

**GREEN STIMULUS AND PINK BATTS:
THE ENVIRONMENTAL POLITICS
OF AUSTRALIA'S RESPONSE TO
THE FINANCIAL CRISIS**

Kyla Tienhaara

It is widely accepted that limiting climate change to an average temperature rise of 2°C will require substantial and sustained investments in low-carbon technologies and infrastructure (OECD, n.d.). While a significant amount of investment will have to come from the private sector, the scale of the problem of climate change and the time frames involved demand that public finance also play an important role in mitigation efforts. However, the dominance of neoliberalism for the past three decades has meant that governments have generally viewed large spending programs as politically undesirable. The focus has instead been on the development of market mechanisms, such as emissions trading schemes that put a price on carbon and other programs to spur private sector investment.

In this context, the Global Financial Crisis (GFC) represented what historical institutionalists call a 'critical juncture'. In a critical juncture, the structural (*i.e.* economic, cultural, ideological, organizational) constraints on political actors are 'significantly relaxed for a relatively short period' (Capoccia and Kelemen, 2007:343). As a result, political actors have a greater range of options for action and leaders have 'greater latitude in shaping policy than might be available in more stable periods' (Peters, 2011: 76).

The GFC was a critical juncture in two respects. First, there was a need for governments to quickly respond to the crisis. Deficit-funded public spending became not only politically acceptable but also popular in many countries and was even promoted by international financial institutions like the International Monetary Fund (IMF, 2009). Second, the economic

orthodoxy of market fundamentalism was implicated in creating the crisis and was, therefore, to a large extent discredited. There was a sense, at least in the early days of the GFC, that neoliberalism was 'dead' and that it needed to be replaced with a new economic model or paradigm. This created an opening for environmentalists to propose a 'green economy' as the way forward (Spies-Butcher and Stilwell 2009). Harris (2013: 71) has suggested that the GFC represented 'a major opportunity for a new kind of macroeconomics to emerge – one that is 'old' in that it returns to some traditional Keynesian principles, but 'new' in that it incorporates the ecological realities of the twenty-first century.'

The return to Keynesian fiscal policy and the push for a green economy were combined in a number of proposals for Green Keynesianism from think tanks and NGOs (*e.g.* Green New Deal Group, 2008; Bowen *et al.*, 2009). Proponents argued that green fiscal stimulus measures made economic and environmental sense. One of the most common claims made was that more jobs can be created through stimulus to green industries, such as solar energy, because they are more labour-intensive than traditional fossil-fuel based industries (Pollin *et al.*, 2008). Others pointed out that many green sectors have better returns on capital than traditional or 'brown' sectors (UNEP, 2009a). It was also argued that investment in certain green sectors (*e.g.* building retrofitting, wind and solar power generation, public transportation) will bring about considerable economic savings to individuals and businesses through lower fuel bills, reduced health costs (less air pollution) and less congestion in cities (Australian Conservation Foundation *et al.*, 2008; Houser *et al.*, 2009).

The Global Research Department of HSBC put out a report in May 2009 that estimated that governments had allocated US\$470 billion in stimulus to projects that fit in the 'investment themes' in the HSBC Climate Change Index (*e.g.* energy efficiency, renewables, etc.) (Robins *et al.*, 2009). However, there has been no follow-up study to assess what was actually spent by governments, nor any close examination of the actual environmental impacts of funded projects. This article examines Australia's experience with green stimulus. It forms a part of a larger comparative project that additionally covers Canada, Japan, Korea, and the United States.

It is acknowledged at the outset that green stimulus and the broader green economy agenda have been extensively criticised by eco-socialists,

including in the pages of this journal (see, *e.g.*, Salleh 2011). The green economy has been critiqued for being focused on technocratic and market-oriented solutions that lead to the commodification of nature and are ultimately aimed at saving capitalism rather than the environment (Gill, 2011; Solty, 2011; Brand, 2012; Unmüßig *et al.*, 2012). Green stimulus is specifically singled out for its role in stimulating economic growth, which is argued to be incompatible with ecological sustainability in the long term (Blackwater, 2012).

While these broad critiques have merit and should not be discounted, this article takes a more agnostic position on the potential value of green stimulus. It is proposed that a focus on short-term stimulus in a crisis need not be incompatible with a longer-term transition away from a growth-oriented economy (see further Tienhaara 2014) and that well designed stimulus measures might contribute to greater public and political interest in, and support for, environmental values. Furthermore, green stimulus programs could instigate a broader trend of environmental issues being integrated into economic decision-making rather than being siloed in peripheral ministries and agencies. The Great Depression is credited with spurring the development of the welfare state through Keynesianism; could the GFC have similarly helped to bring about what Meadowcroft (2005) and others have referred to as the 'ecological state' through Green Keynesianism?

