Challenges for Global Environmental Diplomacy in Australia and the European Union

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One of the predominant issues on the agenda of diplomats and politicians is how to address the consequences of shifts in perception about threats to the environment and the actual short and long-term characteristics and effects of environmental degradation. Another challenge is that such issues as climate change impact on many areas including trade, economic and fiscal policies, employment, transport, agriculture and regional development. Furthermore, decisions taken at a national level cannot be isolated from international concerns, as in the case of the Kyoto Protocol.

This paper maps out some of the differences between Australia and such transnational organizations as the European Union, be they in relation to the role of developing countries in tackling climate change, the use of market mechanisms to tackle environmental problems and the implementation of punitive compliance systems. The paper explores why on some issues Australia and the EU might be perceived as either leaders and pioneers or laggards. The paper also looks beyond the binary coding of 'laggards' versus 'leaders' to some striking parallels between the two jurisdictions in their efforts to achieve sustainable development, ecological modernisation and introduce new environmental policy instruments as well as in similar pressures arising from changes in value systems over the past four decades.

The paper is organized around four themes: challenges facing both Australia and the EU; why the EU is regarded as a global leader; how Australia has engaged with sustainable development; and how commonalities are more striking than differences.

The challenges facing both Australia and the European Union

The Kyoto Protocol is symptomatic of some fundamental challenges for the EU and Australia. Furthermore, arguments over whether or not to sign the Protocol, relate less to the science of climate change – since most parties now accept the findings of the IPCC about the dangers of global warming – but to economic and political issues. These issues pertain to legitimacy, national interest and sovereignty, and trade and economic interests. Since these issues, combined with concern about the environment, constitute a sizeable chunk of the entire political agenda in western democracies, they predictably provide fuel for focusing on binary oppositions and conflicts between various parties and for arguments about different kinds of leadership.

Three other sets of considerations provide further opportunities for characterisations of leaders and laggards in global environmental diplomacy. The first is the recent ratification of the 1997 Kyoto Protocol by such major trading and political entities as the EU and Japan. The second is the refusal by the United States (the world's most powerful industrial nation) and Australia to ratify the Protocol. The third is the issues of the non-inclusion in the current set of proposed rules of such major concentrations of the world population as

China and India, whose emissions of artificial greenhouse gases will in the coming years exceed those of the rest of the world.

Climate change has been one of the predominant issues on the agenda of diplomats and politicians engaged in global diplomacy over the past five years as they have attempted (and apparently failed) to reach agreement on ratification of the Protocol. Interestingly enough, though the Protocol appeared to represent an agreement among nations about setting targets, it did anything but resolve arguments, especially over methods for tackling climate change. The agreement to allow Australia, in the words of the Commonwealth government 'to limit its greenhouse gas emissions to 108 per cent of its 1990 level' by 2008-2012 (Commonwealth of Australia 2001), did anything but pacify critics of the Australian government.

There appear to be or have been several areas of significant challenge and difference between Australia and the EU on climate change policies. They include the notion of differentiation in setting emission targets, the inclusion of developing countries in the Kyoto Protocol, the ratification of the Protocol, the use of market mechanisms, the role of punitive measures and political commitment

1. Differentiation.

The Australian government campaigned for the principle of differentiation of emission targets. Kyoto, in many respects, represented the successful realization of this strategy. Other countries appeared to acknowledge the special circumstances pertaining to the structure of the Australian economy and industry. However, this decision was far from welcomed by many advocates for reducing greenhouse gas emissions. It is, nonetheless, worth noting the EU had its own internal principle of differentiation between more developed countries in the Community and so-called 'cohesion' countries. In other words, the EU, under pressure to tackle uneven economic development within its own jurisdiction and respect the principle of subsidiarity, had internally modified its own policy on uniform emission targets, applying the principle of differentiation by allowing economically less developed Member States ('cohesion' countries) to pollute at higher levels than developed ones.

2. Developing countries

A related challenge emerges when one links the principle of uniform or differentiated targets to the inclusion or not of developing countries in the Kyoto Protocol. Notions of burden sharing pose distinct problems: 'If the EC as a whole accepts that joint implementation can entail the cohesion countries having unrestrained or only moderately restrained increases in CO_2 emissions, it is difficult not to follow the same argument for developing countries' (Haigh 1996: 172-3).

Here we find a division between the EU on the one hand and Australia and the United States on the other. Efforts by Australia and the United States to constrain emissions by developing countries – bearing in mind emissions from developing countries are increasing at a faster rate than from developed ones – have reinforced the perception the EU occupies the higher moral ground and shows more understanding for developing countries. Australia is paired with the US as a laggard, since both want developing countries to be subject to constraints on their emissions (see Paterson, 1996: 69). Any attempt to argue developing nations should also become signatories to the Kyoto Protocol are countered by arguments about principles of justice and who will 'suffer most' if they are asked to cut emissions. Inevitably, both developed and developing nations, including wealthy Arab oil exporting countries, all claim they will suffer disproportionately if they have to ratify the Protocol. Interestingly enough, the main threat deployed by the EU against nations that do not ratify the Protocol is in terms of straight economic interests – in other words, trade sanctions enacted by the World Trade Organization.

3. Ratification

The inclusion (or not) of developing countries is one of the reasons for the reluctance by Australia and the United States to ratify the Kyoto Protocol. Other reasons include the perception that ratification will severely disadvantage the Australian economy in terms of jobs and investment, particularly in such areas as coal mining and the aluminium industry, as well as in exploiting newly discovered reserves of natural gas.

Passionate arguments prevail on both sides. For Alan Oxley, Director of the International Trade Strategies: 'The Kyoto Protocol works against basic Australian economic and trade interests, more than any other country. No wonder the Prime Minister said we will not ratify. Environment officials in Canberra obviously think his mind can be changed. They are prepared an "Australia cannot afford not to ratify case". Currying political favour in Europe seems to matter more to them. Let us hope they fail. It has never worked. … For Australia the issues are straightforward. Will Kyoto work? No. Does ratification serve Australian interests? No.' (*Australian Financial Review*, 20-21 April 2002: 50).

In what the *Australian Financial Review* describes as a 'duel', the opposite position is presented by James Rose, CEO of the corporate ethics and investment advisory firm, Integrative Strategies: 'The inability of the Howard Government to countenance a ratification of the Kyoto Protocol, opting instead to chase limited bilateral options, clearly dates the Government's thinking to somewhere back in those blissfully ignorant, coal-chugging, oil-gushing days of post-war prosperity. …. An alternative and powerful means of effectively circumventing this government's ignorance is a very simple one: put your money where your mouth is. Investing in renewable energy has become a growth industry in Canada, the UK and even in the Kyoto-averse US' (*Australian Financial Review*, 20-21 April 2002: 50).

The Australian position is based on a logic articulated even by the previous Labor government: adopting a uniform approach to reducing emissions would damage Australia more than other nations in terms of GNP and jobs. In July 1996, under the Coalition regime, Senator Robert Hill, Minister for the Environment supported the Ministerial Declaration from the Second Conference of Parties to the Framework Convention on Climate Change in Geneva in all but one respect: 'The challenge that now confronts us is to produce an outcome which will accommodate our *particular economic and trade circumstances*, while contributing effectively to the stabilisation of greenhouse gas concentrations in a global sense' (Hill 1996) (my italics).

To highlight these circumstances the government compared Australia to other OECD countries in terms of population, agriculture and a 'resource-based' economy (Commonwealth of Australia 1997). Between 1990 and 2020 Australia is likely to experience more rapid population growth than these countries: though differences between Australia and Canada and the US are modest, they are huge compared to the EU (29.6 per cent and 1.7 per cent, respectively). Australia also relies heavily on primary industries (agriculture, forestry, fisheries, mining and quarrying), accounting for 8 per cent of GDP compared to 3 per cent across the OECD (OECD 1998: 39). Agriculture represents an enduring challenge since farming accounts for 17 per cent of CO_2 emissions, especially due to land clearing. The economy, particularly energy supply industries, has long relied on fossil fuels, more so than other OECD countries. Australia exports more coal than any other country, and large amounts of natural gas and oil. Finally, Australia's pattern of trade, apart from depending heavily on exporting 'resource-based' goods produced by large volumes of energy, is shaped by exports to the Asia-Pacific region, which has experienced high rates of economic growth.

The counter to these economic arguments is they exaggerate the costs of abatement measures to Australia. For instance, the balance of trade shows Australia also imports many energy-intensive products. Thus it is probably only marginally a net exporter of energy-intensive products (Hamilton 2001: 25). Furthermore, there is inadequate focus on energy efficiency measures like the introduction of mandatory standards for fuel efficiency of vehicles, restructuring the taxation system (Hamilton, Hundloe and Quiggin 1997) and reducing land clearing (Hamilton 1994).

4. Market mechanisms

A fundamental point of difference between Australia and the EU appears to relate to the overall approach to tackling global warming, particularly the use of emissions trading and the Clean Development Mechanism. Australia has consistently argued against efforts by the EU and some G77 countries to limit the use of these mechanisms (Hillman 2000b; 2000c). In commenting on COP6 in The Hague, the Australian government drew attention to divisions in the EU on whether or not to take a 'hard-line on capping the use of market-based mechanisms, limitations on the use of sinks and a punitive compliance system' (Hillman 2001a). There is of course a strong public relations dimension to these comments and the European Commission is

keenly aware of how its opponents might seek to exploit these highly publicised divisions and 'a lack of cohesion and coordination' at the COP6 talks in The Hague (European Commission 2001: 28).

The Australian government has also emphasized that on issues like sinks and market mechanisms the EU is fundamentally concerned about questions of competitive advantage: 'They [the EU] have argued that the US would avoid substantial emissions reductions at home by purchasing Russian emission credits arising from the downturn of the Russian economy and that this would undermine the environmental integrity of the Protocol. The EU is also concerned that this could substantially reduce the cost to the US of meeting its Kyoto target compared to those costs in the EU. In this respect, an important element of the EU's position is to enhance its own competitiveness by limiting access by the US to low-cost options' (Hillman 2001b).

