

The Future of Sub-national Climate Change Governance: First Mover Advantage or End of the Road?

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Abstract

While federal inaction on climate change was a political reality, states in the US and Australia filled the void. By enacting legislation and introducing measures to reduce emissions, states made progress in spite of lack of direction from their national counterparts. Yet with Kevin Rudd's election in November 2007 and Barack Obama's victory the following year, the tides changed. One of the first steps taken by both leaders was related to climate change – Rudd ratified the Kyoto Protocol and Obama initiated the process to grant California's EPA waiver to the Pavley bill, both powerful indications of renewed political commitment to prioritise a lower carbon agenda. But what does it mean for the stalwart states that took those first tentative steps towards real action on the issue?

Through case studies examining both South Australia – the first state in the Southern Hemisphere to enact climate change legislation, and California – whose landmark bill AB 32 offers a comprehensive medium-term roadmap to achieving economy-wide, substantial emission reductions, this paper examines how the emerging dynamics of sub-national climate governance are being altered by more recent shifts in federal policy.

These case studies are placed within the context of emerging national legislation – the Waxman-Markey bill and Boxer-Kerry bill in the US and the proposed Carbon Pollution Reduction Scheme (CPRS) in Australia, with a view to questioning whether we are seeing a re-emergence of more formal, hierarchical systems of government to deal with the issue. This will subsequently allow for an assessment of the importance of sub-national climate governance towards 2012 and beyond.

Introduction

The world waited a decade for a national response to climate change, from the federal governments of the USA and the Commonwealth of Australia. It took an election and change of leadership in each to turn the tide. In the interim, initiative was taken by both the states of Australia and the US to address the issue. Yet now that climate change has been placed on each federal agenda, what is the fate of the policies and regulations that these states have been developing and implementing over the past decade? Will their efforts continue to lead the way? Will their progress be embraced by the federal governments to inform national policy, or will emerging and future measures simply supersede theirs, with the time and investment already committed to the issue consumed in the wake of galvanised federal action? This paper intends to explore these questions.

States are generally responsible for implementing 80% of federal policy and will have a likely role to play here. They also have a proven history of innovation and of feeding into federal policy direction, especially with regard to environmental issues. Whilst states acknowledge that change in personnel in the higher echelons of government allows for greater cohesion on the issue nationally, this leadership will ultimately question the validity of already mandated sub-national agendas.

By looking respectively at South Australia and California, this paper examines how the relationships between the incumbent administrations and their colleagues in state government are evolving with a view to assessing the importance of sub-national government action on climate change towards 2012 and beyond.

With the successful passage of the Waxman-Markey bill (American Clean Energy and Security Act- HR.2454 (ACES)) through the US House of Representatives in June 2009 and then in October, the Boxer-Kerry bill (Clean Energy Jobs and American Power Act - S. 1733 (CEJAPA)) initiating its run through the Senate, action at the federal level in the US is now undeniable. But the role of California's own efforts in climate change mitigation – AB 32- The Global Warming Solutions Act – and those of other states across the US remains unclear.

Australia's proposed CPRS effectively places a cap on around 78% of the country's emissions and is billed as the primary policy tool to drive reductions in emissions. The scheme purportedly renders state or individual action obsolete by relying on the market to deliver reductions.¹ The role of 'complementary measures' is currently being investigated, but what this means for South Australia's political leadership, its Climate Change and Greenhouse Emissions Reduction Act 2007 and its long-term commitment to an 80% reduction in emissions by 2050 remains unanswered.

In order to analyse what is currently afoot in each of the countries, it is important to discuss a number of factors which contribute to the policy development processes and the rationale for the choices being made federally to address climate change. In this paper, the following factors have been identified as significant in the examination of what likely future role state governments will play in addressing climate change and why. Each will be considered in turn below.

- Historical and existing state/federal relationships
- Scale of the problem
- Legal/policy mechanisms for state/federal interaction
- Policy: choice and options

Before each of these factors are investigated, a brief exploration of the happenings of the past decade, including the specific actions taken by each of the states and developments since the election of the new federal leaders is important to contextualise the situation into which the proposed legislation in each country is being tabled. It is important to note that this paper primarily examines efforts (of both states and federal governments) to mitigate climate change. Whilst adaptation policies are developing concurrently and increasingly together with mitigation measures, this area of policy development is not addressed specifically.

¹"The presence of the CPRS is likely to mean that some other measures may no longer be required (for example, measures that are currently justified on the basis that no effective carbon price exists or that were introduced prior to a commitment to introduce the scheme). Continuing to use such measures will not lead to an increase in emissions abatement – within a fixed cap, reductions in emissions in one part of the economy simply result in more emissions elsewhere". Australian Government Department of Climate Change (2009a), CPRS Legislation, Accessed 2nd November 2009, <http://www.climatechange.gov.au/government/initiatives/cprs/cprs-progress/legislation.aspx>

The current political climate

President George Bush called a halt to comprehensive US climate policy in 2002, when he refused to ratify the Kyoto protocol. Australia followed suit the same year, with Prime Minister John Howard branding the treaty ‘useless and harmful’.²

Yet instead of this back-pedal halting progress towards meaningful reductions of greenhouse gas (GHG) emissions in the US and Australia, it actually spurred states in both countries to take the helm on cutting carbon and addressing the challenges of climate change.

For the last 8 years, these sub-national entities have been a powerful force in filling the void and have gained national and international attention for their effects, displaying that in spite of federal inaction, climate change was an issue that needed to be addressed. Such was the momentum created by these states; that the issue became one of the pillars on which election campaigns in both countries were built. The election of Prime Minister Kevin Rudd to office in 2007 has been described as the world’s first climate change election³ and President Barack Obama placed Climate and New Energy alongside Health Care, Education and the Economy as his core campaign issues⁴ - thus illustrating that in both cases rejuvenated support for a federal approach to addressing the issue was nearing.

Yet 8 years in politics is a long time; long enough to see laws passed and implemented and since 2002 states have been mandating action within their borders with a view to developing robust responses to climate change. State action and policy innovation is not new. In 1932, US Supreme Court Justice Louis Brandeis proclaimed that state governments can be viewed as ‘laboratories of innovative government’⁵. At this ‘level’ of government experimental and groundbreaking policies can be tested, on a scale which prevents risking national governments and which if successful, could be rolled out or replicated on a larger scale.

