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Enacted Inertia: Australian Fossil Fuel Incumbents' Strategies to Undermine Challengers

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1 Introduction

The need for a transition to sustainability is well understood (Jenkins et al., 2018). For the last four decades—and especially since 2006—pleas and exhortations for a new set of economic and cultural institutions to sustain human civilisation have become routine (Gough, 2017; Raworth, 2017). Given that a large proportion of anthropogenic greenhouse gas (GHG) emissions come from the use of fossil fuels to provide either propulsive energy or for electricity generation, the energy sector is often studied as one sector in need of rapid transformation.

There is burgeoning interest in the subject of power within sociotechnical transitions (Avelino, 2017) because those who own the infrastructure—of extraction, distribution or retail—are, understandably, keen to continue their profitable business, and have acted extremely effectively in their own defence. The means by which they do this have been studied by journalists and academics. The effectiveness of the 'carbon club' (Legget, 1999) is outlined in journalistic exposes (Gelbspan, 1998, 2004; Goodell, 2007), and more scholarly works (Oreskes and Conway, 2010; McCright and Dunlap, 2010). In order to incentivise, accelerate (or at the very least manage) the decline of incumbents, it is necessary to understand their, past, current and potential defensive strategies.

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This chapter outlines the political, economic and cultural strategies and tactics deployed by them and their proxies in their (largely successful) efforts at slowing the Australian energy transition. By incumbents I mean industry actors (CEOs, business lobby groups) who profit from the status quo, and political actors (politicians, bureaucrats) who defend that status quo from self-interest and/or ideological commitment. In addition to a practical contribution, it helps thicken our understanding of power and agency within sociotechnical transitions, and the role of the state within transitions (Johnstone and Newell, 2018). The data for the chapter drawn from interviews and archival research conducted during the author's PhD research. This includes other researchers' PhD theses, which are rich sources of quotations from industry actors (Pearse, 2005; Sharova, 2015).

Australia is a special case; it is particularly vulnerable to climate impacts, has virtually unlimited supplies of sun and wind for renewable energy generation but its per capita GHG emissions are the highest in the OECD (Organization for Economic Cooperation and Development), despite policymaker awareness of anthropogenic global warming dating back more than 30 years (Hudson, 2017c). The cause of this seeming paradox is Australia's reliance on coal and natural gas for electricity generation which gives enormous potential power to the specific businesses. (Hamilton, 2001, 2007; Pearse, 2005, 2007, 2018; Taylor, 2014; Sharova, 2015). Alongside wind and solar, Australia has superabundant quantities of black and brown coal, and natural gas. The world's largest coal exporter since 1984, it has built enormous Liquefied Natural Gas (LNG) export infrastructure over the last decade. Many have noted the enormous inertia in the energy system, but this inertia has to be constantly (re)-enacted and re-enforced.

Australia has been a Federation since 1901, comprising six states and two territorial governments which guard their powers carefully. Its constitution is silent on environmental matters, and states have jealously guarded their prerogatives. Although the Federal government does in theory have the legal power to halt environmentally-damaging projects, it has been extremely reluctant to invoke these legal powers. A mining boom in the 1960s and 1970s, followed by restructuring of the Australian economy (Kaptein, 1993) did nothing to alleviate these state-Federal tensions. Government switches between the Australian Labor Party (ALP)—a nominally left-centrist party, and the Coalition, made up of a free-market Liberal Party and the socially conservative National Party.

Awareness of possible climate impacts caused by anthropogenic humancaused gas emissions is hardly new (Table 8.1). An April 1957 *Sydney Morning Herald* front page story warned of it (Anon, 1957). Concerns about climate

Table 8.1 Timeline for climate change issues in Australia (1969–2017)

Year	Description
1969	Australian scientists begin to alert policymakers to the existence of a long-term problem.
1988	Climate change first becomes a salient public policy issue.
1990	Australia announces an 'interim planning target', with caveats about not taking actions which would harm the Australian economy.
1992	Australia ratifies the UNFCCC. A domestic policy, the National Greenhouse Response Strategy, made up of only voluntary measures, is agreed.
1995	The Keating Government briefly considers imposing a small carbon tax to fund research and development into renewable energy and energy efficiency.
1997	Australia secures extremely generous terms at COP3.
2002	Prime Minister Howard announces Australia will not ratify the Kyoto Protocol.
2003	Prime Minister John Howard personally vetoes a carbon pricing scheme put to him by at least five members of his cabinet.
2006-2007	Climate change becomes a highly salient political and economic issue.
2010	Kevin Rudd's abandonment of the Carbon Pollution Reduction Scheme leads to a dramatic drop in his personal approval ratings.
2011	Minority ALP government led by Julia Gillard passes carbon pricing legislation.
2014	Incoming LNP government, led by Tony Abbott repeals 'carbon tax'.
2017	Climate review says Australia on track to meet international obligations.

change were a (minor) part of the general awareness of environmental problems (air and water pollution, habitat destruction, overpopulation) in the late 1960s and early 1970s. In the late 1980s and early 1990s policy options—including carbon pricing—were mooted. Voluntary rather than mandatory programs were chosen, and emissions grew almost as steeply as Australia's coal exports.

Since the climate issue (re) emerged in late 2006 (Hogarth, 2007), the Australian political elite has grappled incessantly with policy responses (Hudson, 2019). From December 1975 to November 2007 (32 years) Australia had four Prime Ministers: from June 2010 to the present it has had five, with climate change being intimately tied to the demise of three—Howard, Rudd, and Gillard (Hudson, 2015b). Prime Minister John Howard lost his job in part because of the perception that he did not take climate change seriously (Rootes, 2008). His successor, Kevin Rudd, promised to do so, and saw his popularity collapse when he shelved an Emissions Trading Scheme (ETS) in April 2010. His deputy, Julia Gillard, toppled him and introduced an ETS in the face of enormous media and political opposition.

