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Modernising climate policy in Australia: climate narratives and the undoing of a Prime Minister

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Abstract. Australia came very close to legislating an emissions trading scheme as part of a climate policy package in 2009. This climate policy was driven by a new Prime Minister, Kevin Rudd, who had made addressing climate change his signature policy commitment both before and after the 2007 election that brought the Australian Labor Party to power. His climate policy was underpinned by two main interrelated narratives: ecological modernisation and climate justice. In this paper I consider the story of the Rudd government's climate policy experience through an ecological modernisation lens. In the end, it was the seeming disjuncture between political rhetoric and policy outcomes that brought the Rudd prime ministership down. The telling of the Rudd climate story through these narratives reveals some of the limitations of (mainstream) ecological modernisation as a major environmental management approach, as well as highlighting the vagaries of political leadership.

Introduction

After a decade or more of climate policy inertia, in 2007 the new Australian government moved quickly to stamp its mark as more progressive than its predecessor on climate change. Within weeks of coming to power in late 2007, the new Rudd Australian Labor Party government ratified the Kyoto Protocol and established a new ministry of climate change. It had already commissioned a consultant's report on climate change in Australia when still in opposition and while awaiting this review it continued to build its profile as a climate change leader, both domestically and internationally. Domestically, it identified climate change as a critical moral and economic problem and promised a strong evidence-based policy response, acknowledging that the climate problem posed significant risk to a dry continent such as Australia. Internationally, it sought to position itself as a key player, even leader, in the negotiations for a global climate agreement at the then forthcoming global climate meeting in Copenhagen in December 2009. Compared with the climate policy resistance of its predecessor, this new government was instrumental in forging a new era in Australia's domestic and international climate response.

Among those seeking long-awaited action on the climate problem, hopes were appreciably raised. It was not long, however, before those hopes were dashed. Not only was the extensively developed climate policy, the Carbon Pollution Reduction Scheme (CPRS), ultimately withdrawn, but also its politics dramatically brought down the prime minister who had originally enthusiastically promoted it. What went wrong? (1) As in most other countries, and as testified in global climate meetings,

(1) This is a complex question. While I focus on the climate policy aspects and implications of this story, there are other important facets to the fall of the Rudd prime ministership, many of which have been and continue to be debated in the mainstream media and in a number of books (see Cassidy, 2010; Marr, 2010; Stuart, 2010). Among the key explanations are his leadership style—an alleged authoritarian and noncollaborative decision-making style that confined policy and strategy discussions to just a few actors, several of whom were his young staffers, to the exclusion of his broader cabinet, his party as a whole, and a broader array of stakeholders. Not a popular figure among his party colleagues, Rudd's leadership was sustained by his popularity in the polls.

the politics of climate change drives the climate policy process. In Australia these politics highlight a core 'push – pull' tension in the management of Australia's environmental future. On the one hand, Australia wished to position itself as responsive and progressive in its approach to shaping a sustainable economic future; on the other hand, the capacity to position itself thus was critically conditioned by its resource profile and its related government – business relations politics. This problematised the ecological modernisation of the economy necessary to achieving climate change mitigation.

In the paper I consider the story of the Rudd government's climate policy experience through an ecological modernisation (EM) lens. Prime Minister Rudd utilised two main interrelated narratives to make his case for energy reform: the first was a climate morality and justice narrative; and the second was a mainstream EM one. EM is a major discourse of environmental management today, and while the theory that underpins it is multifaceted and diverse, an analytical continuum often highlights two main conceptions of it: a reformist, mainstream approach and a 'stronger', reflexive one. A key difference is that the former proposes an incremental technocratic approach to the activation of some environmental reform, while the latter requires considerable sectoral change to address both degradation of environmental resources and the 'moral' or justice issues that often accompany it. Then Prime Minister Kevin Rudd invoked the justice dimensions of the stronger version to launch a climate policy that sat within the parameters of the former.

Ultimately, the Rudd government's lofty discursive promotion of the justice underpinnings of the latter brought into sharp relief the limited reforms he did eventually propose—even before his climate policy was withdrawn altogether. In effect, Prime Minister Rudd's policy design sat largely within a mainstream EM while his moral framework nudged the stronger end—with the raised expectations that this generated. Addressing the justice dimensions of the climate problem demands more thoroughgoing changes to a country's energy profile than those required by a more mainstream approach. In the end, it was the seeming disjuncture between the two narratives—long on normative promises and short on purposeful delivery—that brought the Rudd prime ministership undone. The telling of the Rudd climate story through these narratives illustrates some of the limitations of (mainstream) EM theory as a major environmental management approach, particularly in energy-intensive economies such as Australia.

Modernisation for climate change

Until Australia's 'climate change election' in 2007, and the emergence of a prime minister willing to lead on climate policy, Australia had long been considered a climate policy 'laggard' (see Christoff, 2005; Crowley, 2007; Curran, 2009). Australia's energy-intensive economy, and the centrality of its fossil fuel resources to its economic buoyancy, saw the development of a government-business relations culture that actively

(1) continued.

Once this poll popularity dissipated, his hold on the leadership was weakened. The fall in the polls arose after several botched policy implementations such as the roof insulation scheme and the mining tax imbroglio. The single most important impact on his popularity, however, was the significant undermining of his legitimacy when he deferred the CPRS—his signature policy.