Although there are important differences in the positions of the EU and Australia (allied to the US), particularly over issues like the use of sinks, the arguments over global warming between nations that otherwise agree strongly on many issues could well be viewed as 'preliminary sparring' (Hillman 2000b). In practice, positions that at times appear to reflect fundamental differences – e.g. on emissions trading – are modified over time. For instance, the initial reluctance by the EU even to consider this option has given way to much more careful consideration than previously of this option for limiting greenhouse gas emissions

This reluctance by the EU has been in sharp contrast to the strong advocacy of 'unrestricted use of market-based mechanisms' by Australia along with the rest of the Umbrella Group (Hillman 2001b). The most crucial ally for Australia in promoting market mechanisms is the United States. This alliance with the United States also extends to the question of creating a more comprehensive framework that includes developing countries: 'We will also continue to work with other countries, including the United States, to develop a truly global and effective framework to deal with climate change' (Hillman 2001b).

5. Punitive measures and political commitment
Another important contrast between Australia and the EU pertains to the question of punitive measures and political commitment: 'The EU's aim is to have the enforcement approach used to implement obligations in the EU applied to international commitments under the Protocol. In Australia's view, it is a country's political commitment to meet its international obligations that underpins the effectiveness of any international instrument – a punitive approach cannot compensate for lack of political will' (Hillman 2001b).

Political will is, however, shaped by the traditions of different jurisdictions. Although Australia shares many aspects of a strong tradition of regulation with European countries, governments have questioned these practices. In environmental policy Australian governments have not only attempted to promote

schemes for emissions trading but to shift the burden of effort to the private sector through voluntary agreements (see below).

Why the EU is regarded as a global leader

The EU enjoys certain advantages in the exercise of global leadership. The most obvious ones pertain to the size of its population and its economy. In 2000 the population of the 15 Member States was 376 million. The expansion of the EU in terms of population and the success of European economies in recovering from the devastation of World War II provide the foundations for the progression of environmental policy.

The relevance of population lies not only in its size but also its political attitudes. In other words, since the 1970s the environment has become an increasingly salient issue, first as an item of concern for social movements, and subsequently in the formation of green political organizations and green parties. The maturation of this political process has manifested itself both in the efforts by establish parties to coopt the green political agenda, the formation of coalitions (first at regional and then at national level) between green and established political parties, the appointment of green politicians to environment (and other) portfolios in government and, in the case of Germany, the appointment of Joschka Fischer as both Foreign Minister and Deputy Chancellor.

The relevance of economy lies not only in its scale – the EU being the world's largest trading block – but also in its structure. Over the past two decades the notion of ecological modernisation has taken hold in several European states. The survival and prosperity of modern nations depends on their capacity to adapt to changing circumstances. One of the most important changes in circumstances over the past few decades has been the pressure on nations and transnational organizations arising from environmental movements and from scientists and intellectuals about their capacity to cope with environmental damage. The initial response by governments was to try and remedy certain problems – usually through what are referred to as 'end of pipe' solutions or remedial measures for the disposal of waste from factories. In other words, these strategies tended to be reactive.

The ecological modernizers introduced three key concepts in moving from a reactive to a proactive approach to environmental damage. The first is the notion of measuring environmental degradation (thereby providing a basis for debating the relative costs and benefits of pursuing a particular course of action); the second and third are the ideas of a 'positive sum' game and compatibility of economy and environment (in other words the notion that a win for the economy does not necessarily mean a defeat for the environment and vice-versa) (see Hajer 1995: 25-6). Hajer outlines six areas in which ecological modernization has had an impact: techniques of policy making; a new role for science; pollution prevent

'pays'; nature as a 'public good'; shifts in 'burden of proof'; and new forms of participation (1995: 26-9). The greatest support for such strategies emerged in such jurisdictions as Germany, Sweden and the Netherlands.

Crucially, the ecological modernizers perceive a new role for many firms, which have usually lobbied governments to ease environmental regulations on the grounds that environmental regulations add to the costs of the business enterprise. However, such leading pro-business writers as Michael Porter came to argue that true competitive advantage comes from nations applying *high* environmental standards since they serve to promote innovation (as with Japan in creating energy efficiency products) (Porter, 1998: 91; see also Porter and van der Linde, 1995).

The aspirations of the EU or the leading role it has taken in global environmental diplomacy – either deliberately or simply in order to fill a significant vacuum created by the reluctance of the United States to commit to certain multilateral agreements – hinge to a large extent on translating ecological modernization into viable policies and practices. This is of course a very different role to the one conceived at the inception of the Community. The primary focus in the early years was on political objectives relating to peace and security and on cementing economic interdependence. The 1957 Treaty of Rome did not specify common environmental objectives, and formal and explicit recognition of environmental policy as an area of legitimate concern by the EU occurred only thirty years later (1987 Single European Act) (SEA). In that respect it may have lagged behind both public opinion and the practices of some member states.

Paradoxically, laws on the environment were enacted long before 1987, and for reasons not directly associated with environmental protection. From the late 1960s legislation was introduced on the grounds of promoting the internal market or improving living conditions (Butt Philip 1998: 256-7). Furthermore, between 1959 and 1997 the EU passed 580 pieces of legislation. Many of these individual pieces of legislation are amendments or revisions to existing measures. However, at the end of the 1990s approximately three hundred measures are operative. Most of them take the form of directives which Member States are required to implement' (Weale et al. 2000: 2).

Furthermore, since the 1970s the EU has launched a series of *Environment Action Programmes*. In the first four such programmes (1972-91) 'well over 100 major environmental measures were introduced, dealing with air and water quality, noise levels, chemicals and biotechnology, and waste management' (Economist Intelligence Unit 2001: 27). Crucially, in the field of global environmental diplomacy, the EU has signed, on behalf of the Member States, numerous binding international environmental treaties. In the period 1975-1999 it was signatory to 30 such treaties and backed this commitment by introducing 96 regulations and decisions in support of the terms of these agreements (McCormick 2001: 264; 266-7).

Much of the legislation introduced in the EU from the 1970s onwards – on vehicle emissions (1970), bathing waters (1976), titanium dioxide emissions (1978), environmental impact assessment (1985), genetically modified organisms (1990), urban waste water (1991), packaging waste (1994), protection of the ozone layer (1994) and air quality (1996) – exhibits 'an opportunistic and contingent character' (Weale et al 2000: 56).

This is in many respects unsurprising given the lack of formal recognition of the environment as a legitimate concern for the EU until 1987. Yet, the EU came under pressure long before that date to address environmental concerns, and in some ways it responded in a positive manner, notably through its *Environment Action Programmes* (EAP). By the same token one needs to be cautious about interpreting these programmes as a straightforward acquiescence to pressure from environmental groups. None are legally binding. They all contain a judicious mix of environmental and economic objectives.

The 1st EAP (1973-76), for instance, emphasized the promotion of 'a harmonious development of economic activities and continued and balanced expansion, which cannot now be imagined in the absence of an effective campaign to combat pollution and nuisances or of an improvement in the quality of life and the protection of the environment' (Official Journal of the European Communities 1973: 1). As Weale et al point out, the measures proposed in the First EAP were mainly preoccupied with 'the harmonization of activities and standards across the EU' (2000: 57). The 2nd EAP (1977-81) was fundamentally similar to the first one. Both EAPs emphasized the notion of preventive action, an important shift from a paradigm based on reactive or remedial measures. Other pivotal notions included the polluter pays principle, setting standards for the use of certain substances, increasing scientific and technical knowledge through research, greater coordination of policies across the Member States in order to avoid the transfer of problems from one jurisdiction to another, and the need for Community involvement in international organizations (McCormick 2001: 48-9; Weale et al 2000: 58).

One notices in the EAPs a progression towards the 'ecological modernization' model for environmental policy eventually favoured by the Community. The 3rd EAP (1982-87) was notable for identifying 13 priority areas for action (McCormick 2001: 53) and for promoting the integration of environmental considerations into all policy areas. One of the most significant aspects of the programme was the development of arguments about the potential for convergence between the economy and environment, hence about the need for stringent environmental standards in the manufacture of cars in Europe in order to compete successfully in markets in the United States and Japan. As Weale et al point out 'In retrospect, this can be seen as an anticipation of the central theme of ecological modernisation' (2000: 59).

The 4th EAP (1987-92) was announced in the wake of the SEA (1987) with an extended list of 19 priority areas (see Weale et al. 2000: 60). The main innovation lay in the emphasis on the need to ensure the

implementation of policies. There was also a continuing emphasis on the need for integration of environmental consideration in all policy areas.

Reinforcement of the legal competence of the EU in environmental policy occurred under The Treaty on European Union (Maastricht Treaty 1992) and was further strengthened by the Treaty of Amsterdam (1997), which formally introduced the notion of sustainable development. Article 2 of the Preamble set as an objective 'a harmonious, balanced and sustainable development of economic activities'. The focus on sustainable development and, above all, the integration of environmental policy into all policy domains, also became a key feature of the 5th (1993-2000) and 6th (2001-2010) EAPs.

Apart from the 'external' influence of international debates on sustainable development as enunciated by the World Commission on Environment and Development (1987), the pressure to adopt this notion came from within the Community, especially from Member States that had undertaken specific measures under this rubric. Thus the 5th EAP (entitled *Towards Sustainability*) relied on the sustainable development plans developed in the Netherlands, Sweden and France. Perhaps the most relevant of all these national plans was the Dutch National Environmental Policy Plan, which emphasized the enduring and extensive character of environmental damage and focused 'on moving away in policy terms from controlling pollution as an effect to dealing with the underlying causes of pollution' (Weale et al. 2000: 61). Long-term horizons were regarded as pivotal to the success of measures introduced under the 5th EAP.

