

Inertia and stability in electricity metering

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Smart grids messy society

What learning has taken place from the implementation of smart grids in Australia?

- early experimentation – mid-2000s: Victorian AMI and Smart Grid Smart City
- contributes to 2 broad strands of scholarship about *innovation* from **policy studies** and **science and technology studies**
- aims to rectify a lack of attention to **geography** and the particularities of place that is common to both sets of theory



Australian Research Council 'Future Fellowship' (2015-19)

Project website:

<http://www.utas.edu.au/smart-grids-messy-society>

What I will cover

1. Scholarship on inertia and obduracy
2. Empirical case: electricity metering in Australia
3. Conclusions & discussion

1. INERTIA & OBDURACY



Theorising inertia and obduracy

- Relatively neglected - tendency to focus our attention on innovation > obduracy
- Several contributions (Shove, Hommels, Bijker and Bijsterveld) but not yet an integrated/coherent body of theory
- Keeping things the same requires constant effort
 - methodologically harder to identify than new processes

“One of the main challenges for STS scholars has become to achieve a balanced understanding of both obduracy and change in sociotechnical developments.” (Hommels 2005: 330).

“... much [existing] literature overlooks questions about how existing configurations break down and how elements of defunct arrangements persist and reappear... the dynamic relation between incoming, outgoing and returning systems deserves more explicit attention... processes of disappearance are especially important..” (Shove, 2012: 364).

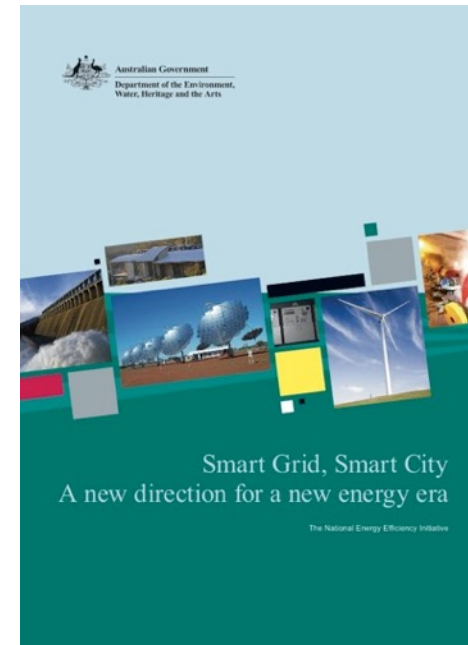
"Infrastructure networks, are, in short, precarious achievements." (Graham & Marvin, 2001: 182).

2A. ELECTRICITY METERING IN AUSTRALIA - BACKGROUND



Smart Grid Smart City

- 2010-14
- AU\$100M government funding
- several different trials
- installation of 8000 smart meters

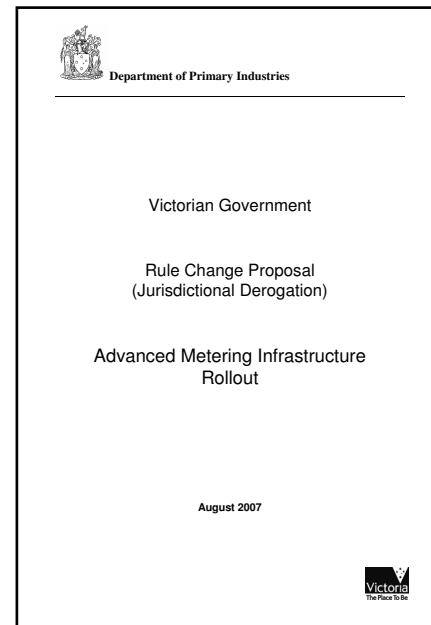


'The new National Energy Efficiency Initiative: Smart Grid, Smart City will use 21st century technology to assist Australia's transition to a low carbon economy by encouraging a smarter and more efficient electricity network.' (2009: 3).

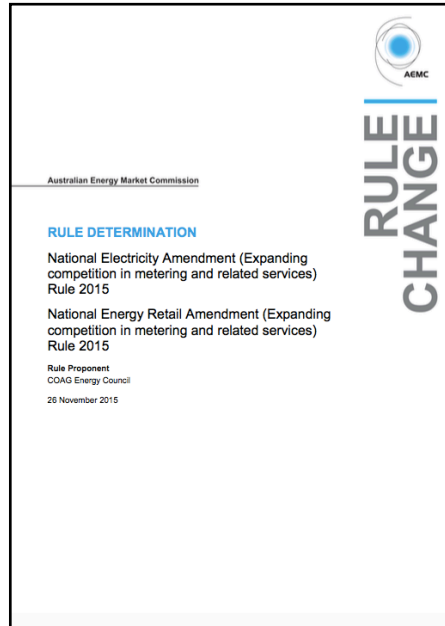
The State of Victoria Advanced Metering Infrastructure (AMI) Program



