national laws enacting treaties including international environmental agreements to 'override' the States. But the States retain the capacity for policy implementation and therefore real influence in these matters largely remains with them. This was reflected starkly in the negotiation of an Intergovernmental Agreement on the Environment (IGAE) between States and the Commonwealth to limit tensions and harmonise environmental policy development between these spheres of government. Moreover, recent legal reforms such as the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999 have also created the potential for important environmental approval powers to be devolved to the States, with a corresponding diminution of Commonwealth environmental authority.

In the mid-1980s and early 1990s, governments in both countries were strongly influenced by the rise of neo-liberalism in English-speaking countries. However,

the concentration of executive power in New Zealand, and the strong influence of the Treasury, brought about a degree of neo-liberal ideological capture that was more extreme. New Zealand governments gradually withdrew their direct involvement in and financial support for environmentally controversial development projects, such as big hydro power schemes and the 'Think Big' energy projects of the late 1970s. This withdrawal of state financial support to industry enabled environmental concerns to be given greater consideration and facilitated a strengthening of environmental institutions, as described above. At the same time, major development projects virtually dried up, largely because of their uneconomic nature without government support. But although these consequences of neo-liberal reform in New Zealand were environmentally positive, this does not mean that the environmental consequences of market-driven development are adequately controlled. The 'New Right' reforms, including the Resource Management Act, were foremost intended to facilitate 'efficient' development driven by market forces, and do not guarantee sufficient environmental protection. Rather, they have shifted the battleground from the national level (notably between the government and environmentalists) to the local government level and, especially, the Environment Court. In the latter arenas, the playing field tends to be tilted in favour of development interests, possibly even more so than at the national level.

While Australian national governments supported the rhetoric of neo-liberalism, they persisted in supporting significant subsidies to environmentally destructive industries. In Australia, such subsidies to energy production, chemicals and forestry are probably increasing. In 1996, they were estimated to amount to at least A\$8bn, equal to 6% of total government revenue (NIEIR 1996). Collectively, such subsidies and related revenue forgone amounted in 1996 to between A\$13.7bn and A\$14.8bn, or 3.5% of GDP. Similarly, while Australia's national government has offered strong rhetorical support for the use of market-based instruments, including in the environmental domain, it has done little to act upon this rhetoric. To date, the introduction of a carbon tax or levy has been rejected, as has the establishment of a national emissions trading scheme.

Australia's electoral system has also influenced the potential for environmental issues to become more prominent on the national and State policy agendas. Vulnerable governments and tight elections, where preference deals become critical, have offered interest groups—including environment groups—advantages in the policy process. Several elections—notably the 1990 national election—have been determined by preference flows bolstered by environmental campaigning. The rise of the Green Party and parliamentary representation of 'green values' has been influenced by differences in voting systems between States and at the national level. Tasmania's Single Transferable Vote system, its small population base and the extremes of its environmental conflicts all served the rise of the Greens there well, making it possible for them to enter into a coalition with the ruling Labor government in the late 1980s. Proportional representation in the national Senate has facilitated the election of Green Party candidates; there are currently four Green senators. However, the single-member district preferential voting system used in House of Representatives elections has prevented the Greens establishing a permanent presence in the lower house.

The significance of proportional representation for environmental interests has also been demonstrated in New Zealand, where the 'first-past-the-post' system for elections of the unicameral parliament was replaced by a Mixed Member Proportional (MMP) system. Following the first elections under this system in 1996,

the Greens gained parliamentary representation as part of the Alliance Party. Going it alone since 1999, they have managed to cross the 5% threshold at each successive election. The Greens have had some success in promoting environmental causes. Prior to the elections in 2005 they appeared to be well positioned to form a coalition government with Labour, but were outmanoeuvred by the leaders of two other minor parties.

It is sometimes argued that countries with consensual political cultures have been the leaders in environmental policy (Jänicke 1997; Scruggs 2003). By contrast, parliamentary politics in Australia and New Zealand have been adversarial in style. Australian policy has been characterised by repetition and amnesia rather than iterative policy experimentation and institutional learning. However, perhaps as a result of being 'locked out' of policy arenas at the national level, the Australian environmental movement has recently more often engaged in direct negotiations and sought partnerships with like-minded industry groups and individual enterprises.

New Zealand's political culture, although traditionally adversarial, may be in the process of becoming less so. The introduction of MMP forces both main parties, National and Labour, to keep the door open to other parties to gain and maintain majority parliamentary support. But it has not led to the creation of new institutions and processes for collaborative policy development essential for the development of enduring long-term environmental policies such as sustainable development. As yet, New Zealand, like Australia, does not have a Sustainable Development Commission or similar agency that can provide a relatively stable platform for the development, monitoring and review of long-term policy. Until now, environmental policy, especially where it links with or affects other policy areas, has continued to be made in an ad hoc and reactive manner, and in an adversarial climate. Consequently, it remains vulnerable to the whims and vicissitudes of politics, as reflected in Labour's backtracking on the proposed 'fart tax' on cattle to pay for research on reducing methane emissions, as well as on its decision to abandon the carbon tax it had earlier planned to introduce.