It was abolished by the next Prime Minister, Tony Abbott (for accounts of some of these battles, see Chubb, 2014; Kelly, 2014; Combet, 2015; Gillard, 2014).

The chapter proceeds as follows. Three sets of strategies—political, economic and cultural—that Australian incumbents have used in their startlingly successful battle against the rise of the climate issue and renewable energy, are explored in turn. Then, based on observed trends and speculations, their possible future actions are outlined.

2 Political Strategies

Australian incumbents have an almost thirty-year history of success in blocking, weakening, delaying or shaping policy responses to climate change. They have ensured that any policies ultimately agreed contained significant caveats and loopholes to allow 'business as usual'. While not a radical policy in-andof-itself, carbon pricing could begin to undermine their business model and crucially support economic competitors. Specific policies supporting renewable energy have been retarded in their development, grudgingly implemented and then endlessly reviewed and changed, leading to investment droughts. Institutions created to support renewables have been de-funded, their remits changed to undermine their efficacy. Incumbents have worked to ensure that National Electricity Market (NEM) rules favour large, centralised fossil fuel generators, making market entry harder for decentralised and renewable sources. To achieve this, they have used the bureaucratic dark arts: lobbying, supplemented with economic modelling, 'hearts and minds' publicity campaigns which either burnish their industries or attack proposals for change; and the creation of organisations that will put the case to policy networks or beyond.

This section looks at the actions of industry incumbents lobbied policy networks and policymakers (Federal and state Governments) to achieve its goals. While there is overlap and occasional synergy with actions taken to influence the public, those will be discussed in the section on cultural strategies. The section is broken down into actions facing federal governments, state governments, and those taken to ensure business 'sings from the same hymn sheet'.

Before discussing these, a conceptual point around the nature of the state needs to be explained. The state has consistently been 'black-boxed' as a neutral arbiter of competing forces. However, the Australian state (Federal or state-level) has always been intensely developmentalist (pro-industry). This is

exemplified by an anecdote from the earliest days of climate policy; in 1987 a document on Australia's energy prospects—*Energy 2000*—was in drafting mode. An industry insider told a researcher that one chapter was removed because:

the then senior public servants perceived it as their patriotic duty to prevent the coal industry from being undermined by an untoward focus on something that in their thinking was a load of cobblers... their perception, and I don't think you could even argue that it was because they were under intense lobbying pressure from the coal industry. I think it was very much a matter of some senior and quite strong public servants taking it into their heads that having a whole chapter in something like this on greenhouse was just plain wrong, so they took it out, or they persuaded the minister of the day. (Pearse, 2005: 327–328)

The role of bureaucrats in shelving, weakening and delaying policy responses (witnessed again in 1991/2 as Australia developed its 'National Greenhouse Response Strategy') is too easily overlooked.

3 Facing Federal Governments

The primary strategy used by business incumbents has been concerted and coordinated lobbying of selected ministers and senior bureaucrats, almost always backed up by economic modelling. The modelling argues that the proposals being put before the government, whether by environmentalists or Treasury, would cause economic catastrophe for Australia's resources sector, and increase electricity prices.

Industry lobbying became steadily more coordinated as environmental issues and sustainability gained centre-stage in the years 1988–1989. The Business Council of Australia (BCA), comprised of the CEOs of the biggest companies, led the way with the creation of an Environmental Taskforce. This enabled the mining sector to combine with other sectors (manufacturing, retail, etc.) to present a loud, unified voice during the 'Ecologically Sustainable Development' process initiated by Prime Minister Bob Hawke. In mid-1991 Hawke used his personal authority to ban uranium mining in Kakadu National Park. The decision so shocked the mining industry that leading actors formed the Australian Industry Greenhouse Network (AIGN). Initially a 'clearing-house' for information, it proved its worth in 1994/5 when it coordinated responses to a proposed carbon tax under Hawke's Labor successor, Paul Keating.

The apotheosis of the AIGNs power occurred during the 11-year reign of Liberal Prime Minister John Howard. Various industry insiders told Pearse (2005) that they could side-line successive Environment Ministers' various proposals by using their intimate contacts within the bureaucracy: "You name it—and if we wanted to put a spoke in the wheel of Robert Hill or whatever we could do it pretty quickly!... we reverse-managed that ministerial (greenhouse) committee so many times" (Pearse, 2005: 194).

Aware of what was going on at critical points, AIGN lobbyists claimed they could "produce other pieces of consultants work which we thought they should have been doing or we would advise the Prime Minister's office and various other people about the fact that these things were going on" (Pearse, 2005: 318). Another interviewee confirmed that AIGNs lobbyists had been involved in writing Cabinet submissions, vetting Cabinet briefs before they were presented and even writing policy (Pearse, 2005: 318). Pearse argues that a 'reverse capture' had taken place, in which former bureaucrats now working in industry could "exert a pervasive influence on the positions advanced to government by the departments in which they once worked" creating "policy cul de sac" in which policies unfriendly to industry were "stifled" (Pearse, 2005: 336–337).

After Howard lost office in 'the first climate change election' (Rootes, 2008) incumbents' old methods were no longer adequate. The new Prime Minister, Kevin Rudd, labelled climate change the "great moral challenge of our generation" and proposed a Carbon Pollution Reduction Scheme (CPRS). Over the two years that the scheme was developed, through green papers and white papers, and draft legislation, industry, especially the Minerals Council of Australia (MCA) lobbied for concessions, exemptions and delay. Midway through the process, renowned Australian economist Ross Garnaut described the lobbying effort as "the most pervasive vested-interest pressure on the policy process since the Scullin Government and... the most expensive, elaborate and sophisticated lobbying pressure on the policy process ever". He observed that "Never in the history of Australian public finance has so much been given without public policy purpose, by so many, to so few" (Garnaut, 2008).