⁽²⁾ There has, overall, been limited analysis of Australian climate policy through an EM lens. In a 2009 paper, however, Curran—utilising a different conceptualisation of EM theory to the one used here—discusses climate policy under the previous Howard government and during the early stages of the new Rudd government (see also Howes et al, 2010). This was before much of the Rudd government's climate policy story as detailed in this paper emerged, and before the Rudd government's climate politics unravelled in earnest.

protected the energy status quo. Christoff (2005) identifies several key phases in Australia's climate policy story. It began with a phase of 'naïve optimism' from 1985 to 1994 when the then Hawke Labor government, reacting in part to emerging global responses to climate change, championed some policy action. The failure to achieve any solid outcomes and the entrance of the conservative Howard government to power in 1996 ushered in a new phase of 'fossil fuel pragmatism' which persisted until 2000. This phase reframed the climate problem into an economic one, emphasising the negative impacts to the Australian economy of sectoral restructuring and refusing to ratify the Kyoto Protocol on this basis. This phase also introduced a concept that was to dominate the debate, in some form or other, for quite some time: the policy approach of 'no regrets'—an approach that sought to ensure that any climate policy developments would not disadvantage industry and Australia's existing sectoral arrangements (see Bulkeley, 2000; 2001; Crowley, 2007; Stevenson, 2009). The next phase (2000 - 02) saw some prevarication among industry and broad-ranging debates about the benefits of ratifying the Kyoto Protocol. In the last phase to 2005, the Howard government nonetheless 'entrenched the line' ensuring that climate policy resistance would prevail. It was only on the eve of the 2007 election, in acknowledgement of growing public support for climate action, that the Howard government took a nascent climate policy to its ultimately unsuccessful 2007 election. This tentative effort to begin modernising the Australian economy came too late, with the Rudd Labor Party already launching the more convincing sustainable development plan and winning the election.

Sustainable development depends on an economy's capacity to modernise along ecological lines. At the same time, most economies will seek to achieve such modernisation as competitively and advantageously as possible. An EM approach that promises to simultaneously generate business competitiveness and environmental sustainability within the framework of the existing liberal market paradigm, is thus very appealing. It helps explain why EM is one of today's major discourses of environmental management or, as others put it, "one of the dominant perspectives in the environmental social sciences" (Scheinberg and Mol, 2010, page 20). Indeed, for some, the potential of an EM approach to "radically reduce the environmental burden of industrial growth" (Janicke, 2008, page 563), particularly through its promotion of innovation and eco-efficiency, "is without any alternative" (page 563). Through decoupling environmental degradation from economic development, an EM approach promotes a paradigm of 'win-win' or "a positive sum-game" (Hajer, 1995, page 64) where technological innovation enhances economic profitability at the same time as it advantages the environment. This paradigm, or "discourse of reassurance" (Dryzek, 2005, page 172), is fundamental to explaining EM's appeal. For governments this approach limits electoral risk; for industry it demands only incremental reform; and for society it promises to contain costs and create opportunities. It hence offered the Rudd government a promising framework through which to launch the climate modernisation of the Australian economy.

EM theory emerged in a largely European context in the 1980s, in part as a 'practical' application of the sustainable development discourse and as a counter to demands for more radical social and institutional transformation (see Bailey and Wilson, 2009; Buttel, 2000). The theory incorporates a range of approaches and foci, which some have distinguished as the "analytical and descriptive versus the normative/prescriptive" (Mol, 1996, pages 311 – 312; see also Buttel, 2000; Fisher and Freudenberg, 2001; Gouldson and Murphy, 2000). The successful application of an EM approach in countries such as Germany, the Netherlands, Norway, and Denmark is often attributed to decision-making arrangements that encourage a more

collaborative relationship between business, government, and other social interests (Buttel, 2003; page 324; Dryzek, 2005, pages 166–167; Dryzek et al, 2002). Generally speaking, EM privileges the role of technology and market dynamics (especially innovation) in driving change, in concert with some modernisation of political institutions and processes that would steer this change (see Mol, 1996). Hence, while modernisation and technology may have been culprit in the creation of environmental problems, they now offer the tools for their redemption.

How these central features and tools of EM thought are conceptualised and applied has driven the critique that is also a feature of its theoretical development (see Fisher and Freudenberg, 2001; York and Rosa, 2003). Rather than rejecting the discourse altogether, some EM critics seek instead to theoretically and normatively 'strengthen' it. This objective has seen EM conceptualised along a reformist—transformative continuum, which often distinguishes it in terms of its 'technocorporatist' or 'reflexive' (Hajer, 1995), 'stronger' or 'weaker' (Christoff, 1996), or mainstream and 'social constructivist' (Buttel, 2000) forms. Central to these distinctions is the conceptualisation of the environmental 'problematique', its normative framing, and the degree of institutional restructuring, both in scope and scale, required to address it.

The mainstream approach focuses on largely technological solutions and eco-efficiency gains that are managed within minimally transformed institutional arrangements. This reflects this mode's overriding faith in the capacity of markets to generate environmentally friendly innovation in response to major environmental problems. The 'clean coal', or carbon capture and storage suite of technologies, is illustrative of this approach, particularly in coal-intensive economies such as Australia. This version marginalises broader power relations analyses of existing political economy and their link to environmental decline (see Bailey and Wilson, 2009; Harvey, 1996, pages 378 - 383). It can thus be understood as "a technocratic and neo-liberal economic discourse that does not involve any fundamental rethinking of societal institutions" (Backstrand and Lovbrand, 2006, page 53), and that shares much with the related discourses of market environmentalism and green governmentality (see Backstrand and Lovbrand, 2006; Liverman, 2009). While Huber (2008, page 366) states that "significant progress" towards this mode of EM has occurred, particularly for clean energy, he also cautions that it has nonetheless been "repeatedly delayed in present-day core innovator countries" (page 366) so that even the "more advanced nations in the present world-system are in early rather than later stages of ecological modernisation" (page 366). The Australian climate policy experience sits well within this version.