² Sydney Morning Herald (2005), *Kyoto pact is useless and harmful: PM*, February 16, Accessed 2nd November 2009, <http://www.smh.com.au/news/National/Kyoto-pact-is-useless-and-harmful-PMs/2005/02/16/1108500144242.html>

³ See particularly Rootes, Christopher (2008), ‘*The first climate change election? The Australian general election of 24 November 2007*’, *Environmental Politics*, Vol. 17, No. 3, June, 473-480; Gascoigne, Toss (2008), ‘*Climate Change: “The” Issue in the Australian National Election 2007?*’, *Science Communication*, Vol. 29, No. 4, 522-531

⁴ Barack Obama: Organizing for America, *Organizing on the Issues*, Accessed 10th November 2009, <http://www.barackobama.com/issues/>

⁵ *New State Ice Co. V. Liebmann*, 285 U.S. 262 (1932)

As Snyder and Binder (2009) point out:

“A silver lining of the federal inaction on climate change over the past eight years has been that it fostered the development of innovative and pioneering efforts by state and local governments to combat climate change.”⁶

The rationale for these states responding to the issue is a matter of much speculation⁷. Yet a likely justification is, at least in part, so that they could be prepared for the introduction of binding federal legislation. By acting early and demonstrating which policies were effective, states could put themselves in a resilient position to deliver on the impending nationwide laws. Yet now that these federal laws are promised and being developed, to what extent is this ‘first mover advantage’ playing in their favour? And what is the likelihood that the resources expended thus far on policy development and implementation in the states will have been done so wisely, given the direction that this legislation is tabled to proceed?

It is important to take a closer look at the policies developed by both California and South Australia, in order to illustrate what exists, is planned and then in also examining the federal policies being prepared, it will be possible to assess what future role the states have to play in the new national climate change agenda.

California

California has a history of leadership on environmental issues dating back nearly 40 years, to when the state established automobile standards more stringent than those set by the federal government in the 1970 Clean Air Act (CAA). Unique in the sense that California’s Air Resources Board (ARB) preceded the CAA, and that it was the only state to have established such an agency, it was afforded the right to set standards above the national average, by requesting special dispensation (a waiver) from the federal Environmental Protection Agency (EPA) to make their standards legal. No other state is permitted by federal law to establish an ARB or equivalent, but may meet California’s standards over

⁶Snyder, Jared and Jonathan Binder (2009), *The changing climate of cooperative federalism: the dynamic role of the states in a national strategy to combat climate change*, UCLA Journal of Environmental Law & Policy, Winter, 239

⁷ See Engel, Kristen H. (2009), *Whither Subnational Climate Change Initiatives in the Wake of Federal Climate Legislation?* Publius: The Journal of Federalism, Vol. 39, No. 3, 432-454 - for an examination and justification of likely factors

those set by the federal government.⁸

California first took decisive action on climate change in 2002, when Governor Gray Davis signed the Clean Cars Act – the Pavley Bill (AB 1498) into law. After the election of Governor Schwarzenegger in 2003 California's response to climate change continued to evolve, as federal inaction became further entrenched and international momentum on the issue accelerated. In 2006, AB 32 – the Global Warming Solutions Act, was passed. Not only does it set the first economy-wide cap on emissions in the US, it also requires a reduction in state emissions to 50% below 1990 levels by 2030. Since 2006, the state has been deliberating which strategies should be adopted to carry out the measures of the bill and in January 2010, some early actions will begin to be implemented.⁹ The Governor also signed an Executive Order (S-3-05) stating that emissions should be reduced 80% by 2050, and whilst not mandatory, many of the measures being developed at the current time are done so with consideration given to meeting this longer-term goal.¹⁰

Whilst its legislation is ambitious and innovative, and what some would describe as world-leading,¹¹ California is certainly not the only US state to take decisive action to address climate change, indeed some 30 states have developed and are implementing climate action plans.¹² And whilst California was the first state to put a cap on its own emissions, both the Regional Greenhouse Gas Initiative (RGGI) on the East Coast – established in 2003 and the Western Climate Initiative (WCI), established in 2007 are regional emissions trading schemes (ETS) bringing the states together to develop a market-based approach to emission reduction. RGGI began trading at the beginning of 2009 and WCI expects to commence in 2012, it is evident therefore that federal government is entering a maturing field of action on climate change. Alongside the European Union ETS, running since 2005, both RGGI and WCI are useful models for designing the national programme. But what happens to these schemes and

⁸ Anderton, Karen (forthcoming, 2010), 'The Need for Integrated Institutions and Organisations in Transport Policy – the Case of Transport and Climate Change' in Moshe Givoni and David Banister (Eds.), *Integrated Transport: From Policy to Practice*, (Oxford: Routledge)

⁹ California Air Resources Board (2009), *Assembly Bill 32: Global Warming Solutions Act*, Accessed 2nd November 2009, <http://www.arb.ca.gov/cc/ab32/ab32.htm>

¹⁰ Anderton (forthcoming 2010)

¹¹ See particularly: Rabe, Barry (2007), *Governing the climate from California*. Paper presented at the 2007 annual meeting of the American Political Science Association, Chicago; Mazmanian, Daniel A., John Jurewitz and Hal Nelson (2008), 'California's Climate Change Policy: The Case of a Subnational State Actor Tackling a Global Challenge', *Journal of Environment Development*, Vol.17, 401- 423; Engel, (2009)

¹² Center for Climate Strategies (2008), *Economic Stimulus, Recovery, and Climate Mitigation: Policy and Program Opportunities from the States*, White Paper, Accessed 2nd November 2009, www.climatestrategies.us/ewebeditpro/items/O25F20666.PDF

California's evolving legislation when a climate bill is passed into federal law remains unclear, it is likely however that at least some measures will be pre-empted under a federal scheme, as illustrated below.