Rudd's successor, Julia Gillard took a different approach. To form a minority government, she relied on various independent and Green MPs. They demanded a Multiparty Committee on Climate Change (MPCCC). Frank Jotzo, a professor at Australian National University, noted that:

There was very little outside involvement during the period of negotiations. They had a Cabinet-level committee [MPCCC] to agree the scheme, and *during that period there was no opening to business lobbies. They didn't tell anyone what*

they were doing. There were no drafts, no scheme proposals that the businesses could react to. They just came out and announced the final agreement. It was quite an unusual way of doing it. (cited in Sharova, 2015: 71, emphasis added)

Greg Combet, Gillard's Climate Minister, recounts: "the meetings with the coal industry were particularly difficult and they were very aggressive. Let's say I was shocked at how rude some of the executives were" (Priest, 2013). Unable to influence the process using their favoured methods, industry resorted to a massive 'hearts and minds' campaign.

With the return to a federal Coalition government, fossil fuel incumbent lobbyists regained favoured access. Prime Minister Tony Abbott repealed Gillard's ETS in 2014. When Abbott's vanquisher Malcolm Turnbull won office, he appointed the MCAs former head of climate and environment as his climate and energy adviser (Slezak, 2017).

One important supplement to lobbying has been the use of economic modelling to assert that greenhouse policies would cause economic meltdown. The earliest example came in 1989, when the mining company CRA (since renamed Rio Tinto) commissioned a report on the costs of meeting an early proposed international target (Marks et al., 1989). Since then, modelling, often produced in flurries ahead of policy decisions, has been used in policy discussions and also given to sympathetic (and credulous) journalists who write 'the sky will fall' articles around impacts on growth, employment and tax revenues. Traditionally, the modelling makes three assumptions—a lack of other policy responses, already perfect energy efficiency, and ongoing high costs of renewable energy (see Diesendorf, 1998; Parkinson, 2017a).

The discursive uses of modelling are best captured by economist Richard Denniss, who remembers meeting his first client:

When I had spent a few minutes outlining what I saw as the strengths and weaknesses of the possible methodological options, the client interrupted: "Look, mate," he said, "all I want is something about an inch thick. I want to walk into a meeting, slam it on the fucking table, and say, 'According to my economic modelling'." (Denniss, 2015)

¹In his preface to the memoir of his chief of staff, published in 2015, Combet goes further: "As a minister, I was quite often astounded by the audacity of the claims. Large global companies were at times outrageous, patronising while simultaneously demanding money. One international coal-mining executive, while toying with immaculately jewelled cufflinks, contemptuously dismissed the government's right to legislate a price for carbon pollution while conceding that his company had been factoring a carbon price into investment decisions for years" (Behm, 2015: vii). Behm himself concurs. For instance: "It was particularly surprising to find Mick Davis, the CEO of the then-international mining giant Xstrata (taken over by Glencore in 2013), unable to disguise his disdain and contempt for both Combet and Gillard when he called on them in 2010. Why did he bother the call when all he was able to do was look scornful?" (Behm, 2015: 175).

With the connivance of government, the fossil fuel industry particularly targeted renewables policy. A Federal Renewable Energy Target was introduced in 2001 and subjected to repeated review. Leaked minutes reveal that in 2004 Prime Minister Howard called a meeting of senior fossil fuel executives, seeking their help in undermining the target (ABC, 2004). When, under Julia Gillard, two new organisations—the Australian Renewable Energy Agency and the Clean Energy Finance Corporation (CEFC)—were created, the Green Party insisted they not be under control of the Minister for Energy, who they perceived as a fossil fuel ally—upon retiring from parliament he became CEO of the Queensland Resources Council (QRC). The Abbott government unsuccessfully attempted to close both but was unable to do so. Instead, Abbott changed the CEFCs remit to enable funding of 'clean coal'.

4 Facing State Governments

Lobbying, supplemented by economic modelling, works at least as well at a State level as it does at Federal (Mitchell, 2012). Former New South Wales (NSW) premier Nick Greiner stated:

The truth is the states are closer to the ground, so there is an easier potential [for corruption] in terms of planning decisions and allocation of mining rights and indeed with gambling. They are qualitatively different from the Commonwealth, which is removed from real-world economic decisions. (Manning, 2014)

Another great source of (presumed) influence is party donations. As Bernard Keane (Keane, 2012) notes: "Mining company donations to state and federal Labor parties and the Coalition since 2004 show the extent to which Coalition benefited from the surge in mining company largesse after the Rudd government infuriated them with its [mining tax] proposal in May 2010".

There have been occasions—especially in the carbon tax battle of 1994/5 and again in 2008/9 and 2011 under Rudd and Gillard respectively—when incumbents used state government uncertainty and antipathy over Federal government interference in what they saw as their developmentalist prerogatives to good effect. In 1994/5 AIGN members lobbied state governments (especially Victoria, Queensland and Western Australia) to apply pressure on the Federal Government.

Incumbents, via organisations such as the QRC and the New South Wales Minerals Council, also engage in a steady stream of press releases, conferences, and reports which burnish their industries and attack their opponents as ill-informed, elitist or even agents of foreign powers.

5 Organising and Dis-Organising Policy Contestation

Incumbents face the same kinds of problems—around outliers, free-riders, etc.—as other collective actors. To overcome these, they perform (at least) three different kinds of action: mobilising existing organisations, defending these from attack/capture, and creating new organisations. To undermine opponents, they capture or undermine opponents' organisations, prevent the creation of opponent organisations, and 'raise the heat' around the issue to reduce the number of opponents. These will be dealt with (necessarily briefly) in turn.

First, incumbents have, in response to rising public concern around climate change, reinforced and reoriented existing organisations. The best example of this would be the BCAs Environmental Task Force, set up to defend coordinated industry responses to the potential threat of the 'ecologically sustainable development' policy process.