Stronger EM theory, on the other hand, is reflexive and critical. It more directly acknowledges the broader transformational requirements of the modernisation task, and the difficult social and political change dynamics this entails (see Thiel, 2010). Wide-ranging political modernisation is hence considered vital to a stronger EM including the establishment of 'reflexive networks' between political, business, and civil society actors to democratise ecological renewal. As Warner (2010, page 539) observes, "[t]echnological innovation without social critique is likely to reflect prevailing social relations of power". Instead, a stronger modernisation would utilise new forms of political intervention "to change the direction of technological progress and to put the compulsion for innovation at the service of the environment" (Spaargaren, 1997, page 15); and in a way that tackles the power relations or "evasive behaviour" of "modernisation losers"—that is, "old" energy-intensive industries reluctant to change (Janicke, 2008, page 562). This mode also more directly acknowledges the normative underpinnings of, and the centrality of values to, environmental problems. Stronger EM thus pays particular attention to "greater institutional reflexivity, democratization of environmental policy and a focus on the justice dimensions of environmental problems"

(Backstrand and Lovbrand, 2006, page 53), ensuring that the equity and justice elements of the climate problem are also key drivers of policy reform. As Harvey (1996, page 379) remarks, "some sort of configuration has to be envisaged in which ecological modernisation contributes both to growth and global distributive justice simultaneously." To a considerable degree, this is precisely the 'configuration' that the Rudd rhetoric on climate policy envisaged. I first tell the Rudd government's climate story, before considering the reasons for its unravelling.

Climate policy narratives

The Rudd Labor government came to power in November 2007 on an electoral platform dominated by industrial relations and climate change reform. While it may be overstated to view climate change as the decisive factor, the view of Rudd Labor as more progressive than its predecessor on climate change played a significant part in its winning of a 2007 poll deemed Australia's first climate change election (see Rootes, 2008). Several years that preceded the poll had coincided with growing public awareness that climate change posed significant national and global risks. Disenchanted with the previous conservative government's climate laggard status, the Australian electorate responded positively to Rudd Labor's promise to reverse climate policy obstructionism and to introduce a suite of progressive climate policies (see Curran, 2009). Accordingly, after winning the 2007 election, the Rudd government moved quickly to politically modernise its climate approach, ratifying the Kyoto Protocol at the 13th Conference of the Parties (COP 13) in Bali in December 2007 during its first week in office.

Ratification was met with enthusiastic acclaim. The symbolism generated by Australia's ratification, especially after its prolonged refusal to do so, was powerful, not only in consolidating the new government's political esteem domestically but also internationally. The Australian government then quickly set about fleshing out its domestic response. The consultant's report it had commissioned—the Garnaut review—released its eagerly awaited report in 2008 to widespread public interest. In the final report Garnaut referred to climate change as "a diabolical policy problem" because "each country benefits from a national point of view if it does less of the mitigation itself, and others do more" (Garnaut Climate Change Review, 2008, page xviii). While Garnaut's emphasis was on the policy aspects of the climate problem, the issue was equally understood as a diabolical moral problem—an aspect of the climate problem that Rudd's climate discourse continually referred to. Garnaut also observed that it was "neither desirable, nor remotely feasible to seek to lower the climate change risk by substantially slowing the rise in living standards anywhere, least of all in developing countries" (page xxi). It is for this reason that the review identified the climate change solution in the EM logic of decoupling economic growth from excessive greenhouse emissions.

From the outset, Prime Minister Rudd situated his climate policy choices within mainstream EM but borrowed his broader moral framework from the 'strong'. He promoted the economic discourse of EM even as his main motivational and discursive force lay with climate justice. The government was successful in launching a high-profile public debate about the need to act decisively on climate change, and attracted a relatively large and willing public to its cause. In building such support, Prime Minister Rudd quickly developed a reputation for his climate justice rhetoric. For Rudd (2009), climate warming was essentially a moral problem, one that demanded moral leadership in steering economic restructuring for climate sustainability. Indeed, climate change was "not only an environmental challenge" and a "massive" economic and political challenge, but also "one of the greatest moral challenges of our age"

(see also Rudd, 2008a; 2008b). In prosecuting his argument, Rudd focused on the current generation's duties to its descendants and to the planet as a whole. In the speech announcing Australia's ratification of the Kyoto Protocol in December 2007, he identified climate change as "the defining challenge of our generation" with choices made now "impact[ing] all future generations" (Rudd, 2007). In the same speech, he noted that "the costs of action are far less than the costs of inaction ... [since the] truth is that this challenge of climate change transcends the old ideological, political and development divide." While his intention to invest in "industries and jobs of the future" signalled his commitment to the EM of the Australian economy, it was the moral responsibility owed to present and future generations that fundamentally drove this impetus. It was to be a narrative that he repeated many times over the course of two years and that came to be characterised as his signature theme.

Climate solutions were nonetheless treated as economic matters, within the confines of existing energy status quo arrangements. Economically, the Rudd government constructed inaction as more costly than action, and heralded the new opportunities for the Australian economy that addressing climate change would provide. Technology and innovation, guided by market instruments, were to be this government's preferred climate change solutions, with an emissions trading scheme (ETS) the preferred model to drive this change—hence the government's embrace of EM's promise of "ecoefficient innovation" in the service of "environment friendly technology which also increases resource productivity" (Janicke, 2008, page 558). It was in the translation of his morality and justice rhetoric to climate policy design that Rudd's climate enterprise began to unravel.

Designing climate policy

The Garnaut Climate Change Review (2008) proposed what it considered an economically feasible, 'realistic', and equitable policy response. It recommended a three-pronged target: 5% reduction of 2000 levels by 2020 if no global agreement ensued; 10% if a global agreement committed to a climate stabilisation of 550 parts per million (ppm); or a fuller 25% if the global agreement sought a 450 ppm target reduction (page xxxix). Importantly, it urged that the government should resist issuing too many free permits to emissions-intensive trade-exposed (EITE) industries and electricity generators in order to avoid distortion of the price signal.