Australia's Response to the GFC

In 2007, the Australian Labor Party, led by Kevin Rudd, was elected to government. Climate change had been a key election issue and Rudd had dubbed it 'the great moral challenge of our generation' (Rudd, 2007). The first official act of the new government was to ratify the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

While Rudd's approach to climate change was a marked departure from that of his predecessor, John Howard, his position on economic issues was not. During the election, Labor was eager to shed its reputation for excessive spending and attempted to brand itself as a party of 'economic conservatives' (Taylor and Uren, 2010: 2, 81). However, the onset of the GFC radically changed the economic discourse in Australia, at least for a time. In early 2009, Kevin Rudd wrote a lengthy piece in the magazine *The Monthly* deriding neoliberalism as the cause of the crisis and

proposing a social-democratic (Keynesian) response. He appeared to regard the GFC as a critical juncture that could result in a paradigm shift in economic policy: ‘From time to time in human history there occur events of a truly seismic significance, events that mark a turning point between one epoch and the next, when one orthodoxy is overthrown and another takes its place’ (Rudd, 2009).

Australia’s stimulus came in several waves. Unlike most OECD countries, Australia gave priority to boosting government spending rather than tax cuts (OECD, 2009:18). The first tranche of spending came relatively early in October 2008 and consisted mainly of direct cash payments to pensioners and families and a boost in a grant given to first-time homebuyers. The second package in December 2008 delivered funds to rail and infrastructure in the tertiary education sector. The 2008 stimulus combined to just over \$15 billion (Taylor and Uren, 2010: Appendix B).

When Rudd signalled that another round of spending would come in early 2009, a coalition of environmental groups, the country’s peak union body, the Property Council and several other groups made a joint statement calling on the government to include substantial investments in green home renovations and green infrastructure (Australian Conservation Foundation *et al.*, 2008). The government’s \$42 billion Nation Building and Jobs Plan arrived in February 2009 with \$3.9 billion for an Energy Efficient Homes Package.

Finally, the May 2009 Budget included a further \$22.5 billion in infrastructure investments, which is included in some estimates of the country’s total stimulus (Taylor and Uren, 2010: Appendix B). While the Opposition derided the government for what it viewed as excessive spending, the stimulus was praised outside the country by organisations such as the IMF and the OECD (Wettenhall, 2011:81).

Measuring the ‘Greenness’ of the Australian Stimulus

The HSBC Report (Robins *et al.* 2009) estimated Australia’s green stimulus at \$13.4 billion (US\$9.3 billion), which was approximately 21% of the 2009 stimulus and 17% of total stimulus spending during 2008/09. This placed the country in the middle of the OECD spectrum in terms of the proportion of the stimulus package that was green, ahead of the US, Canada and the UK but behind China, the EU and South Korea.

However, there are myriad problems with the data in this HSBC report in terms of how it categorizes stimulus spending as 'green'. Others have noted, for example, that the majority of South Korea's stimulus was spent on an environmentally destructive dam project that was pitched by the government as 'green' to gain public acceptance (Normille, 2009).

In terms of the Australian data, the HSBC report includes \$4.6 billion in upgrades to metro rail networks because these are likely to have some positive impact on emissions reductions. Setting aside the fact that the environmental impact of such investments is highly context dependent (Bowen and Stern, 2010), one can question whether environmental objectives were a critical factor in the Federal Government's decision to allocate funding to metro rail. In the 2009 Budget Papers, the upgrades to rail links are justified largely on the basis of alleviating urban congestion. Although the benefit of reducing greenhouse gases is mentioned, it is clearly a peripheral goal at best (Australian Government, 2009: 4). It is likely that that these investments would have been tabled even if environmental concerns, such as climate change, did not exist. As such, it seems to be stretching the definition of green stimulus to include them, simply because they might incidentally have a net positive environmental impact.

The HSBC report reflects a larger problem within the literature, which is the absence of a useful definition of what it actually means for a stimulus measure to be green. As Strand and Toman (2010: 2) suggest, green stimulus has become 'a somewhat imprecise catch phrase for various proposals to undertake economic stimulus activities that at the same time are seen to have advantageous environmental and economic growth effects'. An article in this journal by Goods (2011) has outlined similar difficulties in defining 'green jobs'.

Barbier is one of the few who has attempted to define green stimulus, seeing it as comprising 'Fiscal stimulus measures that are targeted to reducing carbon dependency and to other environmental improvements – *e.g.* supporting renewable energy development, carbon capture and sequestration, energy efficiency, public transport and rail; improving or modernizing electrical grid transmission and river basin management; and improving freshwater supplies and ecosystem management' (Barbier, 2010: 294). However, this definition is quite ambiguous and mainly serves to list examples of projects that might or might not be legitimately 'green' depending on the circumstances.