Industry groups are never unitary; as the climate issue rose, different actors saw business opportunities. Therefore, fossil fuel incumbents' second strategy has been to prevent organisations being reconfigured or captured by 'the enemy within'. Two examples merit recounting. The first involves a move by the Australian Gas Association (AGA), which saw that gas would be a lower carbon electricity fuel than coal. It made noises within the BCA and AIGN. The head of the Minerals Council took the AGA CEO aside and said:

you know you pursue this hardline and you scratch the coal industry too much harder and they will come out and we will start talking about nitrous oxide emissions, methane emissions, or pipe leakages—you know there is a lot of health issues around burning gas particularly in these unflued burners in Victoria which contributes a lot... we know this is your Achilles' heel—don't do it—because if you do it we'll have a big brawl between the energy industries in this country in the public arena which won't do anybody any good. (Pearse, 2005: 125)

Shortly after, another powerful actor tried to reshape BCA policy. The new chief executive of mining giant BHP called a meeting to discuss possible greenhouse policies. He recalled:

I held a party and nobody came. They sent some low-level people that almost read from things that had been given to them by their lawyers. Things like, Our company does not acknowledge that carbon dioxide is an issue and, if it is, we're not the cause of it and we wouldn't admit to it anyway. (Wilkinson, 2007)

Ultimately the BCA announced it had no position on ratification of the Kyoto Protocol. Its 2006 move to support carbon pricing forced John Howard's hand, but since then it has vacillated.

The third incumbent strategy has been to create new organisations, which have had one or more of three functions. These are firstly to co-ordinate policy responses (AIGN), secondly to present an emollient face to the public and policymakers (e.g. the short-lived Sustainable Development Australia and the longer-lasting Australian Minerals and Energy and Environment Foundation), and thirdly to 'take the fight to the enemy'; such groups include the neoliberal think tank the Tasman Institute (1990–1997), the Australian Trade and Industry Alliance, and Manufacturing Australia, and groups such as the climate-change-denying radical flank, such as the Lavoisier Group, founded in 2000 with the support of senior mining industry figures.

Incumbents mobilise to reduce their opponents' capacity to act, seeking to capture or undermine existing organisations which are a real or potential threat. This is a well-established tactic. Interviewed in 1993, famed environmental activist Milo Dunphy noted that in the early 1970s the Australian Conservation Foundation's council included not only high-ranking public servants but also "several mining company executives who... were there 'on a brief to keep this emerging conservation movement under control" (Hutton and Connors, 1999: 135). More recently, in 2009 a journalist, Paddy Manning, noted that the Clean Energy Council, which had formed from a merger of the Business Council of Sustainable Energy and the Australian Wind Energy Association got about 10% of its annual revenues from companies with investments in coal-fired power. He quoted a Green Senator as saying the Council was "completely ineffective" as an advocate for renewable energy and had not even advocated for a higher emissions reduction target (Manning, 2009).

Beyond this, incumbents have successfully prevented the creation of new (business) lobby groups. In 2001 Environment Minister Robert Hill, along with business allies, tried to form an Australian branch of the Pew Centre on Global Climate Change. The then head of the MCA found out that sponsored meetings were taking place. One of Pearse's informants recalls:

And Dick Wells was basically chairing the AIGN at the stage and he said 'hey, what is this about? We are not being invited to any of these forums. You are paying for it out of Commonwealth funds. I mean what is the story? Don't we have this open process?' In the end, business people who AIGN knew very well and AIGN briefed on these things went along to these meetings anyway and told them that they saw no benefit in it so it fell over. (Pearse, 2005: 353)

Five years would pass before any climate grouping involving business gained any traction.

Finally, simply 'raising the heat' around an issue can have the benefit of dissuading some actors from taking part in a debate.² For example, in 2011 The Australian newspaper misrepresented the position of a large Australian bank (Westpac) over its carbon policy stance. Westpac, which in 2008 had urged Rudd to keep the CPRS compensation to a minimum (Irvine, 2008), and other previously loud groups, such as Ai Group, were largely silent during the heightened period. Ai Group had tried to 'subcontract' its support for ETS to an international consultancy. The consultancy showed the Opposition drafts of its work. The response was extremely vehement, and the consultancy, fearful of its future relationships with the Coalition, watered down its findings to meaninglessness (Mildenerger, 2015).

6 Economic Strategies

This section discusses the actions incumbents took to shape the economic conditions within which they faced challenges from competitors. Incumbents have worked to defend profits by keeping environmental regulations as loose as possible and defeating a 2010 proposed mining tax. In addition, they have striven to slow the growth of alternative sources of electricity generation, while supporting the expansion of fossil fuel infrastructure and shaping the NEM to suit the needs of centralised fossil-fuel generators.

In May 2010 Kevin Rudd, fresh from retreating on the ETS, attempted to introduce a Mining Tax. The mining industry response was prompt and ferocious. In just six weeks, it spent AU\$22m on an extensive advertising campaign, under the heading 'Keep Mining Strong' (Murray et al., 2016). When Rudd was overthrown by his deputy, Julia Gillard, the tax proposal was watered down. Rio Tinto's CEO commented that "policymakers around the world can learn a lesson when considering a new tax to plug a revenue gap, or play to local politics" (Albanese, 2010).

State support for fossil fuels is nothing new. As early as 1983 Lowe noted that the National Energy Research Development and Demonstration Council was heavily favouring fossil energy projects (Lowe, 1983). This trend has continued. The 2004 Energy White Paper Securing Australia's Future, avoided support for renewables and supported fossil fuels, extolled the virtues of car-

²This is not to say that attempts at 'silencing' do not occur at a more strategic/logistical level. For an exploration of the Howard government's attitude to civil society, see Hamilton and Maddison (2007).

bon capture and storage (see Baker, 2005a, b for an account of how industry had lobbied). Carbon Capture and Storage would become the signature technological solution proposed by Kevin Rudd, who used taxpayer funds to create the Global Carbon Capture and Storage Institute (Pearse et al., 2013; Taylor, 2012). Meanwhile, support for renewable energy generation has been relentlessly attacked, with policies constantly reviewed and revised, leading to investment droughts (Effendi and Courvisanos, 2012; Parkinson, 2015).