Heeding the Garnaut review's message, but determined to proceed with a less politically risky document, in December 2008 the government released its white paper— "The Carbon Pollution Reduction Scheme: Australia's low pollution future"—with an ETS as its core (Australian Government, 2008). The opening sentences of the white paper observed that "Climate change poses a substantial threat to Australia's economy and our way of life....We can either wait and leave our children and grandchildren to face the full impacts of climate change, or we can take responsible action now by investing in the industries and jobs of the future" (page iii). When measured against these bold proclamations, the ensuing policy response was bound to disappoint those seeking stronger action. For others—particularly those business lobbies who had mounted vigorous negotiations during background consultations, and who were concerned to ensure that Rudd's climate rhetoric did not match its policy action—there was considerable relief at an ETS design that was considerably circumscribed in their favour. This did not deter other industries from pressing for further compensation, however. While Garnaut's final report may have disappointed those seeking stronger targets, and was additionally criticised for its focus on clean coal technologies at the expense of renewables, the government's ensuing climate policy significantly undercut Garnaut's recommendations in any case (see Christoff, 2010).

Adhering to Garnaut's recommendations in at least its minimum target, the CPRS proposed an unconditional minimum commitment of 5% below 2000 levels by 2020 if no global agreement was reached in Copenhagen at the end of 2009. This would rise to 15% if all major economies, including developing economies such as China and India, also committed to comparable reductions. The long-term target was a 60% emissions reduction by 2050. Scheduled to begin in July 2010, the CPRS's coverage was broad, covering 75% of total emissions, although at this initial stage it did not include emissions from the agricultural sector which was expected to come on board around 2015. Despite complaints from various business sectors about harsh and discriminatory treatment, the CPRS was distinguished by its generosity to industry and electricity generators, particularly through the issuing of free permits or compensatory payments. It allocated free permits to EITE industries for up to 90% of their emissions. Maximum free permits would be issued to industries considered particularly vulnerable to carbon leakage, including aluminium, cement, and iron and steel production; and the minimum of 60% would flow to industries such as liquefied natural gas (LNG). Other emissions-intensive, but not trade-exposed, industries, such as coal-fired electricity generators, would be compensated through direct payments, along with significant investment in clean coal research. This did not prevent electricity generators, LNG proprietors, and additional EITE industries from continuing to demand stronger recompense, however. It seemed that each day during this consultation period the Australian media reported a new industry group's proclaimed ruin should it not receive sufficient compensation. Finally, the public, particularly lower-income households, would be cushioned from rising prices through generous assistance and compensation measures.

Not unexpectedly, the reaction to CPRS 'mark 1' was mixed. At one end of the spectrum, energy-intensive industry sectors complained bitterly about inevitable devastation, concerned that even this limited modernisation would wreak havoc on their industries. From the other end, environmentalists and other concerned constituents lamented a hollow policy response that betrayed Rudd's climate rhetoric, and a lost opportunity for stronger modernisation. While there were many industries, particularly in the renewables sector, poised to take advantage of an EM trigger (see Diesendorf, 2007; Saddler et al, 2007), they too were disappointed at the limited innovation the proposed trigger would in reality generate. It was clear that the 'big polluters' or 'the carbon lobby' had exerted considerable influence over a final policy design that best reflected their interests (see Pearce, 2009). This was evidenced in three main ways. First, the stipulated emissions reduction target was low; not only the unconditional 5%, but even more importantly the upper limit of a 15% contribution to a global agreement. Second, the issuance of free permits was extensive, although, as we subsequently note, this was extended even further in CPRS mark 2. Third, the price signal's structural and behavioural change trigger was undermined through the CPRS's complex and extensive compensation schemes. While the next few months saw the Rudd government occupied with devising policies for managing the impact of the global financial crisis, at the same time it sought to manage the fallout from the CPRS. This included continued lobbying from both business and environmental nongovernmental organisations (NGOs), as well as from a political opposition whose agreement it would need for the legislation's parliamentary passage.

CPRS mark 2, delivered in May 2009, was hence as much a strategic document as a revised climate policy scheme. It sought to contain the restructuring trigger by further limiting industry modernisation at the same time as it sought to showcase its modernised climate policy credentials. Through its main changes, it aimed to either satisfy, or politically nullify, a number of diverse constituencies—constituencies important to

the government's immediate political interests. First, CPRS mark 2 granted even more concessions to industry. Reflecting the success of the business lobby in extracting additional concessions from an already generous scheme, a now graduated introduction of the scheme would see unlimited carbon permits sold in the first year at the very low price of US\$10 per tonne; and EITE industries would receive additional support (of up to 95% free permits for some "highly exposed" industries) (Australian Government, 2009).

Second, the government increased its maximum target from 15% to 25%, in order to win the support of some influential environmental NGOs. While disappointed with the revised scheme as a whole, some of these environmental NGOs—but not the parliamentary Australian Greens party which was effectively marginalised during climate negotiations because of its demand for a more 'equitable' design—eventually supported what the government labelled "a soft start and a strong finish" (McLeod, 2009, unpaginated). Finally, the government's redesigned scheme had the additional benefit of hobbling its opposition, an opposition that had called for a one-year delay in the scheme's introduction and for further business compensation. Given that its 'demands' were now met in the revised CPRS, continued resistance by the opposition would seem churlish. In the end, more so for internal party divisions than climate policy integrity, the opposition voted against the bill in any case.