Two important links between the 5th and 6th EAPs are the emphasis on such market instruments as green taxes and eco-labels and involvement by non-government actors. 'Working with the market though business and consumer interests' is an important theme in the 6th EAP. In particular there is reference to 'voluntary environmental agreements' with business as well as an Integrated Product Policy (IPP) Approach 'to improve the environmental performance of products throughout their life cycle' (CEC 2001b: 17). [see also Integrated Product Policy Paper]

The SEA was pivotal in enabling the Commission to focus on the implementation of policies. It addressed, under Articles 100a and 100b, the issue of standardization of laws among Member States. Furthermore, 'Environment' appeared for the first time as a distinct title (Title VII) in the Treaty and extended considerably the legal competence of the Commission. For instance, the Treaty addressed the division of competences with the Member States, giving the Commission power to propose legislation 'to preserve, protect and improve the quality of the environment', 'to contribute towards protecting human health' and 'to ensure a prudent and rational utilisation of natural resources' (Article 130r (1)). However, Article 1305 (4) qualified this by, evoking for the first time the principle of subsidiarity (see below), by permitting action by the Community only if it could be 'attained better at Community level than at the level of the individual Member States'. A groundbreaking aspect of the Treaty was the requirement that 'Environmental

protection requirements shall be a component of the Community's other policies' (Article 130r (2)). There was also formal recognition of the need for the Community to 'cooperate with third countries and with the relevant international organizations' (Article 130r (5).

What are the main explanations for this vast extension of authority, for ceding power that enabled the Community to take on a leadership role in global environmental diplomacy? Several factors are at play. Firstly, some nations – Germany, the Netherlands, Norway, Sweden, Denmark, and to some degree, Austria and Finland – have been identified as leaders in ecological modernization (see Andersen and Liefferink 1997; Jahn 1998; Hajer 1995). Second, some of these 'northern' countries, given their political structures and the strength of green political organizations within these structures, place an intrinsic value on environmental protection and are willing, within certain parameters to enable the Community to act in concert on setting high standards. Third, some nations, Germany in particular, regard ecological modernisation as an inherent part of maintaining economic competitiveness (see Hajer 1995; Jänicke and Weidner 1997: 146-8).

In other words, they wanted 'to protect the "level playing field" by ensuring their industries did not bear costs from which their competitors were free' and were adamant 'that the amendments to the treaty include a reference to a high level of environmental protection to allay their fears about the effects of the single market' (Weale et al. 2000: 44). The economically less developed states in southern Europe (the so-called 'cohesion countries') received compensation in the form of 'structural funds' to ensure they were not overly economically disadvantaged by the setting of higher standards (Weale et al. 2000: 45). This pattern of bargaining is important in understanding the paradoxes of the EU's stance on other global environmental issues like climate change.

So far this account of the EU as a global leader has focused on the expansion of its competence to enact legislation and on powerful statements of intent encapsulated in ever more comprehensive EAPs. However, the deepening of the legal basis for action, with a wide range of procedures applying to different issues, can also be viewed as a 'source of bewilderment for third parties' (Bretherton and Vogler 1999: 84).

Why, despite this confusion, is the EU seen as global leader? There are several explanations.
- The EU, and at least some Member States have promoted ecological modernisation.
- The EU has taken the lead on climate change since the United States has major difficulties in coming to terms with the Kyoto regime.
- The EU has benefited from the perception that countries like the United States are unwilling to make the necessary sacrifices to save parts of the planet.
- The EU has used environmental issues to secure its own legitimacy.

- The multi-level character of governance in the EU has created the impression that decisions are consensual and apolitical, that it is not operating like a typical nation state with narrow interests and has adopted an internationalist line.

Ecological Modernisation

The EU, or at least some of its Member States, have taken the lead in ecological modernisation, prompting many commentators to draw a contrast between leaders and laggards on the world stage, often with limited reference to the circumstances that contribute to different stances on issues like climate change. There thus develops a 'consensus' among the community of experts, which reinforces broader opinion – a variant of the 'band wagon' effect in opinion formation.

In other words, the image conveyed by the media about leaders and laggards is backed by recent analyses of environmental policy that invoke a distinction between leaders and laggards (Jahn, 1998; Crepaz, 1995; Dryzek, 1997; Andersen and Liefferink, 1997; Hanf and Jansen 1998; Lafferty and Meadowcroft 2000). The distinction is made both between states in the EU and between the EU and nations states, the latter comparison usually being in favour of the EU, even though the actual units being compared are different – the one being transnational, the other a nation state. The counter argument is of course that the EU does, despite its internal differences, represent the unified interests of nation states at fora like 1992 United Nations Conference on Environment and Development (UNCED) and the regular Conference of Parties to the Framework Convention on Climate Change. Perhaps one of the keys to this classification of the EU as a leader lies in the influence within the EU of the leader or pioneer states on ecological modernisation – such the Netherlands, Germany, Sweden, Denmark and Austria.

Taking the lead on climate change

The EU has seized the opportunity of taking the lead on climate change since other advanced industrial nations, notably the United States, have major difficulties in coming to terms with the Kyoto Protocol regime. It has been relatively easy so far to portray countries like the United States (and Australia) as laggards in this particular game.

The ambitions of the EU to play a prominent role in climate change negotiations are part of broader concerns about taking the lead on issues at a global level. Interest in developing climate change policies originates in a 1986 resolution by the European Parliament. The June 1990 European Council meeting in Dublin placed the issue on the agenda, and there followed an October 1990 statement on the need to stabilize emissions at 1990 levels by 2000. The EU had thereby positioned itself to take 'a strong and leading role, particularly in relation to the United States' (Haigh, 1996: 162). In terms of public image, the EU was triumphant on two fronts: it presented a united front and was seen as progressive by developing nations and environmental NGOs. To demonstrate its resolve the Commission promised a carbon energy

tax, renewable energy initiatives (the ALTENER programme), increased commitment to a programme for Specific Actions for Vigorous Energy Efficiency (SAVE), and to monitor CO_2 emissions. However, the internal political logic of the EU led to a significant dilution of this effort (see Baker 2000; Haigh 1996).

Furthermore, critics point to lack of coordination of policies (especially in agriculture and transport), and the weak position of the environment directorate relative to other agencies (Haigh 1996; Baker 2000). As with individual nation states the EU takes crucial economic decisions (creating a Single European Market and promoting a trans-European road network) which conflict with environmental considerations (Butt Philip 1999: 272). Baker is pessimistic about future efforts to meet obligations under the Climate Change Convention because energy policy 'remains orientated towards deregulation, is premised on a strong belief in market-based energy solutions, and member-states are reluctant to concede further competence to the Union in this area' (2000: 325). At any rate, commitment to economic development (particularly subsidising projects in poorer regions of the EU) creates fundamental problems in coordinating policy. Other difficulties arise from the potential impact of climate change policy on other areas (trade, taxation, transport, energy, agriculture, industry, aid and research and development) (Bretherton and Vogler, 1999: 82) and the power of interests behind these spheres (Butt Philip, 1999: 272). At best interests may coincide (say between environmental and economic objectives). Energy policy remains 'ad hoc' (Baker, 2000). Funding for SAVE and ALTENER programmes was modest, and their impact on national energy policies has been weak (Haigh, 1996: 184).

Nonetheless, in pursuing the high moral ground the EU gained a favourable reputation in many quarters. Baker notes how the Commission viewed outcomes at Kyoto as far too modest, and how prominent figures like former United Kingdom Secretary of State, John Gummer, accused the United States of being strong on rhetoric and weak on action in order to emphasise the 'leadership' role of the EU: 'The United States was full of fine words about what had to be done but wholly lacked the will to take the leadership role, which befitted the world's biggest polluter. The EU was at last living up to its position as the world's greatest trading grouping and seeking to establish a world order capable of countering a global threat' (cited by Baker, 2000: 324). Similarly, Environment Commissioner Ritt Bjerregaard is quoted as saying the Kyoto outcome for Australia was a 'mistake' and 'Australia had made a misleading case and "got away with it", and that this would not be forgotten' (Hamilton 2001: 89). Furthermore, there are claims a EU environment spokesman referred to the outcome for Australia as 'immoral and wrong' and 'a disgrace', and felt 'it will have to change' (Hamilton 2001: 89). The EU has also directly lobbied organizations like the Australia Institute 'to press for full and immediate action to implement the targets – however unsatisfactory – agreed in Kyoto' (Hamilton 2001: 161).

Overall, despite internal problems, the EU is perceived as progressive because of the stance by countries like the United States on a range of issues. First, there is the question of emissions from developing

countries, which are rising at a faster rate than from developed ones. The EU is seen as more just for showing sympathy for developing countries, and Australia and the United States are seen as laggards for wanting to subject developing countries to constraints on their emissions (see Paterson, 1996: 69). Any attempt to argue developing nations should become signatories to Kyoto are countered by arguments about principles of justice and who will 'suffer most' if they are asked to cut emissions. Inevitably, all nations, including Arab oil exporting countries, claim they will suffer disproportionately if they ratify the Protocol. Second, the United States and Australia refused at the 2001 COP7 meeting in Marrakesh, to ratify the Protocol, apparently isolating themselves even from their 'Umbrella Group' partners (Japan, Canada, New Zealand and Russia). Third, the approach by the EU to market mechanisms has been much more cautious than that pursued by the Umbrella Group (Hillman 2001b). Finally, countries like the United States and Australia apparently differ from the EU on the question punitive measures and political commitment: 'The EU's aim is to have the enforcement approach used to implement obligations in the EU applied to international commitments under the Protocol. In Australia's view, it is a country's political commitment to meet its international obligations that underpins the effectiveness of any international instrument – a punitive approach cannot compensate for lack of political will' (Hillman 2001b).