There are a number of key differences between the two current front-running climate bills in the US. But in very simplistic terms, ACES, the House bill – is 'comprehensive national climate and energy legislation would establish an economy-wide, cap-and-trade system and critical complementary measures'¹³ and CEJAPA comes from the Senate and is at least to some degree modelled on ACES, although there are some distinct differences – distinctions relevant to the subject of this paper are discussed to follow. CEJAPA is designed to create clean energy jobs, promote energy independence, reduce global warming pollution, and transition to a clean energy economy." It creates a "Pollution Reduction and Investment" programme aimed at setting up an economy-wide, market-based programme for reducing GHGs.¹⁴

If either of these bills are passed, significantly whilst cap-and-trade regimes, like RGGI/WCI or any in-state scheme would be pre-empted. All other state programmes will not be pre-empted, so there is a good deal of scope for the states to continue with their climate change mitigation activities. And there appears to be a general acknowledgement from both levels of government that states have a crucial role to play – indeed, in signing the waiver to grant the process of the Pavley bill into law, President Obama stated that "The federal government must work with, not against, states to reduce greenhouse gas emissions."¹⁵

Likewise, in May 2009, Governor Schwarzenegger joined a coalition of more than 30 states and territories to express support for active state-federal collaboration on the issue. Speaking at the launch of the group, the Governor said: "It is not easy to bring together such a diverse group of governors on any topic, so this coalition speaks loudly to the need to work with

¹³ Pew Center on Climate Change (2009a), The American Clean Energy and Security Act (Waxman-Markey Bill), Accessed November 10th 2009, <http://www.pewclimate.org/acesa>

¹⁴ Pew Centre on Climate Change (2009b), *At a Glance Clean Energy Jobs and American Power Act Passed by Committee on November 5, 2009*, Accessed November 10th 2009, <http://www.pewclimate.org/short-summary/clean-energy-jobs-american-power-act-chairmans-mark>

¹⁵ San Francisco Chronicle (2009), *Obama to order review of state's emissions bid*, Monday, January 26, Accessed 2nd November 2009, <http://sfchronicle.us/cgi-bin/article.cgi?f=/c/a/2009/01/26/MNMF15GTPU.DTL&type=printable>

states and adopt a federal approach as we work toward our common energy and green economy goals”¹⁶, illustrating definite support for federal action coming from the states.

South Australia

When John Howard refused to ratify Kyoto in 2002, it looked as though climate change mitigation in Australia was off the cards. Even though the country is only responsible for around 2% of global emissions it has one of the highest per capita carbon footprints in the world due to its high dependence on brown coal.¹⁷ And as with the states in the US, over the past 8 years, Australia’s state government’s acknowledged the imperative to address climate change and set about filling the gaps made by federal inaction. As Lyster (2008) notes: “in the absence of a carbon price signal being imposed by a domestic ETS during the Howard Government era, state governments took it upon themselves to develop ETSs, renewable energy targets, renewable ‘feed in’ schemes and energy efficiency targets.”¹⁸

And whilst South Australia accounts for only 6% of Australia’s emissions,¹⁹ it was a leading force in developing the types of measures referred to above and for pushing the imperative to address climate change onto the agenda. Upon re-election in 2004 Premier Mike Rann, made himself the state’s first Minister for Climate Change – a clear indication, in rhetoric at least, of the state’s commitment to the issue. And in 2007, the state government enacted the first climate change legislation in the southern hemisphere – The Climate Change and Greenhouse Emissions Reduction Act 2007. Through this bill the state is pushing the boundaries of renewable energy generation and R&D in alternative sources of power in Australia.

The lion’s share of Australia’s solar and wind energy is now located in South Australia and it was the first state nationally to: roll out solar panels for schools; implement a solar-feed in scheme to reward owners of solar panels and; trial micro wind turbines.²⁰ The state’s preparedness to innovate comes in part due to the severe drought the state has experienced

¹⁶ Georgetown Climate Center (2009), *Governors’ Energy and Climate Coalition Calls for Action on Climate, Energy Legislation Advocates for Active State-Federal Partnership*, May 21st 2009, Accessed 2nd November 2009, <http://www.law.georgetown.edu/gcc/News/documents/Coalitionrelease.pdf>

¹⁷ World Bank (2007), *Little Green Data Book*, (New York: World Bank); Australian Government Department of Climate Change (2008b), *National Inventory Report 2006 – Volume, The Australian Government Submission to the UN Framework Convention on Climate Change June 2008*

¹⁸ Lyster, Rosemary (2008), ‘*Australian Carbon Pollution Reduction Scheme: What Role for Complementary Emissions Reduction Regulatory Measures*, The Forum: Climate Change Law in Australia, University of New South Wales Law Journal, 31, 3, 881

¹⁹ Government of South Australia (2007a), *Tackling Climate Change: South Australia’s Greenhouse Strategy 2007-2020*, 6.

²⁰ Government of South Australia (2007b), *Tackling Climate Change in South Australia: What is South Australia doing to address climate change?* Accessed 2nd November 2009, <http://114.111.139.25/~climatec/index.php?page=what-are-we-doing>

over the last decade, a sign of likely climate events the state will face in the future. Early action is seen as important to the state if it is to be severely impacted in years to come.

The state is also improving the energy efficiency of government buildings by 25% from 2000-01 levels by 2014, increasing the energy efficiency of dwellings by 10% by 2014, reducing waste to landfill by 25% by 2014 and Premier Rann announced in January 2008 that South Australia's Ministers would become the first in the nation to offset the GHG used in the course of their duties, including travel²¹.

South Australia has worked alongside the other Australian states and territories, in forming the National Emissions Trading Taskforce (NETT) – prior to the election of Kevin Rudd – to begin drafting an ETS to link the states. Whilst in opposition, Rudd together with the states commissioned the Garnaut Review²², and once in power, the newly formed Australian Department for Climate Change assumed responsibility for the findings of the review, which were published in a final report, delivered in September 2008.

The report was designed to assess the impacts of climate change on the economy of Australia and provide recommendations for medium and long term policy responses. This helped guide the National Emissions Target of the new government – 5% reduction in GHG on 2000 levels by 2020 or 25% reduction on the same levels by 2020, if international agreement is reached in Copenhagen.