Finally, it all came to nought—for two main reasons. First, there was the failure at Copenhagen to reach a meaningful agreement, which, among other impacts, slowed the overall domestic policy momentum. Second, after two unsuccessful attempts to pass the bill, the government withdrew its ETS proposal in April 2010, proposing to review it at the end of 2013. Not only did the opposition vote against it—after a protracted and intense negotiation process—but, in refusing to be 'locked into' a low minimum target, so too did the Australian Greens. This was significant given that the Greens's votes were among those necessary for passage of the bill.

The decision to shelve the scheme had devastating consequences for Prime Minister Rudd, whose legitimacy and political popularity, as we saw, had been honed by his climate credentials. Disappointed constituents at the time pointed to alternatives he could have chosen instead of withdrawing the policy altogether. These included triggering a legitimately based double dissolution election. Instead, the Rudd government demurred and withdrew the policy altogether. So significant was the undermining of his legitimacy, and his subsequent collapse in support, that he was removed from the prime ministership in June 2010 in a successful challenge by his then deputy, Julia Gillard. His precipitous fall reflected the community's disappointment in his leadership. He had after all successfully built his status as a 'conviction' politician, fighting a climate cause that he passionately championed through his moral and modernisation narratives—narratives that became central to his political authority.

The justice dimension and climate modernisation

How could a more reflexive EM mode incorporate justice dimensions into climate policy design? This is clearly a complex question (see Caney, 2008; Singer, 2009), which is approached here in a specific way. Many environmental problems are characterised by negative externalities, which arise when the activities of one actor may produce benefits for themselves but harmful burdens for others. Climate pollution is a key example. A first step for the inclusion of justice dimensions into policy design would thus be the effective incorporation of the burden-sharing principle. This principle seeks a more even distribution of the burdens of climate change across and between generations, as conditioned by historical responsibility for the problem and capacity to pay for its remediation.

Two other principles are particularly useful in guiding the incorporation of justice and equity concerns into policy design: the polluter-pays and the ability-to-pay principles—principles which sit within the broader normative framework of a more reflexive EM. 'Paying', however, is highly contested and highly political territory, particularly who should pay what and to whom. But as Weale (1992, pages 31–32) observes, "the internalisation of externalities becomes a matter of attitude as well as finance", so that the "challenge of ecological modernisation" extends beyond the economic benefits of sustainability "to embrace changes in the relationship between the state, its citizens and private corporations".

Paying, burden sharing, and externality 'accounting' are all clearly difficult issues—the very issues that stymied progress at the Copenhagen COP in 2009, as well as continuing to stymie policy progress across the globe, including in Australia. But Rudd's invocation of the moral and justice dimensions of the climate problem to drive his policy design did not necessarily signal an intention to adopt the mechanisms that a stronger EM mode would suggest are necessary to achieve these objectives. While the Rudd government was cognisant of these justice dimensions—hence his normative framing of the climate problem—it was in his policy application that critical problems emerged.

The application of generational equity is far from easy. Equity within present generations and between present and future generations raises a range of contentious issues, not least of which is the complexity of incorporating the interests of future generations into institutional decision-making designs of the present (see Eckersley, 2000; Goodin, 1996). Poorly designed climate policies can also exacerbate inequity and be unfairly punitive. Not all in developed countries such as Australia, for example, have benefited, or contributed, in the same way to global warming, and poorer citizens in these countries could end up paying more for remedial costs than the better resourced (see Moss, 2009). This could mean that unfair burdens are imposed on some members of present generations when it requires them to take responsibility for remedying a situation that they were not necessarily responsible for creating (Jagers and Duus-Otterstrom, 2008, page 582).

The polluter-pays and ability-to-pay principles seek to operationalise equity by addressing the distributional aspects of the climate response. As outlined in principle 16 of the 1992 Rio Declaration, the polluter-pays principle proposes that those industries which cause the pollution should be liable to correct it or compensate for it:

"National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment" (UNEP, 1992, unpaginated).

Put more directly, "the perpetrators of some environmental damage ought to bear the costs of its bad effects" (Page, 2006, page 53). The ability-to-pay principle is twinned with polluter pays, and while it generally refers to a country's resource capacities as a whole, rather than those of only specific industries, it can also be applied on a national scale.

As we saw, Australia's profile as a net producer and exporter of energy, and as one of the highest global per capita emitters (Parker and Blodgett, 2008), conditions its sectoral politics and hence its climate policy response. A fossil-fuel-dominated energy sector, with long-standing established government – business relationships, influences the shape and progress of sectoral modernisation. It is thus central to how the polluter-pays principle is interpreted, negotiated, and applied.

Recognising that the efficacy of an ETS relies on the 'integrity' of its design, the Garnaut Climate Change Review (2008) urged government to stand firm against "rent seekers" (page 321) and to take a "highly principled approach to the design" of the ETS to avoid it "degenerate[ing] into loud professions of support but even louder pleadings for special treatment" (page 342). These "louder pleadings" saw, as discussed earlier, well-resourced industry stakeholders successfully advocate alternative 'justice' narratives in an effort to reshape Australia's climate policy to a form more acceptable to them. The 'small player' defence (Australia's small percentage contribution to global warming as a whole as opposed to its per capita contribution) and the carbon leakage defence (the threat of emissions-intensive industries moving offshore to countries without a carbon impost) were the most prominent and ultimately the most successful. Alcoa Steel's articulation of the carbon leakage defence is representative: "Erosion of EITE industry allocations ahead of international competitors embracing a comparative carbon cost jeopardises the viability of Australian industries, the jobs they support and flow-on benefits to Australian communities" (in ACJP, 2009). The risk that emissions reduction schemes would drive job losses was also a central narrative. The chief executive of the Mineral Council of Australia, for example, promotes carbon plans as "jobs carnage", with "[n]o state ... spared [and] no mining region untouched" (Hooke, 2009, unpaginated).