But perhaps the greatest single environmentally relevant institutional transformation in recent times has been to the legal landscape for indigenous rights. Common law recognition of indigenous ownership of country prior to white settlement has significant implications for land use, resource ownership and environmental management of Crown land in both countries. In Australia, the legal basis for indigenous land claims and ownership changed markedly following the 1992 *Mabo* High Court decision. However, recent Australian changes have been slight compared with the very substantial gains made by New Zealand's Maori population across a range of policy domains, including environmental management, resulting from greater political and legal recognition of the Treaty of Waitangi.

In summary, although the differences in the political systems between the countries help to explain the differences in the capacity of governments to adopt and effectively implement environmental policy at the national level, or to introduce more fundamental institutional reform, they do not explain differences in the policies themselves. More important in that respect is the political-ideological orientation of governments, and their openness and sensitivity to different interests, including the environment. On that level, international influences and globalisation play an increasingly important role, as reflected in the influence of neo-liberal ideology in both countries, and the choices governments make in their international alliances, such as on climate change and nuclear power.

Conclusion

Despite enormous geographical and environmental differences, Australia and New Zealand share many similarities in their environmental institutions, processes, and policies. Perhaps most striking is the emphasis on nature conservation and combating ecological degradation, and the associated strength of a conservation ethic within their environmental movements. However, the flipside of this coin is a common 'frontier' or 'developmentalist' mentality among some citizens, rooted in a common settlement history that has been responsible for the enormous scale of ecological degradation. Many battles have been fought, and continue to be fought, between the two camps, although in recent years there has been a trend towards a more negotiated and co-operative approach. Compared with nature protection, environmental issues associated with urban development, sustainable resource use, waste disposal and conditions affecting human health, such as pollution, have been accorded a much lower priority on the policy agenda, although the attention given to these issues has grown significantly in recent years. However, as yet, a reactive and pragmatic approach to environmental issues prevails in both countries.

There are some important differences between Australia and New Zealand. Whilst New Zealand governments have taken 'greener' positions on climate change and nuclear power, Australian governments have been non-committal to binding targets to reducing greenhouse gas emissions and more favourable to nuclear energy. The New Zealand government has banned clear felling of indigenous forests, still legal in much of Australia. In general, recent New Zealand Labour governments appear more sympathetic towards environmental causes and demands and are more open to consultation with environmental advocates than the Australian Howard government. In New Zealand, the institutional reforms of the 1980s and early 1990s significantly strengthened the position of environmental advocates within the state, and created greater opportunities for public consultation, especially at the local and regional level. However, it should be noted that government positions on these matters are to a large extent based on party political platforms and do not represent consensus across the political spectrum. Changes in government are likely to bring about changes in environmental policies.

The structure of the economy shapes the kinds of environmental pressures generated, the relative weight and power of interests, and consequent government priorities. In this respect, Australia and New Zealand share common characteristics in the importance of natural resources in both economies, but also have important differences in the relative importance of mining, in particular uranium, and in their degrees of dependence on coal for energy generation. Socio-environmental characteristics such as water resources affect the degree of attention given to particular environmental issues. Domestic political-institutional factors condition opportunities for local environmental advocates to put issues on the political agenda and to influence policy development. On this front, under MMP in a unitary state, advocates in New Zealand probably have the advantage over their counterparts in Australia.

These national-level economic, political and social differences between Australia and New Zealand influence and interact with the political-ideological orientation of governments to produce somewhat different patterns of engagement with globalisation, in economic as well as environmental areas. Although international

developments, pressures and demands play an important role in putting environmental issues on the agenda in both countries, these patterns influence governments' views on how such issues should be addressed. Economic interests and political-ideological orientations, in particular, appear to play a dominant role in shaping these patterns and thus also in determining environmental policy and outcomes.