“Customers will benefit from the enhanced competition in the retail electricity market associated with the timely and efficient rollout of AMI.” (DPI 2007, p16)



A market for digital metering



- 2015 rule change from the Australian Energy Market Competition
- Meters no longer governed by distribution utilities, but open to competition
- Intention that new digital metering is encouraged

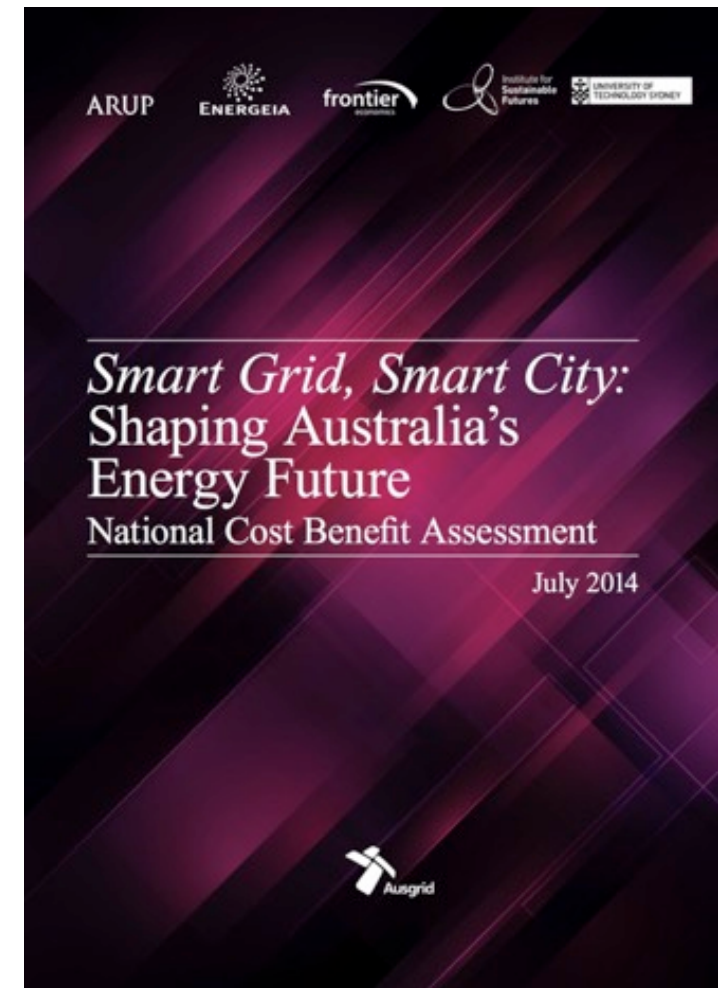
“[it]... will facilitate a market-led approach to the deployment of advanced meters where consumers drive the uptake of technology through their choice of products and services.” (p.i)

2B. METERING OBDURACY



“In the SGSC Program, *almost 30 per cent of sites were found to be unsuitable for the deployment of the smart meter infrastructure... despite a program of pre-qualifications and site visits...*The high level of unsuitable sites in the trial was due to a range of factors, including installation issues and communications coverage. Customer dissent was driven in part by the nature of the deployment.” (2014: 104, emphasis added).

“The SGSC trial found that the costs of installing meters and communications equipment varied significantly for a variety of reasons, including access issues, insufficient meter board space and poor signal strength.” (2014: 107)