There was broad agreement amongst economists during the GFC that, to be effective, stimulus should follow the ‘three T’ principles (targeted, timely, and temporary) (Elmendorf and Furman, 2008). Rather than proposing a single definition of green stimulus, this article similarly proposes three criteria for effective green stimulus measures:

- **Significant** – the measure should have a stated environmental objective that is substantial (*e.g.* on par with job creation) and not incidental.
- **Supplementary** – the measure must entail funding that is additional to what would have been available in the absence of the crisis (*i.e.* it must be a genuine stimulus measure and not a regular budget item).
- **Suitable** – the design of the measure should be linked to the environmental objective (*i.e.* there should be a realistic probability that environmental benefits will actually accrue).

If we remove metro rail upgrades from the \$13.4 billion green stimulus calculation for Australia on the basis that it does not meet the *significant* criteria, and all funding that was pre-existing or re-directed from other environmental programs, this leaves approximately \$7.4 billion in new funds. However, according to available information, only \$2.4 billion of that funding (32%) had actually been spent by mid-2014 (see Table 1).

Applying the second criterion, that funding be *supplementary*, is somewhat more complicated. The key issue is whether the spending would have occurred irrespective of the GFC. The Energy Efficient Homes Package generally appears to pass the test. As a major part of the Nation Building and Jobs Plan, it was clearly developed in response to the GFC. However, two programs in the Package – the Solar Hot Water Rebate and the Low Emissions Assistance Plan for Renters (LEAPR) – were based on pre-existing schemes. The stimulus increased their total funding (from \$252.2 million to \$514.4 million for the Solar Hot Water Rebate and from \$150 million to \$637.4 million for LEAPR) as well as the level of assistance available to individual households (from \$1000 to \$1600 for the Solar Hot Water Rebate and from \$500 to \$1000 for LEAPR) (DEWHA, 2008). Given that neither program ended up spending even its initial level of funding, it is difficult to argue that the supplementary criterion has been met in these cases.

Table 1: Major* Green Programs Funded in 2009

Program	Funding in 2009 (\$M)	Funding spent by 2014 (\$M)	Outcomes	Status of Program
Home Insulation Program (HIP)	2,800	1,450 ^a	1.1 million homes insulated	Cancelled in February 2010
Low Emissions Assistance Plan for Renters (LEAPR)	487.4	14.5 ^b	19,591 rental properties insulated	Rolled into HIP in August 2009
Solar Hot Water Rebate (SHWR)	262.2	173 ^c	255,000 households assisted (since 2007)	Rolled into Renewable Energy Bonus Scheme in 2010 (ended in 2012)
CCS Flagships	2,000	122 ^d	Two projects in preliminary scoping phase	Funding cut several times, \$190 million remains in 2014/15 Budget
Solar Flagships	1,365	167 ^e	One project under construction	Funding rolled into Australian Renewable Energy Agency (ARENA) (future uncertain)
Renewables Australia (renamed Australian Centre for Renewable Energy/ACRE)	100	100 ^f	Funded a portfolio of small projects in renewables sector	Incorporated into ARENA in July 2012 (future uncertain)
Solar Homes and Communities Plan	245.3	245.3 ^g	Installation of 107,752 PV systems from 2000-2010	Discontinued in June 2009 (replaced by Solar Credits)
National Energy Efficiency Initiative (NEEI)	100	100 ^h	Smart Grid Smart City Project (trial of smart grid technologies)	Trial ran from 2010-2014.
Total	7,360	2,372		

Sources and notes:

*Some more minor investment programs are not listed here. These are those that the Greens secured as a condition for their support of the stimulus package in the Senate: a \$50 million Local Green Jobs Package, \$40 million for bicycle paths and \$10 million for the bioremediation of the Lower Murray River Basin (Milne 2009, Siewart 2009).

a: Department of Climate Change Annual Report 2010-11. This figure does not include the costs to the government of various safety programs and industry compensation schemes following the early termination of funding.

b: DEWHA Annual Report 2009-10. Total spending for the program amounted to \$18.8 million, but some of this funding pre-dated the stimulus package (see Administration Legislation Committee 2010).

c: Department of Climate Change and Energy Efficiency 2012. An estimated \$323 million was spent by the government on solar hot water rebates between 2007 and 2012, but \$150 million in funding was in place before the stimulus was announced.

d: Department of Resources, Energy and Tourism 2012. Two projects – CarbonNet and Collie South West Hub – received grants of \$70 million and \$52 million respectively.

e: AGL, n.d.

f: \$690 million in total was spent. Australian Renewable Energy Agency, n.d.

g: This program actually had a huge cost blow out due to the large number of rebate applications, but it does not make sense to include the subsequent spending in the calculation.

h: Department of Industry, n.d.