A 'selfish' United States

Questions of who is exercising global leadership hinge on perceptions. The EU benefited from perceptions that the United States is a laggard, unwilling to make the necessary sacrifices to save parts of the planet. However, it has also benefited from unforeseen opportunities for restructuring its economies (notably those of Germany and the United Kingdom in the 1990s) to meet some of the challenges of climate change.

Given perceptions of leaders and laggards, one of the most surprising parallels between the EU and jurisdictions like the United States and Australia is the all round failure to achieve original targets of stabilising CO_2 levels by 2000. The partial success of Germany and the United Kingdom in reducing emissions had less to do with deliberate policies and more with contingent factors (Kellow 1999: 277). In the United Kingdom the coal industry was drastically scaled down for political and economic reasons (and replaced by gas-fuelled power plants). Germany was able to curb emissions after political unification, and disintegration of East German industry. Although the EU (as well as other OECD nations) has introduced mechanisms to implement climate change policies, reductions in emissions in one area tend to be undermined by increases in another (eg. more traffic on roads).

These limitations have emerged because of shared preoccupations with maintaining economic competitiveness. Compared to the rhetoric prior to the 1992 Rio Conference, by the late 1990s the EU had retreated from commitments to setting *unilateral* targets on emissions, and, *like most other countries*, strongly articulated the logic of economic competitiveness: 'there can be no question of our European economy suffering the consequences of a unilateral global environmental protection policy while our

trading partners could avoid measures influencing energy prices and hence the competitiveness of industry and employment' (CEC 1997: 14, cited Baker, 2001:324). Of course this conflicts with the arguments for ecological modernisation and the aim of ensuring the complementarity of economic and environmental objectives.

An opportunity to acquire more legitimacy

Several writers argue the EU has embarked on a deliberate strategy of using environmental issues to secure its own legitimacy (see Haigh 1996; Bretherton and Vogler 1999). That does not necessarily mean the EU has the capacity to engage in a straightforward public relations campaign. Rather, it can draw creatively on its own complex structures of decision making to argue important decisions are made through a process of extensive deliberation. For example, the Council and the Commission have plenty to gain by emphasizing the importance of 'multi-level governance' and the consensual approach to politics that is implicit in this approach (see below).

The question of leadership is central to attempts by organizations like the EU to secure legitimacy for themselves by playing a key part in enhancing cooperation between nations (Beetham and Lord, 1998). In that regard the issue of climate change provides a valuable case study. For example, UNCED, the largest international gathering of this kind with delegates from 178 countries, provided an extraordinary opportunity for exercising leadership. This was reinforced by the choice of Rio de Janeiro as the venue, which recognized the importance of less developed countries in environmental strategies. The EU was the clear winner in public relations, given the reluctance by the US to enter a binding treaty on emissions, and pledges by EU nations to reduce their emissions unilaterally.

Assuming leadership on the world stage is as an enticing prospect for politicians of established nation states as it is for those operating in supranational institutions. The general imperative driving EU policy in recent years is the effort to assume 'a leadership role in global environmental politics' (Baker 2000: 304) in order to strengthen the EU's legitimacy (Haigh 1996; Baker 2000). The question of legitimacy arises in different guises. In Australia, for instance, governments have aroused fears about job security and economic competitiveness to justify their 'tough' stance on emissions.

Multi-level governance

The EU's capacity to enact climate change policies is largely contingent on its distinctive political, constitutional and administrative structures. These include the Court of Justice (which interprets and ensures adherence to laws), Council (of representatives from different Member States), Commission (of members appointed by national governments) and European Parliament (Macrory and Hession 1996). As noted above, formal and explicit recognition of environmental policy as an area of legitimate concern by the EU occurred only in 1987 (Single European Act). Furthermore, although the Maastricht (1992) and

Amsterdam (1997) treaties strengthened the legal basis for environmental policy, Article 3b of the Maastricht Treaty created an important restriction on centralized influence over policy by emphasizing the principle of subsidiarity. This means although the EU may attempt to play a pivotal role in formulating climate change policies on behalf of several hundred million people, it must also consider the views of 15 Member States wary of encroachments on their sovereignty.

The EU is therefore engaged in an ongoing legal and political tussle with nation states over questions of competence (Bretherton and Vogler 1999: 88). Though this impedes its role in climate change negotiations and implementing promises, the EU has persisted in carving out a leading role in negotiations. The EU struggled to gain recognition at UNCED in 1992 (Butt Philip 1999: 269). It had to undertake 'what one DGXI official described as a "huge battle" with Member States arising from the possible implication for the EC's status at the UN' (Bretherton and Vogler 1999: 91; see also Haigh 1996: 155). These struggles do not appear so far to have made a major dent in efforts to present the EU and the Member States as world 'leaders' in promoting measures to tackle climate change. At times the struggles (as at COP6 in The Hague over whether or not to adopt a tough stance on limiting the introduction of market mechanisms, on the use of carbon sinks and on how to enforce compliance) leave the EU open to attack by opponents of European positions on climate change. But there are contrasting examples – for instance, at the 1995 Conference of Parties in Berlin, the Member States 'remained the most proactive' and operated 'as a group' (Grubb 1995:3). However, the 'Achilles heel' of their efforts at leadership lies in the lack of an 'agreed internal strategy and clear line of responsibility for actually delivering the ambitious declaratory targets for greenhouse gas emissions' (Bretherton and Vogler 1999: 104).

In some respects, the multi-level character of governance in the EU has created the impression of consensual and apolitical decisions, if not operating like a typical nation state with narrow interests and of being internationalist. This international character of its approach, and certainly the understandable perception of the EU as an international actor by other agencies, has reinforced the view of its leading role in global environmental diplomacy.

How does one reconcile these contrasting perspectives on coordination, integration and capacity to act as a leading actor in global environmental diplomacy?

First, there is a story to tell about the immense complexity of the EU, summed up in the argument there is a 'system of environmental governance' that is 'multi-level, horizontally complex, evolving and incomplete' (Weale et al 2000: 6). The basis for this account derives from the 'new governance' literature of the 1990s that emphasized the unique characteristics of the EU. In reviewing this literature Hix (1998: 38) refers to the notion of '*sui generis*', to the idea the EU is not a state but 'a unique system of non-hierarchical, regulatory and deliberative governance', not open to comparison with other political systems. Among the

proponents of this line of thinking are writers like Jachtenfuchs (1995: 115) who refers to the 'polycentric and non-hierarchical' relationship between the state and non-state actors (see Hix 1998: 39). Another important consideration is the absence of a 'central agenda-setting or co-ordinating actor, like the chief executive in a presidential system or the governing party in a parliamentary system' (Hix 1998: 39 referring to Peters 1994). The end result according to these writers is a transformation of governance (Kohler-Koch 1996) and the evolution of a unique system of 'multi-level governance' (Marks, Hooghe and Blank 1996).

The complexity and 'multi-governance' story is an enticing one. After all, the EU does have distinctive institutions. They are complex. They are evolving. They do appear to represent a unique experiment in transnational governance. Furthermore, there is the uncertainty surrounding the precise shape and form of the institutions as new members join the club, the forces it needs to overcome to achieve some of its objectives and the lack of institutional history (a mere 50 years). All these factors warrant the attribution of a distinct label. Multi-level governance seems to capture the complexity of the traditional and unique characteristics of the EU.

There are, as Weale et al (2000: 6) point out, the multiple layers of influence in decision-making at the national and sub-national as well as the EU levels. There is the complexity of having numerous actors at different levels and the efforts to achieve a balance in the division of power and authority between them. There are ongoing disputes about who holds authority or competence for taking initiatives and making decisions.

Despite this complexity and uncertainty about the evolution of the EU, the assumption of it being *sui generis* may come at a price. Arguments centred on notions of new governance may simply serve as a tool for describing certain unique features of the EU without probing into the fundamental mechanisms that render political systems either effective or highly ineffective.

There is at least one account that suggests the EU may simply be 'an unusual version of an old model' of governance (Hix 1998: 39). In other words, it is similar to any political system since it has formal rules for making decisions and an increasingly bicameral legislature; a system for redistributing resources; the mobilization of citizens in electoral contests, referenda and lobbying or social movement activity and salience of traditional Left-Right political alignments around issues including the environment (Hix 1998: 41-3): 'In sum, whereas a new governance conception of the EU emphasizes the informal nature of the policy process, the non-hierarchical structure of the institutions and the non-redistributive nature of policy outputs, this alternative conception sees politics and government in the EU as 'not inherently different to ... any democratic political system' (Hix 1994: 1)' (Hix 1998: 43).

The value of this approach is in challenging the predominant *sui generis* angle, which appears to obviate the possibility of using some of the explanations applied to studying classical forms of government to EU institutions. Rather than arguing for direct comparisons between the EU and other governments, Hix argues for a case study approach that uses 'explanations of phenomena that exist in all political systems: such as executive-legislative relations, policy-making, interest representation, public opinion, voting and party behaviour' (1998: 46).

Furthermore, Hix questions the agenda of the proponents of the new governance on the grounds the EU is not an apolitical entity. It contains all the elements of traditional 'politics and government' (for instance, executive, legislative and judicial powers) and as in all 'political systems' the 'key determinants of political outcomes are the spatial locations of the actors, strategic bargaining between these positions, and the identity of the agenda-setters and veto-players' (Hix 1998: 55). Whereas the new governance writers highlight the notions of transparency, efficiency and consensus in achieving legitimacy, Hix draws attention to 'competition over inputs: by allowing Europe's citizens to choose between rival programmes and élites in a partisan European-wide contest' (1998: 55). Although existing competition (for instance, for the European Parliament) does not meet this criterion, developing the mechanisms for such competition may be crucial to rendering the institutions of the EU more democratic 'via EU referendums or even direct election of the Commission President' (1998: 55).