Three other points relating to the electricity grid are worth noting. Firstly, incumbents stand accused of having deliberately and consistently overestimated future electricity demand to build state-funded infrastructure, so-called 'gold-plating' of the electricity grid (Hill, 2014). Secondly, the institutional arrangements for the NEM have side-lined environmental concerns (Diesendorf, 1996) and favoured incumbents. On the latter point, the former head of the Energy Users Association of Australia likened putting the states' energy ministers in charge of a separate new body, the Australian Energy Market Commission as "like putting Dracula in charge of the blood bank" (Hill, 2014). Regulatory gaming of the NEM has continued, with decisions which would favour renewable energy generation (especially community-owned) repeatedly deferred. Meanwhile, researchers argue that the NEM's opacity, exacerbated by current federal policy "puts the power into the hands of large incumbents, who will actually use tenders to get their own costs down, but they won't necessarily pass on the savings to [consumers]" (Vorrath, 2017).

Finally, fossil fuel incumbents are also lobbying intensively for state funding of new fossil fuel infrastructure—in the form of coal-fired power stations and a railway from prospective coal fields to the Queensland coast.

7 Cultural Strategies

Incumbent industries routinely engage in ongoing maintenance of their public image, via sponsorship of indisputably 'good' actions (sponsorship of air ambulances, etc.). They also have responded to climate change by engaging in issue minimisation and outright denial, as well as 'issue shifting.' To do this they have created think tanks and front groups to provide a steady stream of (mis)information for journalists and cultural warriors. They have attacked renewable energy for its purported aesthetic and wildlife impacts. For over a decade they have claimed that wind turbines are a health risk to human beings. Beyond this, they have reified "baseload," asserting that only centralised fossil-fuel generators can provide "energy security". Most recently they have tried to reframe events such as the 2016 South Australian blackout as a reason to abandon renewables (Hudson, 2017b). These are discussed in turn.

For many years mining industry groups have run extensive campaigns highlighting mining's contribution to the economy, and to the Australian 'way of life'. Esso ran an 'Energy for Australia' advertising campaign in the late 70s and early 1980s, associating itself with iconic Australian scenes (James, 1983). In 1991–1992, the Australian Mining Industry Council, moving on from its previous slogan mining as "the backbone of the country," told Australians that mining was 'Absolutely Essential.' In 2007 the NSW Minerals Council ran a similar campaign 'Life: Brought to you by mining.' More recently MCA launched 'Mining. This is our Story' in 2011 and 'Australians for Coal' in 2014. Alongside this, industry groups burnish their credentials through the sponsorship of sports clubs, rescue helicopters and the like (Pearse et al., 2013; Cleary, 2011). Possible technological responses to coal's climate impact have been front and centre of two television campaigns—'NewGenCoal' in 2008 and 2015's 'Little Black Rock' (Hudson, 2015a).

7.1 Issue Minimisation and Attacking the Messenger

Minimising an issue—declaring that it is overstated or a hypothetical threat, and only of interest to a few (self-interested and/or malevolent) scientists and activists—is a time-honoured tactic. After writing the book *Silent Spring* Rachel Carson was accused of trying to sabotage the American food production industry. One food industry figure said: "I thought she was a spinster... What's she so worried about genetics for?" (Hutton and Connors, 1999: 96). In response to calls to abandon a proposed dam that would flood the Franklin River, Tasmanian Premier Robin Gray declared it "grossly over-rated... For eleven months of the year the Franklin is nothing but a brown ditch, leech ridden, unattractive to the majority of people" (Lines, 2006: 201). Descriptions of climate change as 'only a theory,' 'overblown' or a 'green religion' are legion. Incumbents regularly state that climate change is a minor, manageable and disputed problem, and deride those concerned about it as addicted to apocalypse for psychological and/or financial reasons, out-of-touch elitists at best, and potentially dupes of foreign powers or knowingly treasonous.

7.2 Outright Denial

Outright denial of climate change has long been considered by most industry incumbents to be a high-risk and unnecessary, strategy. They deliberately avoided it in 1994/5 for fear that they would lose credibility with policymakers and motivate environmentalists. However, other groupings were bolder, including the now defunct Tasman Institute, which hosted various skeptical

scientists on tours in the early 1990s. After its demise, the baton was picked up by the Lavoisier Group, formed in 2000 (Taylor, 2000), when it seemed that Australia might adopt a domestic ETS. Lavoisier was bankrolled in part by mining magnate Hugh Morgan, who has since the 1970s been a staunch advocate of mining and opponent of environmentalism, feminism and other 'anti-progress' isms. Lavoisier, which economist John Quiggin (2001) described as "devoted to the proposition that basic principles of physics [...] cease to apply when they come into conflict with the interests of the Australian coal industry" has held conferences and run opinion pieces in newspapers denying the need for action. It even turned the emails stolen from University of East Anglia (the so-called 'climategate' emails) into a glossy book.

More mainstream, and better funded, the Institute of Public Affairs (IPA) has been a consistent, loud and effective voice against climate mitigation for almost thirty years. Closely linked to the Liberal Party, it published its first article on the costs of climate change (based on CRA's modelling report) in 1989. Since then it has run a steady stream of articles, opinion pieces and appearances that shift between casting doubt on climate science and predicting enormous negative consequences from mitigation policies, setting up groups with names like the Australian Environment Foundation and the Australian Climate Science Coalition (McKewon, 2012). It has helped organise tours by speakers opposed to climate action and has organised the publication of various books titled Climate Change: The Facts (with 2010, 2014 and 2017 editions).