The Carbon Capture Storage (CCS) Flagships and Solar Flagships programs, increased funding for Renewables Australia and the Solar Homes and Communities Plan, and the National Energy Efficiency Initiative all came out of the May 2009 Budget. Although the budget was ‘forged in the fire of the most challenging global economic conditions since the Great Depression’ (Swan, 2009), it does not follow that every major project announced in the budget was a stimulus measure *per se*. None of the projects under the Clean Energy Initiative had the potential to create a large number of jobs in the short term; and the funding (which was to be spread out over nine years in the case of the CCS Flagships) also failed to meet the ‘temporary’ criterion typically applied to stimulus measures. It is highly likely that these programs were in the works prior to the GFC and formed a part of the Rudd Government’s broader strategy to tackle climate change rather than a specific response to the crisis. For example, in the discussion of CCS Flagships in the budget papers, it was noted that the program ensures that Australia was playing its ‘part in achieving the G8’s target of 20 industrial-scale CCS projects operating around the world by 2020’ (Wong *et al.*, 2009). This target was set at the Group of Eight (G8) Hokkaido Toyako Summit in July 2008, before any fiscal response to the emerging financial crisis was contemplated (G8, 2008).

Overall, the Government’s stimulus package does not appear to represent a paradigm shift in environmental policy making. This is even more apparent if one considers the ‘brown’ aspects of the stimulus and 2009 Budget, such as the \$4.8 billion allocated to road projects, touted as part

of ‘the biggest road investment program in the nation's history’ (Australian Government, 2009: 14). However, one stimulus measure – the Home Insulation Program (HIP) – could potentially meet the criteria of being substantial, supplementary and suitable. In order to assess whether this is the case and, if so, whether the design and implementation of the HIP might suggest that some incremental change was induced in Australian policymaking through the GFC, this article now focuses on this program.

The Home Insulation Program

Various parts of the Federal Government had been working on a variety of policy options to promote household energy efficiency throughout 2008. A whole-of-government taskforce had been established in the Department of the Prime Minister and Cabinet (PM&C) to examine options to minimize the impact on households of the emissions trading system (known as the Carbon Pollution Reduction Scheme) that was being developed at the time (Wiley-Smith, 2014: 1). However, the key policy being considered was ‘technology-neutral’ and did not have any specific focus on insulation (Wiley-Smith, 2014: 1). The idea was that energy audits would be conducted to determine the most suitable efficiency technologies for a given household, which was in line with the recommendations of the 2008 Strategic Review of Australian Government Climate Change Programs (Wilkins Review).

The genesis of the specific insulation-only program that became the HIP occurred over the Australia Day (January 26) long weekend in 2009. PM&C asked two members of staff in the Department of the Environment, Water, Heritage and the Arts (DEWHA) to develop a proposal for a two-year program to insulate ceilings in 2.7 million homes at no cost to homeowners (Wiley-Smith, 2014: 3). The DEWHA staff members costed a two-year program but also a five-year option, which they recommended because it would allow the insulation industry more time to adjust to a significant uptake in activity in the short-term and inevitable contraction in business in the long-term (a ‘boom and bust’ scenario) (Wiley-Smith, 2014: 5). The recommended level of rebate was \$1200 per household and the model of delivery involved the outsourcing of the implementation of the program to a number of organisations (Brunoro, 2014: 5; Keefe, 2014: 10). The Department of Finance

requested a re-costing at a rate of \$1600 per household, which was the level of rebate eventually adopted (Brunoro, 2014: 5).

On 28 January 2009, the Strategic Priorities and Budget Committee, made up of the Prime Minister and three senior ministers (sometimes referred to in the media as the 'kitchen cabinet' or 'gang of four'), considered the proposals from PM&C and decided to establish the Energy Efficient Homes Package, which was officially announced along with the rest of the Nation Building and Jobs Plan on 3 February 2009 (Walker, 2014). The HIP was the largest part of the Energy Efficient Homes Package, with \$2.8 billion in funding over two years. It is worth noting that the Minister for Environment, Peter Garrett, was not aware of the request made to the DEHWA staff members to develop the program, nor was he included in the meeting of the Strategic Priorities and Budget Committee that approved the program (Garrett, 2014: 3-4).

The announcement of the HIP was generally well received. The Australian Conservation Foundation (2009) called it a 'good step' but argued that, as a whole, the stimulus package could have done more to create green jobs. The Greens welcomed the program although they sought amendments to the stimulus package, including assurances that high energy efficiency standards would also be achieved in buildings funded through the school infrastructure and social housing programs (Milne, 2009). Malcolm Turnbull, then leader of the Liberal-National Coalition, supported the idea of an insulation rebate but felt it should be much lower and means-tested (Turnbull, 2009). Others were less impressed. Greenpeace Australia called the HIP 'tinkering around the edges' whilst Friends of the Earth Australia went so far as to refer to it as 'tokenistic' and an attempt to 'greenwash' the stimulus package (Webb *et al.*, 2009; Anon, 2009).