The Garnaut process was an important precursor, alongside the NETT final report²³, released in December 2007, to the CPRS Green Paper²⁴, published in July 2008 and subsequent White Paper - CPRS: Australia's Low Pollution Future²⁵ from the Department of Climate Change,

²¹ *Ibid*

²² Garnaut, Ross (2008), *The Garnaut Climate Change Review - Final Report*, Accessed 2nd November 2009, http://www.garnautreview.org.au/domino/Web_Notes/Garnaut/garnautweb.nsf

²³ National Emissions Trading Taskforce (2007), *Possible design for a national greenhouse gas emissions trading scheme: Final framework report on scheme design*, Accessed 2nd November 2009, [http://www.garnautreview.org.au/CA25734E0016A131/WebObj/NETTReportfromStateandTerritoryOfficials_Finalreceived14March2008/\\$File/NETT%20Report%20from%20State%20and%20Territory%20Officials_Final%20received%2014%20March%202008.pdf](http://www.garnautreview.org.au/CA25734E0016A131/WebObj/NETTReportfromStateandTerritoryOfficials_Finalreceived14March2008/$File/NETT%20Report%20from%20State%20and%20Territory%20Officials_Final%20received%2014%20March%202008.pdf)

²⁴ Australian Government Department of Climate Change (2008a), *Carbon Pollution Reduction Scheme Green Paper*, Accessed 2nd November 2009, <http://www.climatechange.gov.au/publications/cprs/green-paper/cprs-greenpaper.aspx>

²⁵ Australian Government Department of Climate Change (2008b), *White Paper - Carbon Pollution Reduction Scheme: Australia's Low Pollution Future*, Accessed 2nd November 2009, <http://www.climatechange.gov.au/publications/cprs/white-paper/cprs-whitepaper.aspx>

which was released in December 2008. The CPRS ‘legislative package’²⁶, which followed the White Paper contains 11 bills and was introduced in May 2009, has become the main federal vehicle for achieving emissions reductions and indicates the government’s commitment to addressing the issue.

The CPRS will put a price on carbon and use a cap-and-trade ETS to drive down emissions. In the first instance, this cap will cover around 78% of Australian emissions, (not including agriculture) and whilst a number of other initiatives are being implemented in parallel, such as the Renewable Energy Target (RET),²⁷ and ‘complementary measures’ - to encourage R&D and increase the use of low emissions technologies,²⁸ through the CPRS, Australia is allowing the market to drive its climate response. The scheme is due to start trading in July 2011, but in August 2009, the Senate rejected the bill and at the time of writing this paper the reintroduction of the bill to the Senate is imminent. If the bill fails to pass again, the government will be forced to call an election. So at the current time, the future of the bill and therefore Australia’s primary response to climate change is still uncertain.

Whilst there may be rhetorical support for collaboration and joint responses to climate change, this acknowledgement alone is not sufficient to ensure effective partnership. The question of how this will work in practice needs to be answered. In light of the uncertain future for both federal responses to climate change, it is likely that the state government actions discussed above will progress, at least in the short term. Yet at some point in the future, political wrangling will give way to national legislation, and it is therefore important to consider how and if state and federal government approaches can run alongside each other in the medium to long term. The 4 factors highlighted earlier in the paper will offer a useful framework through which to consider the options.

Historical and existing state/federal relationships

Although both Australia and the USA can simplistically be called federations, the historical nuances and specific governance structures of each, are significant in terms of the responses

²⁶ Australian Government Department of Climate Change (2009a), *CPRS Legislation*, Accessed November 2nd 2009, <http://www.climatechange.gov.au/government/initiatives/cprs/cprs-progress/legislation.aspx>

²⁷ 20% of Australia’s electricity supply will come from renewable sources by 2020

²⁸ Australian Government Department of Climate Change (2009b), *Overview: Message from the Minister*. Accessed November 2nd 2009, <http://www.climatechange.gov.au/about/budget/previous-budget/overview.aspx>

to climate change that each country will deliver, and the relationship that this legislation will have with state policies and regulations.

- USA and California

There are two fundamentally important dogmas in the US which have the potential to end to state action on climate change in its current guise. The first, the Interstate Commerce Clause of the US constitution forbids states from enacting laws that has a significant impact over interstate commerce. But it is likely very difficult for a state to enact regulations that are effective in reducing GHG, that avoid significant leakage and that do not also place an illegal burden on interstate commerce.²⁹

Secondly and perhaps most significantly, the Supremacy Clause of the US constitution holds that federal law pre-empts any conflicting state law and as Engel rightly posits, this means that with a single piece of legislation, Congress could wipe out much of the progress accomplished by the states on climate change.³⁰ So despite the fact that ACES and CEJAPA do not explicitly pre-empt anything other than cap-and-trade regimes, with the introduction of any other subsequent iteration of these or further bills, California's legislation (and that of the other states) still faces an unclear future.

If it is ACES which becomes law, the bill would provide that states could enact more stringent climate regulations than the federal equivalent, with the exception of cap-and-trade programmes. State trading programmes would be put on hold from 2012-2017 to give the federal system a chance to get started. Holders of allowances issued by California, the WCI or RGGI before December 31 2011 could exchange these for federal allowances.³¹ Furthermore, if there is no federal auction in 2012, then state programmes aren't pre-empted until 9 months before the first federal auction occurs.³²

If CEJAPA is successful, it would again place a moratorium on state cap-and-trade schemes until 2017, but it also does not pre-empt states' rights to set GHG targets or enforce other

²⁹ Mazmanian et al. (2008), 413

³⁰ Engel (2009), 433

³¹ Pew Center on Climate Change (2009c), *At a Glance: American Clean Energy and Security Act of 2009. As passed by the House of Representatives – June 26, 2009 (Waxman-Markey)*, Accessed 10th November 2009, <http://www.pewclimate.org/docUploads/Waxman-Markey-short-summary-revised-June26.pdf>

³² Union of Concerned Scientists (2009), *Comparison of the American Clean Energy and Security Act of 2009 (ACES, House-Passed Bill) and the Clean Energy Jobs and American Power Act of 2009 (CEJAPA, 9/30/09 version)*, Accessed 10th November 2009, www.ucsusa.org/assets/documents/global.../CEJAPA-ACES-comparison.pdf

standards, regulations, or GHG reductions programmes. Again, should a federal auction not have taken place by 2012, state programmes won't be pre-empted until 9 months before the first federal auction³³.

So primarily, if the federal government only legislates the introduction of a cap-and-trade regime, some of the other parts of AB 32 could stand outside the scope of this legislation and thus not be seen in conflict. At the national level however, this could result in a most piecemeal approach to addressing the problem and unlikely to work in practice unless very clear boundaries are defined. It is possible that states would choose to comply with federal standards, regardless of no pre-emption to allow for greater consistency. At this time however, it is a very grey, uncertain area and the degree to which the bill (and indeed which bill) will be explicit about the pre-emption is also not clear. If federal legislation is more holistic or stringent than state standards, it is likely that AB 32 will be subsumed by the national bill.