The metaphor of 'multi-level governance' has considerable value in describing certain aspects of the *prevailing* state of affairs. However, as Hix suggests, there is a need to explore more fully 'the connection between politics (i.e. public opinion, party competition, dimensions of conflict) and government (i.e. the policy-making and legislative processes)' (1998: 55). Furthermore, one needs to draw on explanations derived from 'politics and government' to explain some of the limits and possibilities for global environmental diplomacy. This is not to argue that existing politics and government approaches present the optimal solutions to perceived problems but merely to focus on the most plausible explanations for prevailing courses of action or inaction.

In the end, traditional measures of political success or failure will apply. Although the EU has played a leading role in global environmental diplomacy, this could turn out to be a problem if it does not follow through with substantial reforms or fails to demonstrate the strong nexus between environment and industrial development.

Notwithstanding gaps between rhetoric and performance and creative efforts by some commentators to evoke an organization that is apolitical and consensual, the EU does play a crucial role 'in shaping international response to the problem of climate change' and being 'a leading protagonist for a stringent international regime' (Baker 2000: 328). The EU may be setting higher standards for everyone, including

itself, articulating the issue on political agendas and securing moral and political legitimacy for more action (Beetham and Lord 1998).

How Australia has engaged with sustainable development

The importance of studying distinct institutional and historical traditions either of a nation state or such a transnational organization as the EU cannot be overstated when it comes to moving away from binary codes and conflicts evoked by many commentators. Interestingly, just as in the EU, issues of legitimacy are central to the evolution of environmental policy in Australia. Rather than occurring in a vacuum, the changes outlined below reflected the importance of environmental policy to a significant number of voters. In particular, there was a decisive shift in opinion between February and June 1989 – triggered largely by increasing concern about climate change and by the unforeseen success of the Green Independents in Tasmania, where they attracted nearly 20 per cent of the vote (see Papadakis 1996: 172-3). This heralded a clear warning to both major parties to take the environment seriously or risk losing office. Furthermore, ever since 1983, when the environment was first exploited as a major election issue at the Federal level, the preferences of green parties and recommendations by green political organizations became crucial to Labor's success. Labor was therefore especially keen to adopt such notions as sustainable development as a way of reconciling environmental and economic objectives,

In tracking the evolution of policy in Australia, one is also able to use the kind of criteria applied to EU Member States, including the pioneering ones. These criteria have been developed by such writers as Jänicke (1997) and Jänicke and Weidner (1997: 147), who assume strategies for environmental capacity building vary according to different types of regime and their stage of development. New strategies are adopted as environmental advocates expand. The first set of responses is reactive and generally involves regulation or technical approaches to environmental dilemmas. The final stage, 'ecological modernisation', constitutes a deep-seated response. In this stage technical innovation makes it economically efficient and competitive for industry to adopt environmentally friendly practices, green enterprises play an increasingly prominent role in the economy, and there are significant changes in patterns of production and consumption.

Application of this framework to Australia is implicit in accounts that draw on neo-corporatist theory. It is explicit in analyses of institutional change by Papadakis (1996; 2000) and Papadakis and Young (2000). For instance, in evaluating environmental capacity in the 1950s one finds a lack of Commonwealth government responsibility for the environment. This reflects its omission in the Constitution, making it a residual power and therefore placing it within the sphere of influence of state governments. This corresponded to an absence of institutional mechanisms to protect and manage the environment, and the predominance of economic development coupled with low priority to environmental issues. Efforts by the

states to attract foreign capital and avoid regulations that might deter investment meant there was a minimal foundation for a system of national parks and rudimentary legislation to protect flora and fauna.

To overcome this neglect, by the mid-1960s, state governments accepted some responsibility for regulations like air pollution laws. Catalysts for change from other countries included the 1952 killer fog in London, nuclear weapons testing (by the United States, Soviet Union and Britain), the 1967 *Torrey Canyon* oil spill, and publication of *Silent Spring*, *The Population Bomb* and *The Limits to Growth*. Among intellectual elites and commentators as well as social movements there were strong proponents in Australia for an overhaul of prevailing economic, political and social structures that generated exploitative and unsustainable attitudes to the environment.

The response by governments in advanced industrial nations, including Australia, was cautious rather than accepting of radical prescriptions. They acknowledged some problems and the need for regulation. However, the approach was to use well-established techniques of 'administrative rationalism', which entails using existing bureaucratic expertise and mechanisms (see Dryzek 1997) and viewing environmental issues as 'minor, technical, soluble and politically uncontentious' (Jacobs 1997: 3). There were official inquiries into air and water pollution, the Office of the Environment was created in 1971 and the Australia Environment Council in 1972 and from 1972 Environmental Impact Statements became mandatory in assessing Cabinet decisions of environmental importance. State governments established their own laws and agencies. With the election of the Whitlam Labor government (1972-75) there was further consolidation of initiatives, and an attempt to realise electoral promises to address quality-of-life issues (Papadakis 1996). Reforms included establishment of a separate government department to deal with environmental issues and of a Department of Regional and Urban Development; creation of the Australian National Parks and Wildlife Service and the Australian Heritage Commission; a new commitment to international treaties on the environment; and provision of a legislative basis for the Environmental Impact Statement in 1974 with the *Environmental Protection (Impact of Proposals) Act*.

However, even in the late 1970s, environmental policy relied on ad hoc responses to many issues. The environment was not integrated into economic decision making and when conflicts did arise between environment and economic portfolios, the former usually lost out (Young 1994: chapter 4). There was limited appreciation of the values underlying the critique by environmentalists, especially among state governments.

The *transformation* of government institutions in the 1980s appeared to follow the pattern posited by Jänicke and Weidner of increasing efforts among developed nations to address environmental problems. New institutions were created integrating economic and environmental concerns at Commonwealth, state and local government levels. In the 1990s government enacted broad legislation for environmental

protection, and new laws like the Environment Protection and Biodiversity Conservation Bill 1998 enshrined in legislation for the first time the promotion of Ecologically Sustainable Development (ESD). Despite impediments in institutional structures, like potentially conflicting roles of levels of government and lack of effective coordination (Productivity Commission. 1999), a 'whole of government' approach was introduced, at least in principle. Furthermore, governments improved the knowledge base about the state of the environment (SEAC 1996) and economic costs and benefits of pursuing certain actions. Some institutional innovations broadened and intensified capacity to integrate various considerations into policy, notably the Resource Assessment Commission (RAC), which attempted to take into account economic, cultural, social, scientific, ecological and recreational values.

Similarly, the ESD working groups represented an effort to combine international debates about sustainable development with Prime Minister Hawke's unique style of 'consensus' politics (Economou 1996). The promise to accommodate environmental and economic goals became the central plank of environment policy. A further initiative under this broad rubric was the National Strategy for Ecologically Sustainable Development (NSESD), which attempted to coordinate efforts by public institutions to deal with environmental issues. The process of formulating a strategy was assisted by a November 1991 agreement among Heads of Government to create an intergovernmental ESD Steering Committee. In December 1992 the Council of Australian Governments (COAG), comprising the leaders of federal, state and territory governments and the President of the Local Government Association, endorsed the NSESD. The recommendations of the ESD working groups and the Intergovernmental Agreement on the Environment (IGAE) (May 1992) became the basis for developing policy. As the most authoritative association for intergovernmental cooperation, involvement by COAG was vital in ensuring principles of sustainable development were applied to all levels of government.

As noted earlier, these fundamental changes reflected the political importance of environmental policy. The language of ESD along with efforts to enhance central co-ordination of policy and recognition of the inter-related character of problems matches the conjectures by Jänicke and Weidner about increasing government capacity for environmental protection. This occurs when government institutions are open to non-governmental actors, policy coordination occurs across tiers of government and between government agencies, non-government actors are integrated in the policy process and a cooperative style is put in place.

Yet, the promise of ESD was only partially realised (SEAC 1996: 15) and most recommendations of the ESD working groups were not implemented (Productivity Commission 1999). There persisted fragmentation and compartmentalisation of government departments and tiers of administration (SEAC 1996: 11). Much of the impetus for environmental reform was lost in debates over economic reform and, from 1991-2, many environmental advocates were defending any gains they had achieved rather than extending the boundaries of statutory intervention.

The advent of a Coalition government in 1996 led to the creation of a $1.25 billion Natural Heritage Trust, funded through partial privatisation of Telstra. This allowed the government to realise a national vegetation plan, rehabilitate the Murray-Darling River Basin, conduct a national land and water resources audit, establish a national reserve system and tackle pollution of the coast and seas. The government also supported a process to identify links between the NSESD and other policies and initiatives (like the IGAE, the National Greenhouse Response Strategy, the formation of the Australian Greenhouse Office and the National Strategy for the Conservation of Australia's Biological Diversity). Other initiatives associated with the NSESD include the National Waste Minimisation and Recycling Strategy, the Commonwealth Major Projects Facilitation initiative, and the National Forest Policy Statement.

However, subsequent reviews highlighted failures to establish policies on threats to biodiversity; inadequate efforts to reverse the decline in fish stocks; land clearing; ineffective efforts to tackle urban sprawl; transportation and energy consumption issues; falling short of commitments to reduce greenhouse gases; and questionable reforms of the electricity industry, which resulted in lower prices and increases in CO_2 emissions (OECD 1998).

Proponents of a coordinated approach to statutory intervention note the success of the Department of the Environment in extending its range of activities beyond its own programs to influence other Departments – in setting guidelines for purchasing products and setting standards, heritage programmes, creation of a 'green corps' programme for young people to work in environmental conservation projects, educational material for schools and professional development for teachers. Furthermore, although conflicts persist between Departments focusing on either industry or the economy, they are far less severe than previously. In part this reflects increasing recognition of the co-existence of environmental and economic objectives.