The IPA has had a significant political impact. According to the former head of the AIGN John Daley, it became increasingly influential around 2006 and while it "conducted very poor analysis" was:

very influential in the public debate... IPA picked up a lot of what was going on in the United States regarding climate change and brought it to Australia. They were especially effective in persuading a chunk of the Liberal Party that climate change was something they should ignore. (cited in Sharova, 2015: 76, emphasis added)

7.3 Specific Policy Contestation

The fossil fuel industry has run three climate-policy-related advertising campaigns. In February 1995 a coordinated flurry of newspaper adverts, timed to coincide with two policy roundtables, highlighted the potential costs of a carbon tax. In late 2009 the *Australian Coal Association* produced the relatively emollient 'Let's Cut Emissions, Not Jobs' campaign, especially targeting marginal constituencies in Queensland and New South Wales and featuring a

doleful white male coal miner. In 2011, after the success of the 'Keep Mining Strong' campaign, and with usual lobbying methods ineffectual, the MCA and others launched an advertising blitz under the banner of the Australian Trade and Industry Alliance (ATIA). MCAs Sidney Marris, before his move to Prime Minister Turnbull's office told another researcher:

We called it a Trade Alliance because our consensus was that the policy is penalizing exporters. So, it included us and the Australian Chamber of Commerce and Industry, who were most involved in the campaigning. *Other organizations were involved as well but we weren't close with them. We were the most active.* (Sharova, 2015: 76, emphasis added)

ATIA claimed that Gillard's ETS would be "world's highest carbon tax". Its numbers were contested (Sartor, 2011), but it persisted.

More recently, the proposed National Energy Guarantee of 2017–2018 saw the creation of the so-called Monash Forum, which aimed to attack renewables and put government-support for more investment in coal-fired plants on the policy agenda (Hudson, 2019).

7.4 Issue Shifting

Issue minimisation and denial are both risky strategies potentially causing more debate and environmental activism. A safer option is to shift discussion to economic consequences for the Australian economy and individuals. This was done effectively during the 1994/5 carbon tax battle and has continued to be used.

Further, an ambit claim that extracting coal is a moral good (or duty) has been made by several leading Australian politicians. In April 2014, the largest US coal miner, Peabody, announced an advertising campaign called Advanced Energy for Life, which aimed to "Build Awareness and Support to End World's Number One Human and Environmental Crisis" of Global Energy Poverty. Six months later, while opening a \$3.9 billion coal mine, then Prime Minister Tony Abbott said: "Coal is good for humanity, coal is good for prosperity, coal is an essential part of our economic future, here in Australia, and right around the world…" (ABC, 2014).

Two years later, after environment minister Greg Hunt had argued that not selling coal to India would be an act of neo-colonialism (Taylor, 2015), Malcolm Turnbull echoed this sentiment, declaring "Coal is going to be an important part of our energy mix, there is no question about that, for many, many, many decades to come, on any view" (Murphy, 2016).

These efforts to 'wedge' opponents of coal-mining as anti-progress and anti-poor people reached a peak on February 9th 2017. During a heatwave, Treasurer Scott Morrison entered Parliament for question time, clutching a lump of coal. Supplied by the MCA, it had been lacquered so it would not smudge the hands of those who held it. Morrison gave an extraordinary speech, which demands quoting at length:

This is coal. Do not be afraid. Do not be scared. It will not hurt you. It is coal. It was dug up by men and women who work and live in the electorates of those who sit opposite—from the Hunter Valley, as the member for Hunter would know. It is coal that has ensured for over 100 years that Australia has enjoyed an energy-competitive advantage that has delivered prosperity to Australian businesses and has ensured that Australian industry has been able to remain competitive in a global market. Those opposite have an ideological, pathological fear of coal. There is no word for 'coalophobia' officially, but that is the malady that afflicts those opposite. It is that malady that is affecting the jobs in the towns and the industries and, indeed, in this country because of the pathological, ideological opposition to coal being an important part of our sustainable and more certain energy future.

Affordable energy is what Australian businesses need to remain competitive. They cannot fizzle out in the dark as those opposite would have them do, as businesses in South Australia are now confronting. On this side of the House, you will not find a fear of coal any more than you will find a fear of wind—except for that which comes from the Leader of the Opposition; you will not find a fear of sun; you will not find a fear of wave energy; you will not find a fear of any of these sources of energy. What you will find is a passion for the jobs of Australians who work for businesses that depend on energy security that those opposite want to switch off, just like the South Australian Labor government is switching off jobs, switching off lights and switching off air conditioners and forcing Australian families to boil in the dark as a result of their Dark Ages policies. (Morrison, 2017)

This framing echoed that of various groups, especially during the heated year of 2011 when 'no carbon tax' rallies, called by radio shock-jocks, were held, and a "convoy of no confidence" travelled to Canberra to pillory Gillard's policies, especially carbon pricing. Wear (2014) argues this was not an example of 'astroturf'—corporate-funded efforts mimicking 'grassroots'—while pro-carbon tax activists claim that the organiser of the convoy told them it was funded by ATIA (Peterson, 2011).

The IPA, and individuals such as mining magnate Gina Rinehart, have also sponsored speaking tours by prominent sceptics, notably Lord Monckton in 2010 and 2011. One problem was that these people lack specific institutional

affiliations (or academic credentials altogether). The Abbott government tried to solve this by inviting Danish statistician Bjorn Lomborg to head an academic institute. Students at various universities blocked this (ABC, 2015).