These 'louder pleadings' were ultimately successful in amending Australia's climate policy to a form that minimised the amount of modernisation or restructuring that would be required, and that minimised the application of the polluter-pays principle as a whole. While it is important to appreciate the 'special position' that Australia's EITE industries do occupy—their prices are determined by global markets hence limiting their capacity to pass increased costs on locally—the Garnaut Climate Change Review (2008) was adamant that "there are no identifiable circumstances that would justify the free allocation of permits" (page 332). Indeed, it would be "wrong" to use free permits to transition EITEs since this suggests that "assistance is being provided on compensatory grounds" which in turn undermines these industries' restructuring responsibilities (page 332).

The review points out that, in any case, "free permits are not free". While their allocation may be free, "their costs are borne elsewhere in the economy—typically by those who cannot pass on the costs to others (most notably, households)" (page 331). As Eckersley (2009, page 115) observes, auctioning of permits is preferred "from the standpoint of both fairness and efficiency because it does not disadvantage new market entrants..., does not grant a scarcity rent to existing major carbon polluters and provides government with significant revenue from the sale of permits." Alternatives to free permits are instead canvassed. These include: effective sectoral climate change agreements that would see different EITE sectors operating in a relatively level playing field; some domestic assistance measures to "address the failure of our global competitors to act on limiting their carbon emissions" (page 343); and the wider use of credits to reduce "a liable party's obligation to acquit permits at the end of the relevant compliance period" (Garnaut Climate Change Review, 2008, page 348).

A number of reports at the time questioned the accuracy of the claims on which the carbon sector's compensation entitlements rested. They charged that, in effect, in order to extract the best arrangements possible, many major polluters "presented the worst case [scenario] to governments, in an effort to obtain policy concessions" (Berger, 2009). In addition, a complaint to the Australian Competition and Consumer Commission about potential breaches of the Trade Practices Act⁽³⁾ identified discrepancies between what some major polluters report to government (generally very significant damage) and

⁽³⁾ The Trade Practices Act is a major piece of Australian legislation that seeks to protect consumers from the restrictive trade practices of corporations, 'unconscionable' business behaviour, and practices that abrogate consumer protection principles (ACCC, 2011).

what they actually report to their shareholders; and between "their public statements and independent financial analysis of the likely impacts" (ACF and ACJP, 2009).

A May 2009 report by Goldman Sachs JBWere also found that the financial materiality impacts of the CPRS on ASX100 (Australia's equity index) companies would likely be "insignificant", with only four of the top 100 Australian companies likely to experience liabilities of over 5% of their earnings—even before taking the impact of free permits for EITEs into account (in ACF and ACJP, 2009, page 3). Other major financial analysts such as JP Morgan and CitiGroup reached similar conclusions. In its 2008 analysis of the financial impact of the CPRS on the company Woodside Petroleum Limited, Citi Investment Research "estimated the carbon cost impact of Woodside's Pluto and North West Shelf operations at just 1-2 percent of revenue in the early stages of a trading scheme (at a carbon price of \$20 per tonne)" and "rising to 2-4 per cent of revenue (with carbon at \$40 per tonne)" (ACF and ACJP, 2009, page 4). These discrepancies could arise from the fact that many of the carbon costs could in reality be passed on, even if they are not advertised as such. As Freebairn (2009, page 83) contends, "a high proportion of the economic costs" of tradable permits will in reality "be passed forward to consumers, rather than to producers"; so that, in short, "much contemporary policy discussion and lobbying to compensate producers is exaggerated."

On a constituency level, a survey undertaken by an Australian think tank reveals considerable disenchantment with the preferential treatment given to business in the design of the scheme, with 51% stating that heavy industry polluters should take primary responsibility, followed by government at 34% (Fear and Denniss, 2009, page x). Notably, "less than one percent of respondents believed that the views of the business community should be the most important factor for government in choosing an emissions reduction target" (page 41). These views reflect some appreciation of the distributional fairness norm that underpins the climate problem as well as some expectation that principles of justice and fairness should guide climate policy design.

Conclusion

As we have seen, EM increasingly presents as the progressive face of sustainable development today. Its appeal lies in its technological optimism and the reassurances it offers for resolution of difficult environmental problems. It posits socioindustrial change as not only possible but also exciting in the opportunities it provides, and with minimal disruption to existing political economy. Much faith is placed in the capacity of technology and market competitiveness to drive industry innovation for a cleaner carbon future. The relative success of such an approach, at least in its more mainstream face, is evidenced in a number of 'innovator' countries whose corporatist and collaborative decision-making styles have gone some way towards supporting 'green' innovation.

After much delay by previous administrations, the Rudd Labor government launched a climate response framed in the logic of mainstream EM and driven by justice and morality norms. Here Rudd promised not only a much-awaited Australian climate response but also a policy design that would reflect the justice and morality underpinnings that he had long championed. In the hard-fought negotiations that followed, however, the level of modernisation discursively promoted, and the fairness and justice principles that were claimed to guide it, gradually declined against the more visceral demands of influential industry stakeholders determined to resist it.

Paradoxically, Prime Minister Rudd was, in some ways, a victim of his own success: he succeeded in prosecuting the case—both moral and economic—for climate action, but in doing so significantly raised expectations. Incorporating justice and morality elements into an overall EM narrative, as Prime Minister Rudd did, implies

a commitment to going beyond a mainstream EM climate policy design to what has been conceptualised here as stronger or more reflexive EM. For Prime Minister Rudd, discursively embracing the justice narrative while emasculating the (polluter-pays and ability-to-pay) principles that would help embed it into policy, risked exposing too wide a gap between political rhetoric and policy outcome. This in turn risked undermining the political authority of a leader who had made the commitment to addressing 'one of the greatest moral challenges of our age' his signature theme.