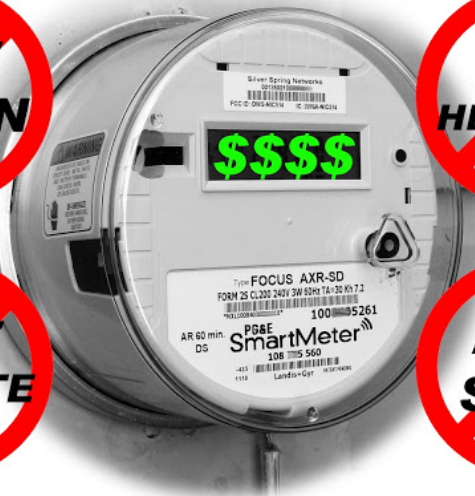


Stop Smart Meters Australia

Fighting for your financial & physical health, privacy, and safety in Australia



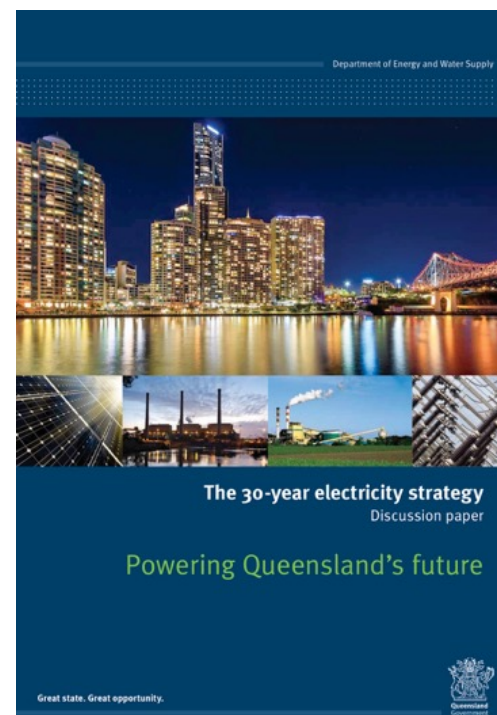
**DO NOT FIT A
SMART METER**



<http://www.peoplepowervictoria.org.au/home>
<http://stopsmartmeters.com.au/>

“Based on the Victorian experience, the Queensland Government has ruled out a mandated rollout of advanced meters in Queensland and will support the customer-driven approach.”

Queensland Government - Department of Energy and Water Supply (2013) *The 30-year electricity strategy Discussion paper: Powering Queensland's future* (pp12)



“Not only were Victorian customers not given a choice of meters, they were also charged the upfront cost of the meter and its installation, a decision which is still costing them. The [NSW] Government has listened to customers and that is why ultimately customers will decide what they want and when they want it.”

NSW Minister for Resources and Energy Anthony Roberts, *Media Release - NSW GETS SMART ABOUT METERS*, 28 October 2014.

3. CONCLUSIONS & DISCUSSION



Unsettling carbon?

- Process of implementing digital meters disrupted in Australia
 - Not resistance to climate change, but about trust of utilities & the detail of how government programs were implemented
 - Improvisation evident: new protest groups, government programs and policies modified & adapted
- Climate change relevant, but not at the forefront
- Scope for theories about obduracy to be further developed – similar level of conceptualisation as for innovation?

Thank you for listening.

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Are policy failures mobile? An investigation of the Advanced Metering Infrastructure Program in the State of Victoria, Australia

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Abstract
 This article is about a case of policy failure and negative lesson drawing, namely the implementation of a mandatory smart metering programme – the Advanced Metering Infrastructure Program – in the State of Victoria, Australia, in the period 2009–2013. The article explores the framing of policy failure, and the ways in which failed policies might be mobile. The Advanced Metering Infrastructure Program provides an important empirical counterbalance to existing scholarship on policy learning, transfer and mobility, which is for the most part about positive best practice case studies, emulation and the travelling of ‘fast’ (and by implication) successful policy. There is evidence that the Victorian Advanced Metering Infrastructure Program circulated domestically within Australia and was influential in policy decision making, but that its international mobility was limited. The case is used to explore what gets left behind – or is amenable – in the telling of policy stories about failure. Science and Technology Studies scholarship on the inherent fragility of sociotechnical networks is drawn upon to consider how the concept of assemblage – a popular conceptual lens within policy mobility scholarship – might be applied to better understand instances of policy failure.

Keywords
 Policy transfer; policy mobilities; policy failure; Australia; assemblage; electricity sector

Introduction
 This article is about the implementation of a policy that did not proceed as expected, and came to be labelled a policy failure, namely the Australian State of Victoria’s Advanced Metering Infrastructure (AMI) Program (2009–2013) (hereafter ‘the AMI Program’). The article explores the learning that took place from the AMI Program and in particular how and why it travelled, with what effect. The politics of framing something as a policy failure

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THE ROLE OF INTERNATIONAL POLICY TRANSFER WITHIN THE MULTIPLE STREAMS APPROACH: THE CASE OF SMART ELECTRICITY METERING IN AUSTRALIA

HEATHER LOVELL

This article draws on Kingdon’s Multiple Streams Approach (MSA) to consider international, not just domestic, flows of policy. It is argued that using the MSA in conjunction with international policy transfer and mobility theories allows for a fuller explanation of the development of smart electricity metering policy in Australia. The MSA is based originally on empirical research within a single country – the USA – in the late 1970s, and all three of the ‘streams’ identified as important to policy change – problems, politics and policy – are conceptualized as domestic. While recent scholarship has broadened the application of the MSA beyond nation state boundaries, it is argued that there is scope to further develop such ideas. In particular, the notion of policy mobility is introduced to capture issues about the globalization of policy, the role of non-state actors and the material substance of policy.