Yet as previously mentioned California has a unique relationship with the federal government. In the arena of air quality management at least, California is entitled to adopt more stringent standards than the federal government for emissions from automobiles under the CAA, and other states have the opportunity to meet federal or Californian standards. After the landmark case *Massachusetts v EPA*³⁴, confirming that GHGs can be considered pollutants covered under the CAA, what does this mean for the Californian auto standards, will the waiver stand in this instance? If the CAA is indeed used as a basis for the regulation of GHGs there is potential that the Pavley bill at least, will remain in place. Again clarity on this nuance will only come once a federal bill has been approved. This is because ACES prohibits any GHG, including CO₂ from being listed as a "criteria pollutant" or a "hazardous air pollutant" on the basis of its effect on climate change³⁵. CEJAPA too stands to limit certain areas of EPA authority within the CAA³⁶, but does not go so far as to explicitly remove GHGs from the scope of the CAA.

At the current time states and the federal government are working closely to ensure that the federal standard is comprehensive in scope and will be workable in delivery, so those states with the most experience in climate change mitigation are likely to shape, at least to some

³³ *Ibid.*

³⁴ 127 S. Ct. 1438 (2007)

³⁵ HR 2454, §831-4 (2009)

³⁶ Pew Center on Climate Change (2009b)

degree, what this federal legislation looks like and thus the extent to which their policies become pre-empted will mean that there isn't too much upheaval in terms of approach. Yet there are advocates for the national legislation to allow for each state to continue managing its own response, given that both the emissions, sources of emissions and likely impacts of climate change will vary from state to state. This will be examined further under the next section, to follow.

- **Australia and South Australia**

When Australia first became a federation of states – the Commonwealth of Australia – back in 1901, it was envisaged that, in contrast to the US 'top down' system, the states would be the most powerful political units and that they would devolve power to a weak central government.³⁷ For addressing climate change therefore, a state-led approach seems like a logical response, as has been seen over the last decade in Australia. Christoff (2008) notes that given the historical and established bureaucratic capacity of states, and the state and local government responsibility for building, planning laws, regulation and energy resource development it gives them 'exceptional power and capacity' for addressing climate change³⁸.

The issue of formal government pre-emption therefore does not exist in the same way in Australia as it does in the USA. Yet over the last century however, there have been fluctuations in this devolution arrangement, with the Commonwealth government slowly being accorded (or taking in some cases) more control over increasingly varied matters traditionally governed in the realm of the states. An example of this would be taxation, with the Commonwealth now responsible for 80% of all taxation, the states for only 20%.³⁹ Indeed in the recent years, the Commonwealth has been using its financial powers and increased legislative power to intervene in areas of state responsibility⁴⁰.

In this light then, the future of climate change management in Australia is an interesting case in point from which to examine these changing dynamics of power. The states were collectively aiming to establish a mutual ETS across their borders and were developing

³⁷ Keen, M, D, Mercer and J. Woodfull (1994), 'Approaches to Environmental Management at the Australian Local Government Level: Initiatives and Limitations', *Environmental Politics*, 3,1, 45

³⁸ Christoff, Peter (2008), 'Aiming High: On Australia's Emissions Reduction Targets', *Forum: Climate Change Law in Australia*, University of New South Wales Law Journal, 31, 3, 875

³⁹ Saunders, Cheryl (1998), *It's your constitution: governing Australia today*, (NSW: The Federated Press), 137

⁴⁰ Twomey, Anne and Glenn Withers (2007), *Federalist Paper 1: Australia's Federal Future*, Report for The Council For The Australian Federation, April 2007, Accessed November 2nd 2009, <http://www.caf.gov.au/Documents/AustraliasFederalFuture.pdf>

independent responses to the problem before the Rudd Government came to power. Now that it is here and is trying to pass the CPRS however, the future role of the states seems most minimal, limited it would seem to complementary measures, whilst the Commonwealth manages the carbon market.

In Australia's most recent submission to the UNFCCC, state and territory governments were cited as an important part of Australia's climate change response because they have responsibility for a range of issues with a bearing on climate change, such as: waste management strategies; planning and development of power plants; promoting the take-up of renewable energy; land use and transport planning; and vegetation management⁴¹. The introduction of the CPRS therefore may introduce tensions over control which will need to be resolved. Furthermore the CPRS approach adopted by the current government - relying on a market response alone - may not be sufficient and doesn't acknowledge the fundamental role that state government actions will have, especially given their responsibility for these issues. This point will be revisited.

The main barriers to addressing climate change could be said to stem from the scale and nature of the problem – in that it transcends political boundaries and sectoral divides in a way that no other issue which requires regulating does. Thus the challenges posed by the problem to current governance structures are immense.

Scale of the problem

“Climate change is undoubtedly unique amongst policy challenges in both its magnitude and its scope. It is both a global and local crisis, and it has both global and local solutions and impacts. [...] Local GHG reduction strategies contribute to reductions in local, as well as international, ambient GHG concentrations. Furthermore, the effects of climate change are being felt at the local and state levels and many of these effects are distinct in nature and magnitude across different locations.”⁴²

⁴¹ Australian Government Department of Environment and Heritage, Australian Greenhouse Office (2005), *Australia's Fourth National Communication on Climate Change: A Report under the United Nations Framework Convention on Climate Change 2005*, <http://unfccc.int/resource/docs/natc/ausnc4.pdf>, 8

⁴² Snyder and Binder (2008), 232-234

The nature, scope and scale of the problem mean that it has a different impact and effect on every locality and each locality contributes to it in a very specific way. Whilst there are a number of common causes and responses to climate change, a state or territory the size of Rhode Island or the Australian Capital Territory has different issues and responses than Texas or Victoria, for example. It is therefore easy to assume that a one-size-fits-all response will fail. California and South Australia will have their own unique challenges, economic constraints and opportunities and likely responses.

It is quite apparent that federal legislation, in any country, will never be able to account for the impacts, industries and conditions in any given locality or state, therefore perhaps overarching legislation is not the best approach to take. In light of this, how do we best govern the beast? Federal regulations will go a long way towards ensuring the issue is tackled, but if states were permitted to use the guidance of the law in a way that best suits its needs, then more robust reductions are likely to be achieved.