Incumbents have also attempted to reduce pro-climate groups' capacity to act. In 2014 the MCA tried to argue that divestment campaigns pressuring banks to withdraw from funding fossil fuel projects were a form of illegal secondary boycott (Davidson, 2014). Meanwhile, following MCA lobbying, the Federal government has instigated inquiries into environmental groups' funding. However, MCA has recently had to soft-pedal on this, as one of its largest contributing members, BHP, has expressed disquiet about the reputational risks of being seen to be silencing democratic protest (Remeikis, 2018). Meanwhile, in 2015 the Abbott government de-funded the Environmental Defenders Office (Arup, 2013).

More specifically, there has been a concerted campaign against renewable energy, especially wind, on the grounds of health (so-called 'wind turbine syndrome' see Chapman and Crichton, 2017), and wildlife impacts (Hudson, 2017a). More generally, proponents of renewables are derided as elitist, middle-class and out of touch with 'real' Australia. An endless torrent of economic modelling, recycled through the opinion columns by industry figures and anti-renewables politicians, is used to 'prove' that renewables are, and always will be, too expensive (see Parkinson, 2017a) Newscorp, owned by Rupert Murdoch, is the primary purveyor of this. The term 'baseload' has been promulgated endlessly as a reason to keep centralised fossil-fuel generators in play, despite critique of the concept (Diesendorf, 2007).³ Alongside this, incumbents used the September 2016 South Australian blackout to argue for centralised fossil fuel generation, despite the cause—cyclonic winds bringing down 22 transmission cables—being unrelated to South Australia's rapid increase in renewable energy generation (Lucas, 2017; Holmes, 2016).

8 What Next for Australia and Decarbonisation?

In this section I speculate on the activities incumbents may undertake in the future. At time of writing Australia still has a Federal government opposed to strong climate action. Given that pressures for decarbonisation are escalating, and the price of renewable generation and both grid-scale and domestic

³The Chinese State Grid's R&D chief Huang Han dismissing coal's claim to be an indispensable source of "base load" generation (Parkinson, 2016).

energy storage dropping, splits may emerge between those who expect to prosper through innovation and diversification and those who are wedded—economically, technologically, psychologically—to threatened assets.

8.1 Political

Incumbents will seek to dilute policy. For instance, AIGN has lobbied so that Australian companies can buy cheap overseas emissions 'reductions' credits. In its submission to the 2017 climate policy review, it argued: "A competitive, credible, and liquid market is necessary to ensure the success, efficiency and effectiveness of an emissions reduction policy. This should include credible local units, as well as access to credible international markets/units" (Federal Government, 2017: 43). This seems to have been accepted. If Labor forms a government, a battle will occur over an Emissions Intensity Scheme (EIS), currently Labor policy. Greens' climate spokesman Adam Bandt notes: "The EIS is becoming more and more popular among business and polluters precisely because they have looked at the details and realised that while it might push coal out, it won't bring renewables in" (Parkinson, 2017b). To that end, incumbents presumably are preparing for a change in government by identifying lobbyists with personal relationships to senior Labor figures who can secure meetings so policies can be modified to suit the needs of (especially) the gas industry, which has more allies than it did 20

Industry may seek to exploit state-federal tensions. It will also have their own tensions to manage, between coal and gas. These are exemplified by the gas company AGL's unwillingness to bend to Federal Government demands to extend the life of an ageing, unreliable and ever-more-expensive coal-fired plant in NSW. AGL, it should be noted, left the MCA in 2016.

One point of agreement may be support for the proposed 'Snowy Hydro 2.0', by which water could be used as an energy storage mechanism. Such a scheme could be an incumbent-stabilising technological development within the grid, extending the life of fossil fuel generation, while providing a patina of 'green-ness'.

Incumbents can be expected to continue using the legal system to chill dissent. Indian scholar and author Amitav Ghosh notes that: "American intelligence services have already made the surveillance of environmentalists and climate activists a top priority" (Ghosh, 2017: 140). He asks: "How will the security

⁴Parkinson (2017b) notes: "The Greens distrust the EIS because it was originally dreamed up by the fossil fuel lobby and is considered a Trojan horse for the gas industry".

establishments of the West respond to these threat perceptions? In all likelihood they will resort to the strategy that Christian Parenti calls the "politics of the armed lifeboat", a posture that combines "preparations for open-ended counterinsurgency, militarized borders, [and] aggressive anti-immigrant policing" (Ghosh, 2017: 143).

Corporate-funded spies have already been exposed in anti-coal groups (Laird, 2015). Meanwhile, in New South Wales, anti-protest laws have become more draconian. de Kretser (2016) notes that:

The NSW laws give police excessive new powers to stop, search and detain protesters and seize property as well as to shut down peaceful protests that obstruct traffic. They expand the offence of "interfering" with a mine, which carries a penalty of up to seven years' jail, to cover coal seam gas exploration and extraction sites.

Environmentalism is already being framed as 'radicalism' and 'extremism' in Federal government 'Radicalisation Awareness Kit' supplied to schools (Jabour, 2015).

Meanwhile, Tienhaara (2017) suggests that fossil fuel corporations will adopt tobacco industry tactics and use investor-state dispute settlements "to induce cross-border regulatory chill: the delay in policy uptake in jurisdictions outside the jurisdiction in which the ISDS [Investor-State Dispute Settlement] claim is brought". She makes the point that these corporations "do not have to win any ISDS cases for this strategy to be effective; they only have to be willing to launch them".

8.2 Economic

The economic interests of Australian fossil fuel industry—extractors, transmitters and distributors—are beginning to diverge. As noted above, fossil fuel (primarily coal) incumbents devoted a large amount of time to enforcing industry unity. They may continue to try, but the potential costs are rising, with the risk of defection by companies such as BHP and Rio Tinto. Ominously, both are divesting from coal (Biesheuvel, 2017; Yeomans, 2017; Gray, 2018). We may begin to see investors shift away from thermal coal assets, while metallurgical coal, needed for the production of steel, remains relatively strong. Internationally, Australian governments have historically sought to defend and extend the interests of coal companies. This is unlikely to change, regardless of which party is in power.