To oversee the implementation of the Nation Building and Jobs Plan, Prime Minister Rudd established the Office of Commonwealth Coordinator-General (OCG) and appointed Senator Mark Arbib to the newly created position of Parliamentary Secretary for Government Service Delivery (a role upgraded to Ministerial portfolio in June 2009) (Rudd, 2014). DEWHA had purview over energy efficiency measures and was therefore specifically responsible for the HIP. However, according to staff at DEWHA, the work done on the HIP in the department was closely monitored by OCG and there was 'very centralised control of the stimulus measures at the time in response to the

global financial crisis' (Carter, 2014: 7).

The HIP proceeded in two phases. From the first announcement of the program until the end of June 2009, DEWHA administered all aspects of the HIP, including approving and distributing payments directly to householders that applied for the rebate. In that period, 73,005 rebates were paid to households at a cost of \$103.1 million (Auditor General, 2010: 21). From 1 July 2009, Medicare Australia was responsible for registering insulation installers and processing payments, which were made directly to installers rather than to householders.

The model in Phase 2 was not what had been proposed by DEWHA which had argued for the direct delivery of the program through a series of regional head contractors. The installer-rebate model was developed by OCG, much to the consternation of DEWHA staff (Carter, 2014: 7; Keefe, 2014: 12-13). There appears to be three key reasons for the OCG pushing this model.

First, there was time pressure associated with the July 1 deadline for the Phase 2 rollout. Staff at DEWHA believed that this deadline was dictated by PM&C and the Prime Minister himself in order to ensure a swift response to the GFC (Carter 2014: 8). The OCG thought that payment processing in Phase 1 had been slow and doubted that DEWHA had the capacity to implement the direct delivery model (Mrdak 2014: 12-13).

Second, the OCG viewed the installer rebate-model as more efficient as it was a 'light touch' regulatory model that would 'let the market operate with few restrictions' (Hanger, 2014: 131). As Parker (2013: 228) convincingly argues, the installer rebate-model 'relied on pro-market ideologies that depict government provision as necessarily slow, centralised, and less efficient than market provision'.

Third, the model aimed to outsource the risks associated with the program (Parker 2013). By limiting DEWHA's involvement in the program to making rebates to installers through Medicare, the model was meant to insulate the government from liability.

The decision to directly pay installers would significantly impact the outcome of the HIP. It opened the door to inexperienced contractors and increased opportunities for fraud. As a result of inadequate training, a number of individuals were injured in workplace accidents. The use of improper materials and poor installation practices also led to an estimated 100 house fires (Taylor and Uren, 2010: 224). In total, four people lost their lives in HIP-related activities. Following these tragedies,

the program was terminated on 19 February 2010. The Environment Minister Peter Garrett was shortly thereafter demoted; and responsibility for energy efficiency policy was transferred to Penny Wong (and then Greg Combet) and a revamped Department for Climate Change and Energy Efficiency (Hall, 2010).

Initially, it was expected that, after a brief hiatus, the government would renew funding for home insulation under the newly developed Renewable Energy Bonus Scheme (REBS). Despite lobbying from the insulation industry, which was under considerable financial pressure following the early termination of the HIP, Minister Combet recommended against the inclusion of insulation in REBS because he did not have confidence that a new program 'could be implemented with satisfactory mitigation of safety and non-compliance risk' (Combet, 2014: 7). In order to deal with the fall-out of the HIP, Combet developed an industry assistance package as well as a number of safety programs involving house inspections and the removal of improperly installed insulation. The government also endeavoured to investigate claims of fraud.

The HIP was responsible for insulation being installed in 1.1 million houses at a cost of \$1.45 billion (not taking into account compensation paid to families and industries and the cost of implementing safety programs) and is estimated to have created between six and ten thousand jobs (Australian National Audit Office, 2010: 26). The HIP has been officially reviewed by Dr Allan Hawke and the Australian National Audit Office (both at the request of Minister Combet) as well as through an inquiry by the Senate Environment, Communications and the Arts References Committee and then, in 2014, by a Royal Commission. There have also been two coronial inquests into the deaths of the insulation installers. All of these reviews have focused primarily on the safety aspects of the program, although there has been some discussion of its environmental goals and impacts.

With the exception of Crawford and Stephan (2012), who address the emissions reductions achieved by the HIP (see further below), academic examinations of the program have thus far also focused entirely on safety issues and the political failure of the program. Several authors have argued that the government should never have taken on such a complex scheme and should have instead delegated its implementation to the States (Lewis, 2012; Kortt and Dollery, 2012; Dollery and Hovey, 2010).

Rather than rehash these issues, the rest of the article focuses on what can be gleaned from the various reviews and media reporting about the environmental aspects of the scheme to determine whether it meets the criteria for effective green stimulus.