This does not deny the difficult domestic political landscape in which climate policy was being negotiated—where the government was reliant on an obstructionist opposition and the higher targets that the Greens Party demanded for passage of its climate bill. But even here it was noted that Prime Minister Rudd had not spoken to the Australian Greens leader for over a year—a leader, furthermore, who shared Rudd's justice framing of the climate problem. Instead of the broader 'reflexive network' promoted by a stronger EM thought, decision making was seemingly confined to elite actors within business and politics who did not necessarily view climate change as a moral problem. Nor does the Rudd climate story deny that the Prime Minister may have genuinely held the values he discursively promoted. Indeed, some writings early in his career and his prime ministership testify to a set of genuinely held social democratic values influenced by his deeply held Christian religiosity. Further, on the very day he was deposed from the prime ministership, he urged that the party return to the CPRS and renew their commitment to climate policy. Buttel (2000) observed that "the thrust of core [or mainstream] ecological modernization thought is that eco-efficiency gains can be achieved without radical structural changes in state and civil society" (page 62). In the light of the Australian climate story told here, it would seem that political reality suggests otherwise.

References

- ACCC, 2011 Overview of the Trade Practices Act Australian Competition and Consumer Commission, http://www.accc.gov.au/content/index.phtml/itemld/788579
- ACF, ACJP, 2009, "ACF complaint to Australian Consumer and Competition Commission", Australian Conservation Foundation and Australian Climate Justice Program, http://www.acfonline.org.au/uploads/res/ACF-Complaint-to-ACCC.pdf
- ACJP, 2009, "Corporate climate risk: comparing political claims with actual disclosures to shareholders", Australian Climate Justice Program, http://www.acfonline.org.au/uploads/res/ACJP_Climate_Risk_Report_Final_June_2009.pdf
- Australian Government, 2008, "The Carbon Pollution Reduction Scheme: Australia's low pollution future", white paper, Department of Climate Change, http://www.climatechange.gov.au/emissionstrading/index.html
- Australian Government, 2009, "Strengthening Australia's 2020 carbon pollution target", Department of Climate Change, http://www.climatechange.gov.au/emissionstrading/pubs/carbon_pollution_target.doc
- Australian Industry Group, 2008, "CPRS white paper: key points", http://www.aigroupagecom.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Environment/Presentations/7273_CPRS_key_points.pdf
- Backstrand K, Lovbrand E, 2006, "Planting trees to mitigate climate change: contested discourses of ecological modernisation, green governmentality and civic environmentalism" *Global Environmental Politics* 6 50 75
- Bailey I, Wilson G, 2009, "Theorising transitional pathways in response to climate change: technocentrism, ecocentrism, and the carbon economy" *Environment and Planning A* **41** 2324 2341
- Berger C, 2009, "Two face strategy may damage polluters" *Australian Financial Review*, 15 June, http://www.acfonline.org.au/articles/news.asp?news_id=2312
- Bulkeley H, 2000, "Discourse coalitions and the Australian climate change policy network" Environment and Planning C: Government and Policy 18 727 – 748
- Bulkeley H, 2001, "No regrets? Economy and environment in Australia's domestic climate change policy process" *Global Environmental Change* 11 155 169

Buttel F, 2000, "Ecological modernization as social theory" *Geoforum* 31 57 – 65

Press, Melbourne)

- Buttel F, 2003, "Environmental sociology and the explanation of environmental reform" Organization and Environment 16 306 – 344
- Caney S, 2008, "Human rights, climate change and discounting" *Environmental Politics* 17 536 555 Cassidy B, 2010 *The Party Thieves: The Real Story of the 2010 Election* (Melbourne University
- Christoff P, 1996, "Ecological modernisation, ecological modernities" *Environmental Politics* **5** 476 500
- Christoff P, 2005, "Policy autism or double-edged dismissiveness? Australia's climate policy under the Howard government" *Global Change, Peace and Security* 17 29 44
- Christoff C, 2010, "Touching the void: the Garnaut Review in the chasm between climate science, economics and politics" *Global Environmental Change* **20** 214–217
- Crowley K, 2007, "Is Australia faking it? The Kyoto Protocol and the Greenhouse Policy challenge" Global Environmental Politics 7 118 – 139
- Curran G, 2009, "Ecological modernisation and climate change in Australia" *Environmental Politics* **18** 201 217
- Diesendorf M, 2007 Greenhouse Solutions with Sustainable Energy (University of New South Wales Press, Sydney)
- Dryzek J, 2005 *The Politics of the Earth: Environmental Discourses* (Oxford University Press, Oxford)
- Dryzek J, Hunold C, Schlosberg D, Downes D, Hernes H-K, 2002, "Environmental transformation of the state: the USA, Norway, Germany and the UK" *Political Studies* **50** 659 682
- Eckersley R, 2000, "Deliberative democracy, ecological risk, and 'communities-of-fate'", in *Democratic Innovation* Ed. M Saward (Routledge, London) pp 117 132
- Eckersley R, 2009, "Just carbon trading?", in *Climate Change and Social Justice* Ed. J Moss (Melbourne University Press, Carlton) pp 99–129
- Fear J, Denniss R, 2009, "Zero-sum game: the human dimensions of emissions trading", paper No. 2, The Australia Institute, August
- Fisher D R, Freudenburg W R, 2001, "Ecological modernization and its critics: assessing the past and looking toward the future" *Society and Natural Resources* **14** 701 709
- Freebairn J, 2009, "Some distributional issues in greenhouse gas policy design", in *Climate Change and Social Justice* Ed. J Moss (Melbourne University Press, Carlton) pp 82–98
- Garnaut Climate Change Review, 2008, "Final report", Commonwealth of Australia, Canberra, http://www.garnautreview.org.au/index.htm
- Goodin R, 1996, "Enfranchising the Earth, and its alternatives" *Political Studies* 44 835 849
- Gouldson A, Murphy J, 2000, "Environmental policy and industrial innovation: integrating environment and economy through ecological modernisation" *Geoforum* 31 33 44
- Hajer M, 1995 The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process (Oxford University Press, Oxford)
- Harvey D, 1996 Justice, Nature and the Geography of Difference (Blackwell, Oxford)
- Hooke M, 2009, "Carbon plan will cause jobs carnage" *The Australian* 22 May, http://www.theaustralian.news.com.au/business/story/0,28124,25518783-30538,00.html
- Howes M, McKenzie M, Gleeson B, Gray R, Byrne J, Daniels P, 2010, "Adapting the idea of ecological modernisation to the Australian context" *Journal of Integrative Environmental Sciences* 7 1 17
- Huber J, 2008, "Pioneer countries and the global diffusion of environmental innovations: theses from the viewpoint of ecological modernisation theory" *Global Environmental Change* **18** 360 367
- Jagers S, Duus-Otterstrom G, 2008, "Dual climate change responsibility: on moral divergences between mitigation and adaptation" *Environmental Politics* 17 576 591
- Janicke M, 2008, "Ecological modernisation: new perspectives" *Journal of Cleaner Technology* **16** 557 565
- Liverman D, 2009, "Conventions of climate change: constructions of danger and the dispossession of the atmosphere" *Journal of Historical Geography* **35** 279 295
- McLeod S, 2009, "Well crafted package puts onus on Turnbull" *ABC News* 4 May, http://www.abc.net/au/news/2009-05-04/well-crafted-package-puts-onus-on-turnbull/1672002
- Marr D, 2010 *Power Trip: the Political Journey of Kevin Rudd* Quarterly Essay 38 (Black Inc. Books, Collingwood, Victoria)
- Mol A P J, 1996, "Ecological modernisation and institutional reflexivity: environmental reform in the late modern age" *Environmental Politics* 5 302 323