References

- ABS [Australian Bureau of Statistics]. 2004. *Environmental Issues: People's Views and Practices* (Cat. no. 4602.0). Canberra.
- Barnett, J. and J. Pauling. 2005. 'The Environmental Effects of New Zealand's Free-market Reforms.' *Environment, Development and Sustainability* 7: 271–89.
- Bonyhady, T. 1993. *Places Worth Keeping: Conservationists, Politics and the Law*. Sydney and London: Allen & Unwin.
- Bonyhady, T. 2002. *The Colonial Earth*. Carlton, Vic.: Melbourne University Press.
- Bühns, T. 2003. 'From Diffusion to Defusion: The Roots and Effects of Environmental Innovation in New Zealand.' *Environmental Politics* 12(3): 83–101.
- Bühns, T. and R.V. Bartlett 1997. 'Strategic Thinking and the Environment: Planning the Future in New Zealand?' *Environmental Politics* 6(2): 72–100.
- Bühns, T. and R.V. Bartlett. 1993. *Environmental Policy in New Zealand. The Politics of Clean and Green?* Auckland: Oxford University Press.
- Christoff, P. 1999. 'Regulating the Urban Environment.' In *Serving the City: The Challenge for Australian Institutions*, ed. P. Troy. Sydney: Pluto Press.
- Christoff, P. 2005. 'Policy Autism or Double-edged Dismissiveness? Australia's Climate Policy under the Howard Government.' *Global Change, Peace and Security* 17(1): 29–44.
- Commonwealth of Australia. 1990–2005. *National Annual Budget Papers*. Canberra: The Treasury.
- Crosby, A.W. 1986. *Ecological Imperialism. The Biological Expansion of Europe, 900–1900*. Cambridge: Cambridge University Press.
- Curtin, J. 2004. *The Voice and the Vote of the Bush. The Representation of Rural and Regional Australia in the Federal Parliament*. Australian Parliamentary Fellow Monograph. Canberra: Parliamentary Library.
- Dann, C. 1999. 'From Earth's Last Islands. The Global Origins of Green Politics.' Thesis submitted in partial fulfilment for the degree of Doctor of Philosophy. Canterbury, New Zealand: Lincoln University.
- Dovers, S., ed. 1994. *Australian Environmental History: Essays and Cases*. Melbourne: Oxford University Press.
- Eckersley, R. 1992. *Environmentalism and Political Theory: Toward an Ecocentric Approach*. Albany: State University of New York Press.
- Energy Efficiency and Conservation Authority [EECA]. 2004. *Annual Report of the Energy Efficiency and Conservation Authority for the Year Ended 30 June 2004*. Wellington: EECA.
- Fox, W. 1990. *Toward a Transpersonal Ecology. Developing New Foundations for Environmentalism*. Boston and London: Shambhalla.
- Hay, P.R. and M.G. Haward. 1988. 'Comparative Green Politics: Beyond the European Context?' *Political Studies* 36(3): 433–8.
- House of Representatives Standing Committee on Environment and Heritage Australia. 2005. *Sustainable Cities: Report on the Inquiry into Sustainable Cities*. Parliamentary Paper 215/2005.
- Hughey, K.F.D., G.N. Kerr and R. Cullen. 2004. *Public Perceptions of New Zealand's Environment: 2004*. Christchurch: EOS Ecology.
- Hutton, D. and L. Connors. 1999. *A History of the Australian Environment Movement*. Melbourne and Cambridge: Cambridge University Press.
- Jänicke, M. 1997. 'The Political System's Capacity for Environmental Policy.' In *National Environmental Policies: A Comparative Study of Capacity Building*, eds M. Jänicke and H. Weidner. Berlin and New York: Springer.
- National Institute for Economic and Industry Research [NIEIR]. 1996. *Subsidies to the Use of Natural Resources*. Environmental Economics Research Paper no. 2. Canberra: DEST.
- New Zealand Ministry for the Environment. 2005. *Projected Balance of Units during the First Commitment Period of the Kyoto Protocol*. Wellington: Ministry for the Environment.
- OECD [Organisation for Economic Co-operation and Development]. 2004a. *OECD Environmental Data Compendium 2004 Edition*. Paris: OECD.
- OECD [Organisation for Economic Co-operation and Development]. 2004b. *OECD in Figures. Statistics on the Member Countries. 2004 Edition*. Paris: OECD.

- Rolls, E.C. 1969. *They All Ran Wild: The Story of Pests on the Land in Australia*. Sydney: Angus & Robertson.
- Scruggs, L. 2003. *Sustaining Abundance: Environmental Performance in Western Democracies*. Cambridge: Cambridge University Press.
- Statistics New Zealand. 2005a. *New Zealand External Trade Statistics. June 2005*. Statistics New Zealand. <<http://www.stats.govt.nz/NR/rdonlyres/126E9F25-1F92-4095-8BBF-5199E7E4A65E/0/NZETSJun05.pdf>>. Accessed 30 September 2005.
- Statistics New Zealand. 2005b. *Tourism Satellite Account 2004*. Statistics New Zealand. <<http://www.stats.govt.nz/NR/rdonlyres/96342CFC-0677-4EC7-A194-E24EACF7C234/0/TSA2004.pdf>>. Accessed 30 September 2005.
- TerraNature. 2005. *Water Quality. How Clean and Green is New Zealand? Freshwater Ecosystems at Risk*. <<http://www.terrature.org/riversStreams.htm>>. Accessed 22 September 2005.
- Tiffen, R. and R. Gittins. 2004. *How Australia Compares*. Cambridge: Cambridge University Press.
- Tyrrell, I. 1999. *True Gardens of the Gods: Californian–Australian Environmental Reform, 1860–1930*. Berkeley: University of California Press.
- Venetoulis, J., D. Chazan and C. Gaudet 2004. *Ecological Footprint of Nations 2004: Redefining Progress*. <<http://www.redefiningprogress.org/publications/footprintnations2004.pdf>>. Accessed 29 September 2005.
- Walker, K.J., ed. 1992. *Australian Environmental Policy*. Sydney: University of New South Wales Press.
- Wilson, R. 1982. *From Manapouri to Aramoana. The Battle for New Zealand's Environment*. Auckland: Earthworks Press.
- Wood, G.A. 1985. 'The National Party.' In *New Zealand Politics in Perspective*, ed. H. Gold. Auckland: Longman.