Whilst questions of scale are fundamental, in the short term at least, massive shifts in the way things are done are unlikely, so the infrastructures through which action takes place will probably remain top-down to some degree. But there is much to be said for a better coordinated, ‘co-operative federalism’ which relies on federal, state and local governments working together to deliver on one aim – emission reduction. There seems to be an acknowledgement of this in US; as previously mentioned, both state Governors and the President have recognised the importance of collaboration. How this collaboration occurs and whether there will be any fundamental shifts in governance of issues, is likely to be seen only in the medium to long term – this is discussed in more detail below. Given the imperative to address climate change, perhaps more drastic institutional changes are required.

Australia too, through the Council of Australian Governments (COAG) has a forum through which the states can work with each other and with the federal government on areas of pressing concern, such as climate change. COAG comprises the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association (ALGA), its role is to initiate, develop and monitor the implementation of policy reforms that are of national significance and which require cooperative action by Australian

governments.⁴³ Given that it was the states initially calling for an ETS, it would be pragmatic to think that COAG is a forum through which they can influence design and the mechanisms of the federal scheme, yet given that the federal government has assumed responsibility for the implementation of the ETS and held this to be the primary mechanism in Australia's response to climate change, the extent of this collaboration is likely to be limited and states and local governments also restricted in the powers to act to meet their own specific needs.

As previously mentioned, most closely related to the issue of the scale of climate change, is the responsibilities of the various levels of government and the incompatibilities which exist between them and addressing the problem effectively. How/whether these can be reconciled is the third factor through which the likely future role of state governments in climate change mitigation can be discussed.

Legal/policy mechanisms for state/federal interaction

As mentioned briefly earlier, states in both Australia and the US (as elsewhere) have distinct areas of responsibility that the national government has little or no control over. Since a successful response to climate change needs to be economy-wide, covering all sectors, there will almost certainly be areas which need to be managed by either state or local authorities. Therefore a purely federal response to climate change is an ineffective one.

- USA and California

As was explained earlier, if ACES or CEJAPA is signed by the President, all state programmes, bar the carbon market, will not be pre-empted, thus much of what has gone before, in terms of state legislation and traditional areas of jurisdiction will remain unchanged. And whilst both bills in transit through the US legislative system also cover a comprehensive list of measures to address GHG emissions from a host of sources, these are not set to stand in the way of state-led action and this therefore is likely to continue.

But what could actually be said, is that the holistic approach called for by climate change may actually be an opportunity to 'correct' some of the seemingly illogical idiosyncrasies of the state/federal and local authority system. As one example – the relationship between the levels of authority for transportation and land use is complex. Land use planning authority is

⁴³ Coalition of Australian Governments (2008), *About COAG*, Accessed November 2nd 2009, http://www.coag.gov.au/about_coag/index.cfm

traditionally held with the local government and transportation with the state. In developing effective 'smart' climate-related transportation policies, this institutional arrangement could prove to be a significant barrier.⁴⁴ Similarly energy efficiency – building standards are the remit of the state, appliance standards, the federal government. A comprehensive energy efficiency strategy would need to bear this divide in mind, or relevant steps taken to work around the incompatibility of the governance structures.⁴⁵

- **Australia and South Australia**

The situation in Australia is slightly different, in that the ETS proposed by the CPRS stands to be the primary mechanism through which to address climate change. Individual and state voluntary action is likely to be discouraged as the majority of emissions will be covered under the cap and the market will deliver reductions, so any additional action is therefore obsolete. These issues will be examined further below.

Whilst there is room for ancillary 'complementary measures' under the CPRS, it is probable that these will be decided at the discretion of the Commonwealth government and that states will be almost discouraged to act. Their role could be limited to managing the ETS-specifics within their state and delivering on the RET.

Recent developments suggest that the role of state and local governments could be even further rescinded, under Commonwealth government plans to develop national planning standards for cities⁴⁶, a strong indication of the overarching role that this government would like to take in addressing climate change. Whilst this is a positive intervention in that it aims to actively reduce emissions and to do so in consultation with the states and local governments, it is a powerful signal of the desire to reform traditional areas of authority – from state and local government to the Commonwealth.

It seems somewhat impractical, given that the states have jurisdiction over so many activities which generate emissions, their role in emission reduction through the CPRS. And this is the final factor for consideration regarding the future roles that states play in climate change

⁴⁴ Anderton (forthcoming, 2010)

⁴⁵ Klass, Alexandra B. (Forthcoming, 2010), 'State standards for nationwide products revisited: Federalism, Green Building Codes, and Appliance Efficiency Standards', Harvard Environmental Law Review.

⁴⁶ ABC News (2009), *Rudd flags national city planning criteria*, Wed Oct 28, Accessed 10th November 2009, <http://www.abc.net.au/news/stories/2009/10/28/2725885.htm>

mitigation – the choices made by the federal government in terms of policy choice and the design of the regime being developed.

Policy: choice and options

Whilst the current federal action being witnessed in the USA and Australia is an important step forward, an examination of the policy approach taken in both countries is crucial. There are lessons to be learned from state experiences and from the last 8 years of climate mitigation globally – so it is important to look closely at the choices being made to see where, if at all, they fall down under scrutiny.

Choice

In each of the cases presented in this paper, cap-and-trade mechanisms have been chosen by the incumbent authorities to respond to the challenge of climate change. There has been abundant debate over the virtues of market-based regimes to reduce emissions, given the external factors which have the ability to influence the market, and thus emission reduction. It is likely an ETS in isolation would be an insufficient approach, given the magnitude of the issue and because it alone doesn't actually guarantee a reduction in emissions. As the Stern Review⁴⁷ emphasised, pricing alone is an insufficient response to climate change, so legislation based solely around this response is likely to be ineffective.

Furthermore, cap-and-trade regulations would take years to develop and implement; the desired price signal for carbon might be difficult to achieve; and administration of and compliance with the system pose significant challenges.⁴⁸ Given the immediate response required to address climate change, again this may not be the optimum policy choice.

There are also specific details of each proposed system which warrant discussion before some other aspects of policy design and implementation can be discussed.