INTRODUCTION
 In the decades since the late 1970s and 1980s when the Multiple Streams Approach (MSA) was first developed by Kingdon (1984), a trend of increased international transfer of policy has been observed (Mansh and Sherman 2009; Peck and Theodore 2010; Benson and Jordan 2011; Stone 2012). The overall objective of the article is to consider the value of further integrating ideas from scholarship on the international movement of policy with the MSA, building on the work of Bache (2013), Bache and Reardon (2013) and Cairney (2009, 2012) among others. The MSA was originally developed in order to explain domestic policy agenda-setting in conditions of high ambiguity (Kingdon 1984; Zahariadis 2014; Jones et al. 2013; Cairney and Jones 2016). With a now well-documented trend towards the more rapid global circulation of policy ideas and best practice programmes (Mansh and Sherman 2009; Peck and Theodore 2010; Benson and Jordan 2011; Stone 2012), alongside greater consideration of multi-level governance (see for example Hooghe and Marks 2003; Betsell and Bullock 2006), there has been a shift in MSA scholarship to consider other spatial scales of policy making (Jones et al. 2013). Bache and Reardon, for instance, have focused on the international sphere, and have considered the value of marrying concepts from international policy transfer and diffusion with the MSA, acknowledging how:

Kingdon’s analysis does not discuss the importance of transnational policy communities through which ideas are framed around and developed. This may be a consequence of time (1984) and space (US) in relation to Kingdon’s initial study (or perhaps to his case studies (Death and transportation)), all of which would point to largely domestic policy communities. But since his initial study, policy communities in many policy areas have become more transnational. (Bache and Reardon 2013, p. 907, emphasis added)

The article builds on these existing contributions in a number of ways. First, the core aim is to further develop the MSA so that it better encapsulates the international dimensions of policy, by drawing not only on policy transfer theory but also a set of related ideas

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Mobile policies and policy streams: The case of smart metering policy in Australia

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ABSTRACT
 Geographers have become increasingly engaged with the notion of policy mobility. It is argued that in a globalized world policies have become increasingly mobile, not just in an era of ‘fast policy’, flowing on new concepts of mobility, sociotechnical, and globalisation – and with a heightened sensitivity to geographic and urban context – policy mobility scholars have developed new ideas about how policies circulate internationally. In the process, however, theories of policy change developed within political science have been rather overlooked. In this paper I examine how a political science theory with a related theoretical focus – the Multiple Streams Approach (MSA) – an underpinning to policy transfer scholarship – we return to particular attention by the MSA, first, with attention to policy assemblage, the role of the nation state in reconfiguring the possibilities for, and timing of, policy change. In turn, policy mobilities scholars highlight the different trajectories of the mobility of policies, those problems, concerns, organizations and regulations that constitute policy. It also raises questions about the validity of analytically separating policies from policy proposals, as advocated by the MSA. These issues are considered using the empirical case of smart electricity metering policy in Australia. In the period 2009–2013,

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1. Introduction
 In 2010 the Australian Energy Market Commission (AEMC) hosted a number of Public Forums to deliberate on a change to the Australian electricity regulations about who implements, owns and manages new digital ‘smart’ electricity meters. Lasting over one hour, one might imagine each forum would comprise rather dry, technical discussions. The policy was anything but in a policy transfer with around 150 attendees (mostly smart metering pilots) met in between presentations, and sessions being held in the ‘at’. What was taking place was not simply a discussion of competing policy proposals, but rather a complex layering of debates surrounding broader issues such as when the problem was that smart meters were solving, and longstanding conflict between electricity distributors and retailers about their respective roles in Australia’s National Electricity Market (NEM). This context is the role of the nation state in reconfiguring the possibilities for, and timing of, policy change. In turn, policy mobilities scholars highlight the different trajectories of the mobility of policies, those problems, concerns, organizations and regulations that constitute policy. It also raises questions about the validity of analytically separating policies from policy proposals, as advocated by the MSA. These issues are considered using the empirical case of smart electricity metering policy in Australia. In the period 2009–2013,

work the same way here’. Policies like the New Zealand smart metering program might indeed be increasingly mobile, being tested at international venues and widely dispersed through websites and reports, but this does not necessarily help us understand policy change. For policy change does not take place simply in response to the circulation of a new policy idea or proposal from elsewhere, other factors are equally important. Policy mobility scholarship occurs with this view – assessing the importance of local context matters. For ‘transfer’ can mean many different things, and the rich and complex world of politics, institutions and already existing policies at the AEMC Public Forums provide an indication of the need to unpack and distinguish between the different aspects of policy: to be clear about what we mean by ‘policy’, in this paper political science will be used to refer to the process of policy change – specifically the Multiple Streams Approach (MSA) – to seek to distance and help address two related weaknesses in policy mobility scholarship. First, a lack of attention to what policy is (or constitutes elements) and, second, issues to do with the timing of policy change in particular with respect to the processes and procedures of the nation state.

These two issue-related issues – the definition of ‘policy’ within policy mobility scholarship and the timing of policy change – are the core focus of the paper, explored using the empirical case of

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