Criterion 1: Significant

From the outset the government sold the HIP as a measure with twin goals: job creation and energy efficiency. Energy efficiency was linked to both climate change and the ambition of reducing household energy bills. In a press release from the Prime Minister's Office (2009) announcing the HIP, the program is described as supporting jobs and setting Australia up 'for a low carbon future.' A joint press release from the Prime Minister and the Treasurer specifically claims that the HIP will cut household energy costs by \$200 per year and '[r]educe greenhouse gas emissions by around 49.4 million tonnes by 2020, the equivalent of taking more than 1 million cars off the road' (Swan and Rudd, 2009).

However, in the actual implementation of the scheme, the available evidence suggests that the economic and environmental goals were not given equal weighting by the government. Civil servants in DEWHA have suggested that, from their perspective, it appeared that PM&C had chosen to target stimulus toward insulation primarily because it was an industry with low entry requirements for new employees (Carter, 2014: 10; Kruk, 2014: 10). In other words, jobs could be created very quickly. Although DEWHA staff and Minister Garrett were keen to bolster the energy efficiency aspects of the program, they were under pressure from OCG to deliver the program quickly. As Ross Carter, a First Assistant Secretary responsible for the Renewables and Energy Efficiency Division in DEWHA has noted:

My recollection is that it was impressed on us by the OCG that any delay was not in the government's mind, in terms of the stimulus effect, and the need to get stimulus out at a household level and to get employment opportunities out at a dispersed level. Energy efficiency outcomes were not, in my observation, equally important. The primary objective was about creating economic stimulus and providing for jobs (Carter 2014: 8).

The dominance of the job creation goal of the program is reflected in the fact that the program was rolled out over a shorter period than

recommended by DEWHA staff (two rather than five years). The head of the Royal Commission that investigated the HIP argued:

There was an inevitable and predictable conflict or tension between the two aims of the HIP. One aim was to insulate 2.2 million homes and the other was to stimulate the economy. Both were doubtless admirable aims but there was an inherent conflict between them: the first required detailed and careful planning over time, and the other required speed. In the case of the HIP, planning was sacrificed to speed (Hanger, 2014: 5).

The mode of delivery adopted (at the insistence of OCG) also removed any possibility for homes to be assessed for their actual energy efficiency needs. Minister Garrett apparently also ran into difficulties when trying to develop an associated informational campaign to educate homeowners about energy efficiency (Keefe, 2014:13; Levey, 2014: 6, 26).

Documents released following the termination of the HIP appear to scale back the emphasis on the green elements of the program. In a factsheet produced by the Department of Climate Change and Energy Efficiency (2011), the HIP is described as having been 'designed primarily to promote employment and stimulate the Australian economy in response to the global financial crisis'. Energy efficiency and the lowering of household energy bills are referred to as 'additional benefits of the program'.

Criterion 2: Supplementary

The idea of federal government financing for home insulation existed prior to the GFC. When Malcolm Turnbull was Minister for Environment he proposed a 'greenhouse grant' for home insulation. Former Prime Minister John Howard apparently favoured the idea, although no progress was made because the Treasurer, Peter Costello, opposed it (Hartcher, 2009).

As noted above, following the 2007 election, several areas of government began working on energy efficiency policies and considering measures to increase insulation in households. The Wilkins Review (2008) recommended that home insulation form a part of any national strategy on energy efficiency. There was also some discussion of home insulation in the Energy Efficiency Sub-Group of the Council of Australian Governments (COAG) Working Group on Climate Change

and Water in the lead up to the development of a National Energy Efficiency Strategy (COAG, 2008). Already in May 2008, a \$500 rebate had been offered to landlords who installed insulation in rental properties (Rudd, 2014). It should also be noted that several Australian state governments had adopted rebates for home insulation before the federal government entered the fray.

However, although some funding may have been directed to supporting home insulation in the absence of the GFC, it is highly unlikely that anything of the scale and speed of the HIP would have been contemplated. Prior to the HIP, the annual rate of home insulation retrofits was about 70,000 per year (Hanger, 2014: 1). Over the course of less than one year, the HIP resulted in 1.1 million houses receiving ceiling insulation.

Criterion 3: Suitable

Many advocates of green stimulus around the world argued for a focus on household energy efficiency initiatives, including insulation (Green New Deal Group, 2008; UNEP, 2009). As a climate change mitigation strategy, it is generally considered 'low hanging fruit', meaning that a substantial amount of emissions reductions can be made at relatively low cost. There is debate about the exact numbers, but between 0.5-1.65 tonnes of carbon dioxide equivalent (CO₂-e) are saved each year for every house that is insulated (Hawke, 2010: vi; Daley and Edis, 2011: 30). About 40 per cent of household energy in Australia is devoted to heating and cooling and, in turn, homes account for about a quarter of the country's total energy consumption (Crawford and Stephan, 2014). Prior to the HIP about 40 per cent of Australia's housing stock was not insulated (Prime Minister's Office, 2009).