⁴⁷ Stern, Nicholas (2007), *The Economics of Climate Change: The Stern Review* (Cambridge: Cambridge University Press)

⁴⁸ Avi-Yonah, Reuven S. and David M. Uhlmann (2009), 'Combating Global Climate Change: Why a Carbon Tax is a Better Response to Global Warming than Cap and Trade', *Stanford Environmental Law Journal*, Vol. 28, No. 3; U of Michigan Public Law Working Paper No. 117, 6-7

USA

ACES has been criticised for not placing enough resource towards clean energy and technology investment. Whilst it is a positive provision to be contained in the bill, it would only stand to invest 1.5% of the 40-year revenue stream of the cap-and-trade system in the R&D efforts for clean energy⁴⁹.

CEJAPA is a relatively new bill, so detailed analysis of its provisions are somewhat scarce, yet some degree of scepticism has been voiced on the achievability of its more ambitious short term reduction target – from 17% below 2005 levels by 2020 in ACES to 20% below 2005 levels by 2020 in CEJAPA⁵⁰. Whilst ambitious targets are a positive intervention in theory, only if they are achievable and clear action is laid out as to how to achieve this target, will it be credible.

Overall, because the proposed US bills are both relatively comprehensive in scope, the fact that the ETS is a central pillar of the legislation does not detract too much from the other provisions contained in them. With each bill also guaranteeing that pre-emption will only apply to cap-and-trade and not to other policy mechanisms employed by the states, there is a broad array of levers left open to states to reduce their emissions.

Australia

One crucial provision in the CPRS has caused a lot of criticism to be levelled at the legislation. It is the notion that companies covered in the ETS should be ‘compensated’ for the introduction of the scheme – which seems to go directly against the objectives of the bill⁵¹. Criticism has further been levelled at the legislation, because of its lack of recognition for voluntary action⁵², the fact that it isn’t inclusive of all emissions⁵³, because its targets are

⁴⁹Muro, Mark (2009), *Next on Climate: Improve Waxman-Markey Innovation Provisions in Senate*, The Brookings Institution, June 29, 2009, Accessed November 10th 2009,

http://www.brookings.edu/opinions/2009/0629_energy_muro.aspx

⁵⁰The Climate Group (2009), *Comment: Us Climate Bill Faces Tough Road Ahead*, Accessed 10th November 2009,

http://www.theclimategroup.org/news_and_events/comment_us_climate_bill/

⁵¹Dennis, Richard (2009) ‘*Rudd’s ETS victims*’, A Better Australia Newsletter, Issue 48, 11th July 2009; MacGill, Iain and Regina Betz (2008), *A Lost Opportunity for Leadership*, Accessed 21st July 2009, <http://newmatilda.com/2008/07/21/lost-opportunity-leadership>

⁵²Voluntary Carbon Markets Association (2009), *Submission to the Senate Standing Committee on Economics Enquiry into the Exposure Drafts of Legislation to Implement the Carbon Pollution Reduction Scheme*, March 2009; Government of

too weak⁵⁴, because the role of complementary measures is unclear⁵⁵ and because it will be prohibitively expensive for the states to implement - rewarding large emitters with credits, whilst states must spend their own budgets in the management and regulation of the scheme.⁵⁶

Options

It costs a lot of money to initiate an ETS and more to keep it going. Noting the likely flaws of the bills that are being considered at the current time in both the US and Australia, there are policy options available which would guarantee emission reductions if implemented and could stand to improve or resolve the current issues of each bill.

- Energy Efficiency

Energy efficiency is often cited as the policy which holds the most potential for emissions reduction – the ‘low hanging fruit’, as it is oft referred. As previously mentioned in the US the efficiency of buildings is mainly left to state and local authorities (and builders) to set standards and manage, whilst the federal government has control over the appliances used in these buildings.⁵⁷ So energy efficiency is a good test to see how the idea of cooperative federalism will work in practice, in terms of measures that will maximise the potential of this policy lever to reduce emissions. Both ACES and CEJAPA provide energy efficiency funds for state and city initiatives, so there is a positive indication that states and cities are likely to be able to do even more than they have capacity for at the current time, due to this additional funding.

In Australia, whilst energy efficiency does not directly fall under the auspices of the CPRS, the government has acknowledged its importance and has also guaranteed a number of specific funds to promote it across the country. Yet over the last few years, state governments have actively been encouraging voluntary action in households and the messaging surrounding this has been about individual benefits as well as about the potential for emission

South Australia (2009), *South Australian Government Submission to the Senate Select Committee on Climate Policy*, 20th April.

⁵³ Christoff (2008), 874

⁵⁴ MacGill and Betz (2008)

⁵⁵ Parliament of Australia Senate Economics Committee (2009), Exposure draft of the legislation to implement the Carbon Pollution Reduction Scheme – Chapter 9: Complementary Measures, 16 April 2009. Accessed November 10th 2009, http://www.aph.gov.au/Senate/committee/economics_cte/cprs_09/report/c09.htm#c09f6; Christoff (2008), 879

⁵⁶ Richardson, David and Richard Denniss (2008), *The Impact of an Emissions Trading Scheme on State Government Budgets*, The Australia Institute, Research Paper No. 54, August 2008; Denniss (2009)

⁵⁷ Klass (Forthcoming, 2010)

reduction. Under the CPRS, this action will only be recognised through the buying and cancelling of permits through the Australian Carbon Trust.⁵⁸ It remains unclear whether householders will involve themselves in the market. This seems a convoluted approach to managing one of the easiest ways to reduce emissions, taking the personal incentive away for individuals to act. By overcomplicating things, the Australian government may actually be reducing the potential for emission reduction through energy efficiency.

- **Carbon Tax**

There is much debate surrounding the best financial mechanism to respond to climate change. Stern stated that it was a fundamental component of a robust climate change response⁵⁹. Whilst compared to cap-and-trade, a carbon tax may have its own set of inherent challenges, yet it also has the potential to deliver actual emissions reductions, would provide a fundamentally important revenue stream to invest back into decarbonising the economy and developing zero emission technologies and would ensure that the polluter pays. Whilst not advocating one mechanism over the other, these are important factors that both governments should be heeding to ensure that they have a sufficiently robust response to climate change.

One final important point on the issue of policy design, in not pre-empting all climate change action when the federal government has the chance to, there is a risk that states will slow or stop their own efforts, with the introduction of the cap-and-trade scheme and that instead of witnessing innovative, ambitious actions and new areas of policy developments; the states will stall. Whilst there are many other measures laid out in both ACES and CEJAPA, not having consistent federal standards and measures to which all states should adhere, there is a risk of the much cited 'race to the bottom' where instead of pushing the boundaries, states do the bare minimum, or worse take no action at all.