- Mol A P J, 1997, "Ecological modernisation: industrial transformations and environmental reform", in *The International Handbook of Environmental Sociology* Eds M Redclift, G Woodgate (Edward Elgar, Cheltenham, Glos) pp 138 149
- Mol A P J, 2003, "Joint environmental policymaking in Europe: between deregulation and political modernisation" *Society and Natural Resources* **16** 335 348
- Moss J (Ed.), 2009 *Climate Change and Social Justice* (Melbourne University Press, Carlton) Page E, 2006 *Climate Change, Justice and Future Generations* (Edward Elgar, Cheltenham, Glos)
- Page E, 2008, "Distributing the burdens of climate change" *Environmental Politics* 17 556 575 Parker L, Blodgett J, 2008 *Greenhouse Gas Emissions: Perspectives on the Top 20 Emitters and Developed Versus Developing Nations* Congressional Research Service, Washington, DC
- Pearce G, 2009 *Quarry Vision: Coal, Climate Change and the End of the Resources Boom* Quarterly Essay 33 (Black Inc. Books, Collingwood, Victoria)
- Rootes C, 2008, "The first climate change election? The Australian general election of 24 November 2007" *Environmental Politics* 17 473 480
- Rudd K, 2007, "Speech at high level segment of the 13th Conference of the Parties", United Nations Framework Convention on Climate Change, Bali, Indonesia, 12 December, http://www.pm.gov.au/node/6006
- Rudd K, 2008a, "Australia's low pollution future", speech, 15 December, National Press Club, Canberra, http://www.npc.org.au/speakerarchive/the-hon-kevin-rudd-mp.html
- Rudd K, 2008b, "Building a better world together", speech, 9 June, Kyoto University, Japan, http://www.nuclearsecurityproject.org/atf/cf/%7B1FCE2821-C31C-4560-BEC1-BB4BB58B54D9%7D/SPEECH_RUDD_KYOTO_UNIVERSITY_60908.PDF
- Rudd K, 2009, "Earth hour 2009", speech 26 March, http://www.pm.gov.au/media/Speech/2009/speech_0885.cfm
- Saddler H, Diesendorf M, Denniss R, 2007, "Clean energy scenarios for Australia" *Energy Policy* **35** 1245 1256
- Scheinberg A, Mol A P J, 2010, "Multiple modernities: transitional Bulgaria and the ecological modernisation of solid waste management" *Environment and Planning C: Government and Policy* **28** 18 36
- Singer P, 2009, "Climate change as an ethical issue", in *Climate Change and Social Justice* Ed. J Moss (Melbourne University Press, Carlton) pp 38 50
- Spaargaren G, 1997 The Ecological Modernisation of Production and Consumption: Essays in Environmental Sociology (Wageningen University, Wageningen)
- Stevenson H, 2009, "Cheating on climate change? Australia's challenge to global warming norms" *Australian Journal of International Affairs* **63** 165 186
- Stuart N, 2010 Rudd's Way: November 2007 June 2010 (Scribe, Melbourne)
- Thiel A, 2010, "Ecological modernisation and the scalar level of contradictions in Southern European water politics: the case of the Odelouca Dam in Portugal" *Environment and Planning C: Government and Policy* **28** 492 511
- UNEP, 1992 *Rio Declaration on Environment and Development* United Nations Environment Programme, http://www.unep.org/Documents.Multilingual/Default.asp?documentid= 78&articleid=1163
- Warner R, 2010, "Ecological modernisation theory: towards a critical ecopolitics of change?" Environmental Politics 19 538 – 556
- Weale A, 1992 The New Politics of Pollution (Manchester University Press, Manchester)
- York R, Rosa E A, 2003, "Key challenges to ecological modernisation theory" *Organization and Environment* **16** 273 288



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