Although the HIP meets the criterion of being suitable, it is worth noting that many would argue that a 'technology neutral' assistance program for energy efficiency would have been more suitable to meet the objective of emissions reductions. This would have involved household energy audits in conjunction with rebates for technologies that would maximize energy efficiency yields. Such an approach was proposed in the Wilkins Review (2008: 142) and was also the focus for discussion in DEWHA prior to the introduction of the HIP (Brunoro, 2014: 2,4; Levey, 2014: 6). According to a policy advisor to Minister Garrett, there was a feeling at DEWHA that, in comparison, the HIP 'wouldn't necessarily be providing the

energy efficiency investment that was best suited to that household. You would be just giving everyone insulation' (Levey, 2014: 6).

Concerns were also raised in the course of a Senate inquiry about the failure of the program to consider the appropriateness of different types of insulation in Australia's various climatic zones. In the hotter areas of the country, bulk insulation (*e.g.* pink batts) may prevent heat from escaping from houses at night (Environment, Communications and the Arts References Committee, 2010: 65) which could lead to increased use of air conditioning, with associated increases in CO₂ emissions. Although the Senate Committee was unable to deduce from the conflicting submissions of the bulk insulation and foil insulation representatives whether this was a serious problem, it did conclude that DEWHA should have ensured that home owners were given proper advice about the type of insulation that was most suitable for their region. The inquiry also revealed some of the broader problems associated with the privatisation of the standard-setting agency meant to deal with such issues (Parker, 2013: 232).

Others have pointed out that the mode of delivery of the HIP permitted insulation to be put into very old houses that might be demolished shortly thereafter (Fricker, 2014: 555). As there is an energy cost involved in making insulation, such a result is counterproductive from an energy efficiency perspective. Minister Garrett also disagreed with the Prime Minister's Office's plans to extend the program to holiday homes because he wanted the focus to be on where the greatest energy efficiency gains could be made (Garrett, 2014: 8).

Some insulation was also imported, particularly from the US and China. In addition to having a carbon cost associated with shipping, some of the materials were reportedly substandard. However, the government was not in a position to restrict imports in light of its obligations under free trade agreements (Environment, Communications and the Arts References Committee, 2010: 62).

Perhaps the HIP would have been a more suitable response to climate change if Minister Garrett had been successful in getting an educational campaign on energy efficiency launched. According to his policy advisor, Garrett wanted a campaign that 'would actually drive behaviour change in energy efficiency' rather than one that simply advocated that people 'go out and get insulation' (Levey, 2014: 12). However, the Coordinator-General and Senator Arbib wanted the focus of outreach to be focused on

selling the economic benefits of the stimulus and the jobs being created and apparently the approach eventually agreed upon favoured their view rather than Minister Garrett's (Levey, 2014: 12-13).

Successful?

The criterion of suitability is a basis for assessing whether a stimulus measure is legitimately green when it is announced. Ultimately it is more important to assess whether the stated environmental objectives were actually achieved. In the case of the HIP, this task is not straightforward, but some estimates have been made.

The Department of Climate Change and Energy Efficiency (2011) estimated that the HIP would result in 14 million tonnes of CO₂-e reductions by 2020. Energy Efficient Strategies (2011: 13) (in a report commissioned by the Insulation Council of Australia and New Zealand) projected a slightly lower 10 million tonnes of CO₂-e reductions by 2020. This reduction would be associated with a cumulative savings in space heating and cooling energy costs of \$3.88 billion by 2020 (Energy Efficient Strategies 2011: 13). Daley and Edis (2011: 29) have estimated between 6-11 million tonnes of CO₂-e reductions by 2020.

None of these estimates takes into account the energy requirements and CO₂ emissions associated with the manufacturing of insulation for the HIP. Crawford and Stephan (2012) suggest that, when these factors are considered, it becomes apparent that insulation will still result in significant energy savings and greenhouse gas emissions reductions, but only in the long term. For the HIP, they suggest that the environmental benefits will not begin to accrue until after 2030.

When compared to past Australian rebate schemes for solar PV, the HIP provides a better return on investment in terms of emissions reductions per dollar spent (Daley and Edis, 2011: 29). However, other policy initiatives that don't rely on direct subsidies, like the Renewable Energy Target (RET), are far more cost effective (Daley and Edis, 2011: 9). That being said, the HIP was not designed solely with emissions reductions in mind and was also intended to create large numbers of jobs.

Ironically, despite the early termination of the program and the political fallout for Rudd and Garrett, the HIP may end up having a stronger positive legacy than any of the other climate change programs introduced by Labor governments between 2007 and 2013. Rudd's planned

emissions trading scheme was shelved and, although the Gillard Government brought in a carbon tax, that was repealed by Tony Abbott's Liberal-National Coalition Government in 2014. Abbott also attempted to dismantle most of Labor's other climate change initiatives, with varying success. The Liberal-National Coalition may have hoped to gain political advantage by embarrassing Labor in the Royal Commission into the HIP, but the 1.1 million homes insulated under the program will continue to provide energy savings regardless.