This is less relevant in Australia, where states have traditionally been stronger than the Commonwealth government. What is likely to be an issue here is that Commonwealth control of the issue and the policy route chosen mean that emission reduction may not be as comprehensive as it might have been under the control of the states. Yet with constitutional

⁵⁸ Australian Government (2009), *Government Taking Strong Action to Combat Climate Change*, Accessed 10th November 2009, <http://whitepaper.climatechange.gov.au/minister/combet/media/mr07082009.html>

⁵⁹ Stern (2007)

reform spoken of more, perhaps a collaborative role managed through COAG is a more robust long term strategy.

Innovation

One final point remains – what of state policy innovation? Now that federal responses are being developed, is there any role left for the states to experiment with climate change responses?

Climate change is not the first issue over which the states have innovated – there are many examples of states experimenting with policies, so there is strong evidence to suggest that what happened in the last 8 years was not an anomaly and that states will continue to try new things and develop innovative responses to climate change. The scale and magnitude of the issue is yet to be fully understood, just as all of the responses have not yet been conceived of or developed. It would be near-sighted and naive to suggest that the policy and technological levers that exist today are exhaustive. And just as states have done before, they will be suitable testing grounds for these new, different approaches.

There is increasingly more clarity over the role that states are likely to continue to play to manage climate change and it would appear that in the US aside from the market mechanisms states will be free to continue to act. In Australia, the situation is less clear, traditionally states have held the power and so thus have been the primary policy makers, but the situation is changing and whilst in the medium term, little is likely to change, it is likely that if the CPRS is passed, states will have to be innovative in terms of finding areas through which they can address climate change alongside the ETS.

If nothing else, the ambition and commitment to climate change displayed by states over the last 10 years was invaluable in terms of raising awareness and keeping the issue on the agenda. As Engel points out, although the trajectory of state and local action on climate change has been increasingly more mandatory, promising ever greater actual emissions reductions, little tangible GHG reduction has been delivered.⁶⁰ Policy innovators they have been and innovators they shall stay?

Conclusion

⁶⁰ Engel (2009), 449

In terms of what happens next, for the short term at least, federal action is still not concrete – and the political wrangling that will ensue over the coming months, before and after Copenhagen will leave the state legislation in California and South Australia a constant force and one that should continue to be implemented, until a time when it is mandated differently.

Similarly, in the long term there could be subsequent changes in federal leadership down the line, which will leave the states once again in a position where they must step up and fill the void – especially if CPRS doesn't get through and the Australia is forced to call an early election. Climate change is a long term problem incompatible with short political cycles, so sub-national action should never be underestimated.

Both the states of South Australia and California have demonstrated leadership on the issue of climate change and have been commended for their efforts. Whether they did this to obtain a strategic advantage over their counterparts come federal action on the issue is now a matter of speculation. Their efforts were noted and to at least a certain degree have gone some way to shape federal legislation.

In California, bar the market mechanisms that the government is pre-empting, it looks as if much – targets, programmes and implementation – will remain the same at least for the mean time, through the front-running federal bills in play. The hard work will pay off as the first early actions are delivered in 2010.

In South Australia it would seem that voluntary uptake of renewable energy was a good move and is likely to attract further investment in the renewable energy economy of the state towards the RET. For its other initiatives, the future remains uncertain and it may be the end of the road for a number of South Australia's initiatives, if and when the CPRS enters force. There is a need for much greater clarity on what the legislation means for the states.

The fact that we appear to be witnessing evermore collaboration and cooperation between levels of government, in both instances, is a positive thing. With COAG and institutions like the Georgetown Climate Center, for example, dialogue is open and responses shared. Federal responses in their own right are not enough, especially if they have obvious shortcomings which need to be resolved. Careful attention should be paid over the coming weeks and months ensure that the long awaited national legislation to address climate change, stands up

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to the task at hand – not just in economic terms, but in their ability to deliver tangible emission reductions. The design of federal policy needs to be appropriate and effective to tackle the challenges posed by climate change and needs to be acknowledgement that it is appropriate for states and local government to maintain jurisdiction over and responsibility for certain issues.

Whilst the US has a formalised structure to deal with the relationships between state and federal laws, and much previous experience in taking lessons learned from state governments and applying it nationally, it seems that a much more flexible, ad-hoc approach will be taken in the instance of climate change. Whilst both ACES and CEJAPA face more political wrangling and the final bill passed may eventually look much different to those going through the motions now, what will be wrote into law will establish a cap-and-trade scheme. Indications suggest that a strong state presence will remain, existing programmes in other areas will be kept alive and innovation will continue other measures – the relationship shows the foundations of reciprocity and cooperation.

In Australia however, the Commonwealth government has traditionally been weaker than the states and the jurisdictions over which it has control have been relatively limited. This has been changing with the state governments surrendering power over more and more areas of responsibility. It seems that climate change is likely to be the next candidate.

Whilst the Commonwealth government’s current bill is currently stalled in its passage through Senate, there is a probability that it will nonetheless be passed in some similar guise over the coming months. With recent indications that the government is keen to take over control of land use planning – a former stronghold of the local government, there is strong evidence to suggest that federal government wants to hold the reins and that whilst state governments may be consulted on direction, the CPRS will be a primarily Commonwealth concern. Whilst CPRS may be governed through a form of ‘cooperative federalism’ under the auspices of COAG, it would seem there are bigger issues than on which there is much contention about the future role of the states in Australia.

Given the long term time frame required to satisfactorily reduce emissions levels, in a climate where the federal government aims to increase its areas of jurisdiction and power, it makes sense that climate change become a more federal concern. Whilst that may be the case it

should not detract from the fundamental flaws of the CPRS approach to achieving reductions, which if implemented in isolation, will fall far short of what is required.

Whilst similarities exist between the approach adopted by the Australian and US government, the evidence which has been highlighted in this paper and the emerging developments that continue to unfold suggest that the endgame on national climate legislation quite diverse. Yet nothing is certain when dealing with the complex intricacies of an immense problem, like climate change through convoluted political systems. So what is true now, may well be wrong or obsolete in the months and years that follow.

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