Another consideration, which relates less to notions of statutory intervention and more to a focus on trade liberalisation, is that 'most decision makers' believe 'the wealth created by economic activities will overcome environmental effects' (OECD 1998: 8). This has several consequences. It diminishes inter-departmental conflict over environmental issues (compared to the 1980s). It entails re-evaluation of statutory intervention traditions. On the one hand there is pressure for refinement of economic and regulatory instruments (through greater use of product charges, deposit refunds and emission trading and the adoption of the user pays principle in areas like waste management and waste water treatment for achieving sustainable development (see OECD 1998: 2)). On the other hand it means promoting more than ever the capacity of business and free markets to address problems (see Hawken et al 2000). It is therefore unsurprising to find Commonwealth and state governments promoting notions like 'light-handed regulation' (Andrews 2000a), emissions trading (Hillman 2000b; 2001b) and sustainable industries (Commonwealth of Australia 2000a: 43).

Why the commonalities are more striking than the differences

The story of environmental policy development in Australia and the EU is full of surprises – the shift in values to include quality of life and environmental issues in the 1960s, green political movements in the 1970s, the salience of green political issues in electoral contests, the chameleon like character of established political parties in adopting much of the green agenda, the capacity of conservative and labour parties and politicians (Margaret Thatcher in Britain, Helmut Kohl in Germany, the Labor and Liberal Parties in Australia) to appreciate the political salience of green issues, the rapid adoption of notions of sustainable development and ecological modernisation, and the linkages between neo-liberal policy in the form of market-based instruments and renewed efforts to address fundamental environmental problems.

Perhaps the most striking feature about all these surprises, given the apparent divergence in approaches between the EU and Australia, is the commonality between both jurisdictions. It is, as if, in focusing on the conflicts or on the apparently divergent approaches of Australia and the EU to climate change, commentators have overlooked some obvious features, which are similar histories in the evolution of public opinion, social movements, political parties and changes in the attitudes and behaviours of key interest groups, including industrial and business interests. Of course the precise timing of many of these developments has varied between nations both within Europe and between Europe and Australia. It is interesting to read competing accounts of whether or not the world's first 'green party' was formed in New Zealand or Australia or the Netherlands or Germany or Britain.

The reality is the underlying trends have been very similar. There are certainly time lags both in the influence of ideas and the adoption of policies. Yet, adopting a historical perspective serves to dissipate considerably some of the sharp contrasts evoked by media and academic commentators. The remainder of this paper focuses on some of the striking commonalities.

Principles relating to climate change
Among the most important similarities between the EU and Australia are the following. Both accept climate change is a problem and signed the UN Framework Convention on Climate Change. Both accept the precautionary principle. Both understand the importance of a differentiated approach for political and economic reasons. Furthermore, despite rhetoric about global leadership, both jurisdictions have similar ideological constructs and material practices for dealing with emissions. One of these practices is to try and increase cooperation between agencies given 'complex, longer term, and structurally rooted problems associated with sustainable development implementation' (see Meadowcroft, 2000).

Balancing trade and economic development with environmental considerations

Another pivotal consideration is the strong tradition of economic development and exploitation of natural resources in each jurisdiction, as well as struggles to balance these traditions with modern environmental objectives (Papadakis 1996; Baker 2000). Much effort has flowed into plans like the National Strategy for Sustainable Development in Australia and the EU's recent Environment Action Programmes. Both plans promote integration of environmental factors into all policy areas, use of market and regulatory instruments to shape behaviour, and partnership between government and community. Each jurisdiction has developed strategies for reducing greenhouse emissions. Each has established mechanisms to provide information on the state of the environment: in the EU this role is assigned to the European Environment Agency, in Australia the government created an independent State of the Environment Advisory Council.

Problems of coordination

In both jurisdictions environment agencies take their responsibilities seriously but remain relatively weak in hierarchies of influence. Official accounts (like EU reports to the Commission for Sustainable Development on implementing Agenda 21 and reviews of the 5th Environmental Action Programme, and the 1999 Productivity Commission Report in Australia) highlight gaps between rhetoric and reality, and failures to coordinate policies (see O'Riordan and Jäger, 1996; Butt Philip, 1999; Baker, 2000; Productivity Commission, 1999). Given perceptions of 'leaders' and 'laggards', one of the most surprising parallels between the two jurisdictions concerns trends in emissions, with Australia *and* most EU countries failing to achieve original targets of stabilising CO_2 levels by 2000. Although Australia and the EU have established mechanisms to implement climate change policies, reductions in emissions in one area tend to be undermined by increases in another (eg. more traffic on roads).

Rethinking economic competitiveness

This arises from shared preoccupations in the EU and Australia with maintaining 'economic competitiveness' based on assumptions of the old economy. Just as the EU has retreated from commitments to setting *unilateral* targets on greenhouse gas emissions, and, *like most other countries*, strongly articulated the logic of economic competitiveness, Australia has been equally vocal in arguing, even after winning concessions at Kyoto, it faces harsh economic competition.

Seminal works and concepts in shaping attitudes

When it comes to attitudes that have shaped a generation of environmentalists and then policy makers it is hard to go beyond the seminal work entitled of Rachel Carson published in 1962 under the title of *Silent Spring* – a landmark scientific study written by a marine biologist who had previously worked for the United States government. This passionate account changed perceptions across the world about the chemical industry (and industry in general) from that of a benign force in promoting progress and prosperity to that of arrogance, characteristic of neglectful and exploitative attitudes to nature. Yet, even though the work attracted huge publicity across the world, its impact on mainstream media perceptions in

Australia was delayed by several years, as was the effect on policies over the use of DDT (Papadakis 1996: 74-5).

There are many examples of innovations, breakthroughs or discoveries that were 'ahead of their time', yet formed the basis years later for environmental movements in Australia. These include acknowledgement of the significance of the difference in lifestyles of European settlers and the indigenous population; creation of myths about the Australian bush by poets and artists and the connection between these ideas and the notions of nationalism, egalitarianism and patriotism; the practice of organised lobbying by associations of preservationists and conservationists; adaptation of a model for the preservation of wilderness and national parks from the USA; innovations in ideas about tourism and environmental protection; and the concept of preservation for future generations. Yet, several decades later, from the 1960s, leading political organizations, let alone environmental groups and organizations, adopted these principles (Papadakis 1996: 60).

Other highly influential works on informed opinion in Europe and Australia include *The Population Bomb* (Ehrlich 1968), 'The Tragedy of the Commons' (Hardin 1968), *The Limits to Growth* (Meadows et al. 1972), *A Blueprint for Survival* (Goldsmith et al 1972), *Small Is Beautiful* (Schumacher 1973) and *Our Common Future* (World Commission on Environment and Development 1987). The impact of these works on policy makers, media and public opinion were decisive in stimulating empirical and conceptual research relevant to environmental policy and politics. Political organizations have in t long to an a a and a a man who uses in the "of 50 raises the rn drawn on the burgeoning empirical and conceptual studies to set the agenda for change, especially over the past two decades.

Sustainable development

The account given in the previous two sections of policies on sustainable development in the EU and Australia further underlines the theme of commonalities rather than differences. There are certainly variations in emphasis at different points in time. Yet, the overall trend is towards common points of view on the need for coordination and, above all, of complementarity between economic and environmental imperatives.

New environmental policy instruments (NEPIs)

A similar pattern is emerging in the area of NEPIs, which encompasses market based instruments, voluntary agreements, ecolabels, other innovations and variations on regulation.

The following analysis deliberately focuses on developments in Australia in order to counter the perception of Australia being a 'laggard'. There are of course similar and very significant developments across the EU.

Market Based Instruments

Economic instruments are used across Australia to address a wide range of problems. Though an OECD report found economic instruments were not widely used, it drew attention to several initiatives by the Commonwealth or the States (see Box 1).

Box 1

Taxes, charges, fees and levies on emissions	
COM	motor fuel tax; tax on leaded gasoline; and noise levy
NSW	special environment levy on waste water; trade waste quality charges; and waste disposal levy.
Licence fees	
COM	licences for ozone-depleting substances
NSW	licence fee for discharges to rivers
QLD	visits to national parks and conservation reserves (like the Great Barrier Reef); and bushland acquisition levy
SA	licence fee for emissions to air and for discharges to the marine environment
VIC	licence fee for emissions to air and for discharges to rivers; and landfill levy (based on volume and type of trade waste)
Deposit refunds	
SA	beverage containers (beer, soft drinks and mineral water)
Tradable discharge permits	
NSW	Hunter River Salinity Trading Scheme; South Creek Bubble Licensing Scheme (phosphorous levels)
NSW, SA, VIC	Murray Darling Basin Salinity Scheme (credits tradable between states)
Tradable resource use rights	
COM	transferable quotas in fisheries management
NSW, QLD, SA, VIC	transferable water entitlements
NSW QLD, SA, TAS, VIC	log pricing and allocation
Performance bonds	
VIC	lender liability for contaminated site clean-up
COM: Commonwealth; NSW: New South Wales; QLD: Queensland; SA: South Australia; TAS: Tasmania; VIC: Victoria	

(Based on OECD 1988: 141, Table 6.4)

The enhancement since then of such instruments results from recognition by policy makers of the economic costs of environmental damage, of market failure and of how market based instruments may be 'ideally suited' to tackle such failure (Gordon and Hatfield Dodds, 2000).

Among recent innovations are a 'load based licensing system' and a 'load based pollutant charge' introduced in July 1999 by the New South Wales Environment Protection Authority: 'Under the scheme, discharges are controlled by absolute maximum load, or volume, limits accompanied by a new license fee structure. Pollution charges are levied on the annual pollutant load discharged by a firm to provide an ongoing incentive to reduce loads' (Gordon and Hatfield Dodds, 2000). The authors noted it was premature

to assess the effectiveness of the scheme in providing incentives for improving environmental performance and the adoption of cleaner technology.