Conclusions

On the whole, it is difficult to disagree with Pearse (2010: 230) who states that '[a]lthough Australia may have emerged from the global financial crisis with flying colours, green isn't one of them.' This article has shown that, when measured under a more rigorous definition, Australia's green stimulus amounts to only \$1.45 billion rather than the \$13.4 billion estimated by Robins *et al.* (2009). This would put Australia at the laggard end of the OECD spending spectrum, although similar scrutiny would likely reduce the green stimulus projections made by Robins *et al.* (2009) for other countries too.

The HIP was Australia's most distinctive green stimulus measure. It was flawed, but it does meet all the green stimulus criteria of being significant, supplementary and suitable. However, the available evidence suggests that the primary motivation for the program and the goal that fundamentally shaped its development was job creation, rather than energy efficiency. Furthermore, there is no evidence that the program created cross-pollination of ideas between environmental and economic ministries (who generally engaged in a traditional 'turf war') or increased public support for environmental values.

Now that the Green Keynesian moment has ended, what can we learn from it? The ALP Government led by Kevin Rudd came to power with a strong mandate to tackle climate change; and Rudd publicly repudiated neoliberalism and embraced a Keynesian response to the GFC. As such, Australia presented a 'most likely' case for both significant green spending and a substantial shift in economic governance, and yet neither occurred. Possible explanations for this can be found in the literature on crises and the post-GFC scholarship on neoliberalism.

First, although Kevin Rudd has frequently been personally criticised for micro-management and for a highly centralised mode of governing (see Chubb, 2014), there is a more general tendency for power to be concentrated in times of crisis (Peters, 2011). The centralised development of the stimulus in Australia excluded voices (such as that of Minister Garrett) that would have argued for a more substantial green response. The centralised control of the HIP fundamentally changed its delivery model with negative impacts for workers and the environment. As long as environmental ministries are considered 'peripheral', their goals are likely to be subservient to economic ones when a crisis erupts.

Second, recent contributions to the crisis literature suggest that the optimism about the potential for crises to catalyse paradigmatic change may be unwarranted. Starke *et al.* (2013: 184) examined developments in social policy following several crises, including the GFC, and found that 'the link between crisis and path-breaking change may be much weaker than previously thought' and that 'missed opportunities may well be much more common.' They argue that one possible reason for this is that during moments of crisis, people 'tend to stick to what they know best' and governments are therefore likely to draw on established 'policy routines' when developing a response (Starke *et al.*, 2013: 10).

This relates to a third issue, which is that neoliberalism has proven remarkably resilient (Overbeek and Apeldoorn, 2012). The Australian government's established 'policy routines' are the neoliberal strategies of outsourcing control (and risk) to the market (Parker, 2013). The ultimate failure of the HIP is inextricably linked to the delivery model, which was based on neoliberal principles. If Rudd and his 'gang of four' had truly repudiated neoliberalism and had embraced the idea of a socially democratic-driven recovery, then DEWHA might have been given the resources it needed to (successfully) manage the program directly. In practice, the Environment Minister wasn't even able to garner the support he needed to launch an educational campaign.

The resilience of neoliberalism also accounts for why other programs (*e.g.* solar hot water) were slashed once the economic crisis had abated. Thus, the two aspects of the critical juncture presented by the GFC – the opportunity for spending and the opportunity to replace the dominant economic paradigm – are inextricably connected in the Australian case. The failure to embrace both opportunities led to sub-optimal

environmental outcomes from the stimulus and a quick return to business as usual.

Unfortunately, there has been very little institutional learning despite the many reviews of the HIP. The Royal Commission made some recommendations for how DEWHA's capabilities could be enhanced but the official government response was to appoint Professor Peter Shergold (a strong advocate of outsourcing public service delivery) to lead a review of government processes (Hunt, 2014). This response is consistent with the widespread use of the HIP by the current government and the media as evidence that governments are ineffective and inefficient at providing services, ignoring the fact that the HIP was effectively outsourced to the private sector. Many have noted that public confidence in 'the ability of governments to run large-scale energy efficiency programs' has been affected by the HIP scandal (Crawford and Stephan 2014; Dowling 2012) and that, as a result, it is less likely that future federal governments will embark upon large investment programs of this nature (Dovers 2013). This suggests that the Australian experience with Green Keynesianism has not led to the creation of an 'ecological state', as proposed at the outset of this article, but instead may have placed such a goal even further out of reach.

Kyla Tienhaara is a Research Fellow at the Regulatory Institutions Network, Australian National University. This research was supported under Australian Research Council's Discovery Early Career Researcher Award funding scheme (project number DE120102787).

kyla.tienhaara@anu.edu.au

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