As assets decrease in value we may see intensification of use—trying to extract value while any still exists—even if this accelerates decline. In any case, as mines close or face closure, incumbents will probably attempt to socialise the cost of mine-site remediation, while continuing to fight health-based claims for compensation.

Meanwhile, those who own gas-fired plants, transmission networks and retailing face a different set of challenges. To paraphrase Mark Twain, reports of the utility 'death spiral' may be greatly exaggerated (see Costello and Hemphill, 2014 for an historical overview). However, as Newbury (2016) notes there are many challenges around:

the continuity of the existing technological regime; the emergence of cost competitive technologies; competitive intensity; ongoing natural monopoly status of electricity network utilities; consumer empowerment; business models and economies of scale; long term investment decision making; demand trends; emergence and diffusion of new technologies; emergence/impact of battery storage; and long-term industry attractiveness.

As rooftop solar and domestic storage penetration increases, problems of load defection, if not actual grid defection, may intensify (Schneider Electric Blog, 2015). Some incumbents, seeking to extract maximum rents, will attempt to defend existing rules via the regulatory framework, to gold-plate the infrastructure, and lock in customers with long contracts where possible. Others, presumably, will seek to reinvent themselves as energy services providers (Price Waterhouse Coopers, 2014). New entrants will proliferate, followed by a winnowing. While there will be business model innovation, it is hard to see incumbents engaging in defensive technological innovation. That ship has sailed.

8.3 Culturally

An intense culture war over climate change has raged for a decade. That war will end one day, but further bloody battles are likely. It is hard to see how Liberals and Nationals, who have asserted that climate change is not real, are going to get themselves out of the corner they have painted themselves into. If and when renewables become the cheapest option, they may be able to adopt a 'homo economicus' stance.

Fossil fuel lobbies will engage in more intense advertising campaigns, perhaps around their internal sustainability programmes (Wright and Nyberg, 2017). These may happen not because there is compelling evidence that they

work, but simply because such campaigns provide emotional and psychological side-benefits. Marchand (1987) notes of pre-war American campaigns: "Of uncertain efficacy in other respects, they provided their sponsors the significant and undeniable satisfactions of enhancing their self-esteem and winning the respect of their peers" (see also Hudson, 2015a).

While companies like AGL reposition themselves as 'low carbon' (Agl.com. au, 2018), coal interests face a dilemma. Their campaigns against disruptors are leading to reputational risk for less-committed members of their business lobbies, while their last two 'pro-coal' campaigns (2014 and 2015) were met with derision. Pro-coal incumbents may choose to burnish their own credibility using more general 'Aussie battler' mythology, harking back to the 'Backbone of the country' adverts of the 1970s, with adverts showing 'hardworking real Aussies' (as per 2009's 'Let's Cut Emissions Not Jobs' campaign). A second line of attack might be to emphasis mining's contribution to Australia's balance of payments position, though this would be risky given ongoing questions over mining's tax payments (as distinct from royalties). Such a campaign might also invoke 'baseload' 'energy security' and 'reliability' in an attempt to reinforce existing 'common sense' views of a masculinised and centralised system of power (generation), alongside ongoing economic modelling claiming that the costs of renewable energy are enormous.

There will be continuing attempts to blame all problems with the existing electricity grid (around price, reliability, etc.) on renewable energy. Teething problems will be painted as existential threats, with the inevitable distortions, corruption and hype within renewables and storage amplified to tarnish the 'brand'. Proponents of renewables, and opponents of cheap international credits, will continue to be attacked as effete elitists, extremists and purists and 'un-Australian' uninterested in the problems of 'normal people'.

9 Conclusion

Hindsight bias will make it 'obvious' what happened to Australia. If it is a picture of decay and ever-increasing economic, cultural and psychological damage as the impacts of climate change overwhelm efforts at mitigation and adaptation, then future scholars will be able to point to the successful incumbent defenses over the last thirty years, and the frailty of efforts to disrupt

⁵ In the 1920s, Thomas Griffith Taylor, an Australian scientist saw his textbook which described parts of Western Australia as 'arid', banned. In the 1960s, opponents of a Japanese exploratory oil rig off the Great Barrier reef were accused of "tools of American oil companies who were trying to exclude Japanese business from the lucrative reef oilfields" (Hutton and Connors, 1999: 104).

their power. Conversely, if Australia adopts renewables, and becomes a renewable energy superpower, then scholars will point to the plummeting cost of renewables, their uptake by householders and communities, and the efforts of companies and social movement actors to speed the transition to a low-carbon future. For the time being, then, Australia sits on the edge of both major directions of travel; concrete predictions have become a fearful proposition given that Australian climate politics is effectively 'off the map'.

Without the benefit of hindsight, it is not possible to say if the political class will find the knowledge, courage and capacity to act that has so far eluded it. While the ALP is benefitting from complete disarray within the Coalition at present, if it—as expected—forms the next government, it will probably come under sustained pressure to move beyond its relatively mild ecomodernist positions. Vested interests will not give up without a fight. We can expect new front groups, new arguments, renewed attempts to transfer costs of remediation and decommissioning onto the taxpayer.

History matters. Past policy battles and settlements shape and constrain future possible courses of action. Writing before climate change became an issue, Australian academic Stephen Boyden (1987: 30) noted, "lack of motivation, even active resistance on the part of the corporate organisations which hold power in society can effectively block useful cultural adaptive responses". As this chapter has shown, for thirty years, Australian incumbents in business and the state have fought successful campaigns against both the pricing of carbon and support for renewables. Academics, activists and 'ordinary citizens' would be well-served by understanding better the repertoires deployed by these actors in their efforts to defend their positions, since the past is a guide (albeit imperfect) to the future.

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