Another attempt to introduce market instruments is the New South Wales Carbon Rights Legislation Amendment Act (1998), which recognized 'ownership of, and trade in, carbon sequestration rights from State forests in New South Wales'. The Act was designed to support the 1999 launch 'of the world's first exchange-traded market for carbon sequestration credits by the Sydney Futures Exchange and State Forests of New South Wales', and thus enable 'buyers to purchase credits (denominated in one metric ton of CO_2 equivalent) as a hedge in a future emissions trading market or bundle them with a product sales to create emission-free products' (Gordon and Hatfield Dodds, 2000). Although, the demutualisation of the Sydney Futures Exchange was apparently a factor that led it to withdraw from this initiative, it is indicative of links established between 'light handed' regulatory approaches and the private sector.

Another initiative, demonstrating the intention of policy makers, is the effort by the Commonwealth government to develop emissions trading systems. These systems represent what Byron (2001) refers to as 'economic instruments defining new markets'. Detailed consideration of such systems and what sectors might be covered by them has been conducted by the AGO (1999a; 1999b; 1999c; 1999d). One outcome was the declaration by the Federal government that 'it would only implement a mandatory national emissions trading system if the Kyoto protocol is ratified by Australia and enters into force, and if there is an established international emissions trading regime' (Commonwealth of Australia 2000a: 42). The notion of trading systems remains an integral part of the agenda and is focused on developing domestic emissions trading schemes and systems to credit early greenhouse abatement action.

Crucially, Hill privileges market-based over administrative strategies: 'Research carried out by ABARE indicates the cost to countries of achieving greenhouse targets is much less through an emissions trading system – particularly one that operates internationally – than through administrative policies and measures' (2000a: 5; see also James 1997). Australia understandably regards itself as 'one of the strongest proponents of the use of an uncapped international emissions trading system to meet greenhouse gas abatement targets' and 'has put considerable effort into the development of a possible national trading system, using the Kyoto Protocol as a template for the rules, eligibility, and design procedures' (Gordon and Hatfield Dodds 2000).

Voluntary Agreements
The most widely publicised program for reducing greenhouse gas emissions is Greenhouse Challenge, introduced by Labor 1995. Unlike incentive-based structures of other programs, this is a voluntary scheme to raise industry awareness of its polluting activities and cost-effective ways to reduce emissions. The scheme provides access to experts who advise on technical, financial and cultural issues impacting on performance and devise action plans. Greenhouse Challenge involved 558 companies and industry

associations as at 15 November 2001, with the aim of reducing CO_2 emissions by 20Mt per annum. The scheme is marketed to business on the strength of potential efficiency gains, corresponding incentives to adopt leading technology, and community recognition of environmental performance. Significantly, participants include key industry sectors: '100 per cent of aluminium production; 98 per cent of electricity generators, distributors and transmitter emissions; 78 per cent of emissions generated by mining; and increasing numbers in the agricultural and transport sectors' (Commonwealth of Australia 2000a: 42). The scheme does not attempt to ensure compliance through regulation and only includes a limited proportion of potential emissions. Companies agree to random independent verification of their actions.

Total funding for the scheme between 1995 and 2003 is $36 million. Organizations sign a Cooperative Agreement with the Commonwealth to reduce emissions. Each agreement typically comprises a greenhouse gas inventory, an action plan for greenhouse gas abatement and a forecast of future emissions.   An evaluation of the program showed it had achieved significant reductions in emissions (23.5 Mt) and was enhancing the capacity 'to identify, monitor, manage and report' emissions (Commonwealth of Australia 1999). The aim is to double the number of participants to 1,000 by 2005, with emphasis on recruiting large emitters. The program is seen as pivotal in capacity building in industry by securing commitment of CEOs, changing workplace cultures, effective management of data (to prepare companies for an emissions trading regime), reducing impacts on the environment and creating opportunities 'to demonstrate environmental credentials to the community' (Andrews 2000a). Performance verification was taken a step further by involving 35 of the largest firms that had signed up the program. A separate analysis described the program as 'an excellent first step', and argued it will become even more effective if 'requirements for audit and verification' included testing the 'incorporation of environmental concerns into internal decision making, processes and culture' (Parker 1999: 74).

Another initiative, presented as part of the National Greenhouse Strategy (NGS) under the heading 'greenhouse best practice in industrial processes and waste management', is the $3 million 'Eco-efficiency program' launched by the Federal Environment Ministry, Environment Australia. The program has led to agreements with the Housing Industry Association and the Australian Food and Grocery Council 'to promote, demonstrate and monitor improved eco-efficiency practices' (Commonwealth of Australia 2000a: 66). An 'Eco-Efficiency Agreement' is a three-year, voluntary accord between the Commonwealth and an industry association. The aim is for both parties to promote eco-efficient practices among members of the association. The tools to implement and monitor eco-efficiency include environmental audits, environment management systems, environmental reporting, environmental accounting and life cycle assessment (Commonwealth of Australia 2002a).

Finally, a major voluntary initiative, launched in August 1999, was the National Packaging Covenant. This aimed 'to minimise the environmental impacts of consumer packaging and paper waste, close the recycling

loop and develop economically viable and sustainable recycling collection systems' (Commonwealth of Australia 2000c: 3). The central concept in the Covenant is 'product stewardship', implemented through collaboration between industry and government. The Covenant is 'a self-regulatory and voluntary measure', backed by the National Environment Protection (Used Packaging Materials) Measure (NEPM), which 'requires jurisdictions to impose recovery activities on non-Covenant brand owners, and seeks to create a level playing field that protects Covenant signatories from market disadvantage' (Commonwealth of Australia 2000c: 3). There are formal obligations to report on progress, particularly to the National Environment Protection Council. Eight Commonwealth, State and Territory Ministers, two local governments, nine industry associations and 13 industry organisations or companies initially signed the Covenant. By October 2000 there were 131 signatories, including eight governments, five local governments or regional organizations, 12 industry organizations and 106 companies. Though the scheme has faced opposition by the Australian Local Government Association, two of the local government signatories to the Covenant represent nearly one third of all local governments in Australia – the one in Queensland, which represents 125 local governments and the one in Victoria, which represents 78 councils. Another factor in the early stages of this initiative is that 'Many organisations also indicated they were waiting to analyse the implications of the NEPM legislative requirements on their operations' (Commonwealth of Australia 2000c: 5). Moreover, many signatories have not yet submitted Action Plans and there is much to be done in ensuring independent verification of actions by participants, accountability and penalty for non-compliance and quantifiable performance indicators (Commonwealth of Australia 2000c: 14). Nonetheless, it is a significant voluntary initiative in terms of the initial engagement. In July 2000 the national shopping retailer Coles Myer, which represented about 20 per cent of the entire retail market, became a signatory. Overall, notwithstanding the challenges of implementation, the Covenant attracted 'substantially more signatories than any previous ANZECC (Australian and New Zealand Environment and Conservation Council) Agreement concerning the management of packaging waste' (Commonwealth of Australia 2000c: 1).

Ecolabels

The Federal government promotes labelling to enable consumers to ascertain the environmental impact of products and 'make responsible product choices' (Commonwealth of Australia 2002b). There have been several initiatives. Mandatory Fuel Consumption Labelling requires business (in this case the car industry) to advertise the environmental liability of products in terms of fuel consumption. From 1978 to 1987 a voluntary agreement between the government and the Federated Chamber of Automotive Industries ensured the trend of national average fuel consumption in new cars continued to decline. New legislation, effective from January 2001 made it mandatory for fuel consumption labels to be placed on car windscreens at point of sale. These model-specific labels show the fuel consumption in numerical terms, such as litres/100 km.

There are several joint initiatives between the Federal government and the States and Territories to promote environmental labelling. An early experiment, 'Environmental Choice Australia' (1992-1994), was aborted after failing to gain industry support. A more successful scheme, the Energy Rating label scheme for major appliances, is a mandatory scheme covering such appliances as refrigerators, air conditioners, dish and clothes washers and clothes dryers. A system of star rating labels enables direct comparisons of the energy efficiency of appliances. This highly successful scheme, introduced in 1986, has gained widespread support from industry.

Another voluntary initiative, the Australian Energy Star Program, involves industry and covers office equipment (including computers, printers, fax machines and photocopiers) and will be extended to home entertainment equipment (such as television sets, video recorders, DVD players and audio equipment). Office equipment under this scheme is designed to switch to 'sleep' mode when not in use, and home entertainment goods are designed to reduce the power consumption when in 'standby' mode. The potential energy savings from this scheme are considerable. GHG emissions could be reduced by 2.28 million tonnes (CO_2 equivalent) 'If the energy-saving features were activated on all Energy Star compliant computers in Australia' (Commonwealth of Australia, 2002c). Equipment in this scheme has to meet specified energy efficiency standards. The scheme is based on international benchmarks, originally created by the US EPA in 1992. Another aspect of this initiative is involvement as 'Energy Star Partners' of such corporations as Compaq, Sony, Apple, IBM, Sharp, Intel, Microsoft, Acter, Epson, Minolta, Fuji Xerox, Hewlett Packard, Brother, Harvey Norman, Ricoh, Hitachi, Wyse, Canon, Philips, TEAC, Lexmark, Samsung, Ipex, Toshiba, LG and Pioneer (Commonwealth of Australia 2002d)

In all these initiatives, even when evolution of the instrument is indigenous, there is awareness of programs in other countries – such as Environmental Choice Canada, Blue Angel in Germany and the European Union Eco-Label Scheme. Evidence from OECD reports on labelling is cited to back local labelling schemes, as are the ISO standards (Commonwealth of Australia 2002b).

Other innovations

Several schemes entail incentive funding to generate commercial interest in reducing greenhouse gas emissions through alternative energy sources. The Photovoltaic Rebate Program, the Renewable Energy Commercialisation Program, the Renewable Energy Showcase Program and the Renewable Equity Energy Fund offer funds on a competitive basis, promoting adoption of equipment and processes for renewable energy. Where technology is already available, a cash rebate for consumers applies. In other cases, the government funds industry investment in new technology. The requirement is the venture be a good prospect commercially and of significant environmental benefit. The Renewable Energy Equity Fund is

based on decisions of an investment manager according to strict guidelines, rather than a government regulator.

The Greenhouse Gas Abatement Program (GGAP) and the Alternative Fuel Conversion Program allocate funds to projects designed to reduce emissions. As with renewable energy programs, projects need to be commercially viable and result in quantifiable and additional abatement of greenhouse gases. The GGAP was allocated $400 million between 2000-01 and 2003-04. It supports projects that result in quantifiable and additional abatement not expected to occur in the absence of GGAP funding. The objective is to reduce net greenhouse gas emissions by backing activities likely to result in substantial emission reductions or sink enhancement. Projects that will deliver abatement exceeding 250,000 tonnes of CO_2 equivalents per annum are given priority.

The Alternative Fuel Conversion Program, a four-year program which began in 2000, was allocated $75 million to assist operators of heavy commercial vehicles and buses weighing 3.5 tonnes gross vehicle mass or more, to convert their vehicles to operate on either CNG or LPG, or purchase new vehicles running on these fuels. Applications are assessed competitively according to relative performance against expected greenhouse gas emission reductions resulting from the proposals, the degree to which proposals promote community awareness of issues, the financially viability of applicants and the need to substantiate conversion or fuel system upgrade costs through a process in which at least two competitive quotes are sought. The scheme is one of direct funding with market-based incentives.

Finally, the Emissions Reduction Incentive Program, funded through a commitment of $13 million over 5 years, provides supplementary funding for councils towards project costs designed at reducing greenhouse gas emissions across a wide range of areas. The first round of applications closed in February 2001.

According to Gwen Andrews, the main criterion for evaluating projects is cost effectiveness in reducing emissions, for example by using new technologies or supporting sustainable land management 'through better integration of greenhouse considerations into agricultural and forestry practices' or 'promoting the development and uptake of sustainable energy in regional Australia, including bio-fuel and biomass for energy' (2000a). The GGAP will also provide government and industry 'experience in assessing abatement projects against baselines, and in rigorous financial assessment of potential abatement activities' and 'provide some evidence from across the economy of the cost of abating emissions, which will be a useful pointer to the value of carbon in the economy' (Andrews 2000a). The strategic objectives of the GGAP are to encourage technological development and highlight advantages to business of 'early movers' in emission abatement. For Andrews the current mix of government programs emphasizes 'cost minimisation' and encourages 'low cost abatement opportunities from all sectors of the economy' (2000b). She also adds: 'But in spite of the large government investment, the truth of the matter is that in the near to medium term,

the paradigm will have to shift from a government investment model to one that involves the entire economy. And it is for this reason that the government has asked the AGO to look at emissions trading as a possible policy response'.

Variations on Regulation

The mix of approaches to environmental policy is reflected in initiatives like the Renewable Energy Action Agenda – part of an effort to create an industry with annual sales of $4 billion by 2010 – and the Renewable Energy (Electricity) Act 2000 which sets mandatory (two per cent) targets for energy from this source. In other words, this legislation compels industry to develop renewable energy. Even ardent critics of the government acknowledge the Mandatory Renewable Energy Program 'is expected to give a significant boost to the renewable energy industries and place Australia in a better position to meet emission reduction targets' (Hamilton 2001: 127).

The Renewable Energy Certificate (REC) legislation, created the world's first mandatory environmental instrument. The subsidy of $30 or $40 per megawatt hour is a small addition to consumers' power bills. But the incentives for the market have proved beyond government expectations. Take the plan by the firm Enviromission, which aims to combine solar energy with turbine power to create the world's tallest manmade structure – a five kilometre wide, 1 kilometre high solar chimney. (ABC Television 7:30 Report, 5 September 2001). There is strong interest in RECs among wind power engineers, with the industry calling for more ambitious government targets. One indicator of the success of market-based instruments is where firms pressure regulators to increase their requirements.

Programs for greenhouse gas abatement depend on a mix of market, voluntary and regulatory instruments. Many initiatives form part of the NGS, a $1 billion undertaking by the Commonwealth (endorsed by State and Territory governments) to tackle climate change and meet international commitments to reduce emissions. The NGS aims to limit emissions through partnerships with governments, industry and the community. One partnership is the Cities for Climate Protection campaign, developed by the International Council for Local Environmental Initiatives to assist local governments in reducing greenhouse emissions. The involvement in this scheme, from 1998, by 99 Australian local governments (covering 47.5 per cent of the country's population) represents, according to the Federal government, 'the fastest uptake and largest number of participating local governments in the world' (Commonwealth of Australia 2000a: 41).

The NGS includes measures to promote efficient and sustainable energy use and supply. Though the initial impact of some reforms ran counter to the policy objective of reducing greenhouse emissions, measures like the deregulation of the natural gas industry are expected to reduce emissions (Commonwealth of Australia 2000a: 47). Many initiatives in energy use highlight a range of regulatory approaches, including efforts to 'fine-tune' or target certain areas in a strategic manner. For instance, in July 2000, the

government applied new standards to generators used in power stations, which should reduce greenhouse gas emissions by 4 Mt per annum by 2012. Another form of regulation relates to setting energy efficiency standards for residential and commercial buildings as well as energy performance codes and standards for domestic appliances and commercial and industrial equipment.

The initial impression conveyed by key initiatives like the NGS is one of continuity in traditional regulatory approaches, with several qualifications: growing emphasis on voluntary arrangements, targeting of resources to encourage the creation of competitive eco-efficient industries, the importance of strategic (rather than operational) interventions by the Commonwealth and other agencies and research on economic or market-based systems (like emissions trading).

NEPIs and the prospects for 'light-handed' regulation in Australia

When the Chief Executive of the AGO, Gwen Andrews, told an audience of business people that 'we are aiming for a light-handed regulatory approach, with only minimal government intervention where essential' (2000a), she was backing arrangements that combine traditional approaches with the introduction of NEPIs. The current regime has wanted to minimise statutory interventions (Loudon, 2000), a way of thinking that flows partly from the decline in confidence in established institutions (Papadakis 1999), and a concomitant belief that markets are better providers of economic and social incentives than government.

The shape of NEPIs in Australia nonetheless remains largely a process steered by the state. Their success depends on government setting incentives and penalties. As James argues, 'governments can influence usage patterns by controlling the quantities of environmental or natural resource attributes that are traded, or by controlling their prices, either directly where there is a mandate to set prices or indirectly through charges, taxes, subsidies and other economic incentives' (1997: 13). Statutory traditions are used to bolster these initiatives, hence the claim that Australia's state-sponsored NGS is, on a per capita basis, 'the highest investment by a national government to reduce emissions' (Hill 2000d). This seems to support arguments that even 'voluntary' agreements 'appear to herald a dramatic extension of the role of the state, rather than a withdrawal' (Lafferty and Meadowcroft 2000b: 452).

However, this impression can only be sustained if one insists on analysing state interventions, in other words, on examining solely the role of the state in changing processes of consumption and production. A more complete account would examine the role of 'wealth-generating industries' that operate in accord 'with bio-physical realities' (Carden, 1999: 102). This would, in effect, entail acknowledgement of some tenets of natural capitalism (Hawken et al 2000). The new mix of policy instruments reflects scepticism (among some political and business leaders) about direct regulation. Emissions trading systems are regarded as potentially far more effective than administrative and regulatory measures in tackling climate change. Furthermore, the new initiatives imply a critique of cost-benefit approaches that assume

incompatibility between environmental protection and the costs of running a business. They suggest sustainable development (which posits a central role for government in steering society) needs to be supplemented NEPIs.

Though proponents of NEPIs challenge the notion that industry's role is necessarily destructive, they face several hurdles. First, parts of industry resist the argument they are operating unsustainably. Second, there are adversarial relations and lack of trust between government, industry and environmental groups about the compatibility of environment and development. Third, there is the complication of redesigning government institutions that have long played a central role in creating and enforcing regulations. Finally, it will take more time to evaluate whether or not introduction of NEPIs, even on a modest scale, has been successful in changing behaviour. Overall, NEPIs in Australia are not so much replacing regulation but introducing an element of deregulation, and exist alongside regulatory structures, providing complementary means for addressing environmental problems.

Conclusion

Despite the immense effort that has gone into drawing contrasts between leaders and laggards one is still struck by the following commonalities between the EU and Australia:

- How both Australia and the EU have at least in principle committed themselves to sustainable development policies and begun to experiment with innovative measures for addressing environmental *and* economic concerns.
- How, over time, positions that appear to reflect fundamental differences – e.g. on emissions trading – are modified. For instance, initial reluctance by the EU to consider this option has given way to careful consideration of this option for limiting greenhouse gas emissions.
- How there is a desire to shift the burden of effort to dealing with many aspects of environmental degradation to the private sector through voluntary agreements.
- How there is growing recognition that business may end up being a powerful ally for reform in dealing with some of the most fundamental issues raised by environmentalists in the 1960s as well as by proponents of sustainable development in the 1980s.

It is in all such areas that we find not only the greatest commonalities between the EU and Australia but also the possibilities for common approaches and understanding. There is of course plenty to disagree about, both because of immediate concerns relating to different economic structures and interests and attitudes formed during times of conflict – be it the ambivalent relationship between Australia and Britain or the conflict between Australia and the EU over negative outcomes on agriculture. Yet, if we examine the overall trends in terms of predispositions towards the environment and policies to solve problems associated with human interventions, the opportunities for collaboration or sharing knowledge and

understanding far outweigh the negatives – as in the area of NEPIs, where, in the last few years, Australia has made some considerable inroads, which have parallels in Europe and potential to provide models for new policies.

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