### Selective memory of past energy and climate policies: an assessment of two smart grid policy initiatives



#### SoERC Conference, 3-4<sup>th</sup> July 2019 Canberra Prof. Heather Lovell University of Tasmania







"And in terms of what happened earlier this year when the AMI Program officially closed down... are there a certain set of procedures that you'd go through at that point, in terms of wrapping up?...For instance, were there exit interviews with everyone leaving the Program..? Where you sat down and recounted your version of what happened with the program and the learnings and that sort of thing?

Not really, no. I don't really think that happened, no. But I don't really want to say that that didn't happen. I mean yes, look there was - so, the official version, yes there were records that were created."

(Interview - Victorian Government, Nov 2016)

### Structure

- 1. Institutional Memory & Amnesia
  - what we remember about past policies and why this might be important
- 2. Two case studies about smart grids
  - a. Smart Grid Smart City
  - b. State of Victoria Advanced Metering Infrastructure (AMI) Program
- 3. Summary & Conclusions





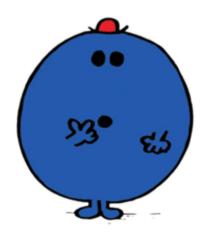
Smart Grid, Smart City A new direction for a new energy era



## 1. INSTITUTIONAL MEMORY & AMNESIA

### Political Science research

- Concern that with modern forms of government things are forgotten more easily (Pollitt; Corbett et al)
  - Formal processes of institutional memory have been eroded
  - High staff turnover, increase in collaborative governance (public-private partnerships)
- But also cases of strategic or willful amnesia – deliberate forgetting (Stark)



### Is institutional amnesia a problem?

- defined as "..the declining ability—and willingness—of public sector institutions ... to access and make use of possibly relevant past experiences" (Pollitt, 2000: 6)
- Consequences
  - intermittent and poor policy learning repetition of mistakes
  - failure to value knowledge held by long-serving staff
  - increased risk of copying innovations which may have worked for other institutions/context but are not optimum
  - increased vulnerability to fashionable, but superficial and inadequate solutions

"Why are you doing a research project on smart grids? No-one talks about smart grids any more. If I were you I would research something else." (Interview, Energy Consultant, April 2015)

"We don't talk about smart grids at all now really....it all seemed a little bit gimmicky, it seemed like a marketing idea rather than a wholesale change in mindset."

(Interview, Californian Regulator, March 2016)



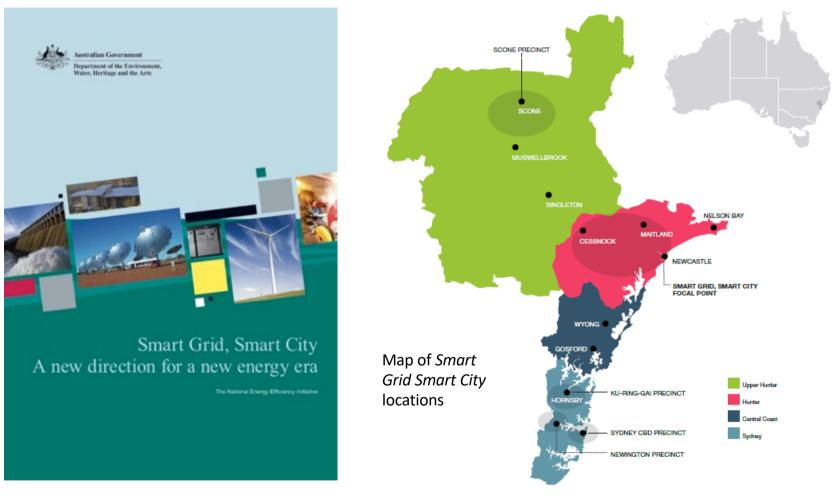
### **2. CASE STUDIES**

### Methodology

- 50 research interviews, April 2015-May 2017
- In-depth review of policy documents
- online survey of users of Smart Grid Smart City reports and data (2017)



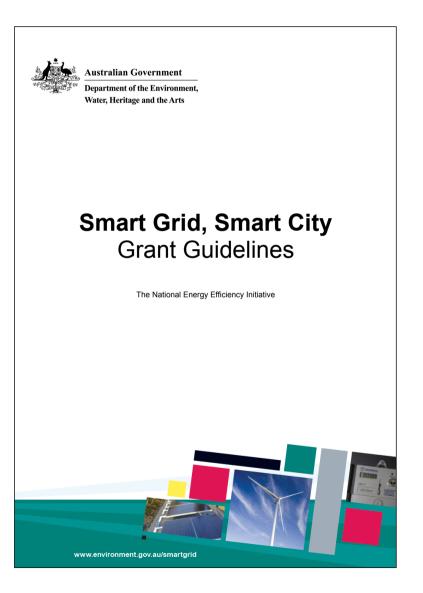
### a. Smart Grid Smart City (SGSC)



source: AEFI (2014) *Smart Grid, Smart City:* Shaping Australia's Energy Future National Cost Benefit Assessment: 16

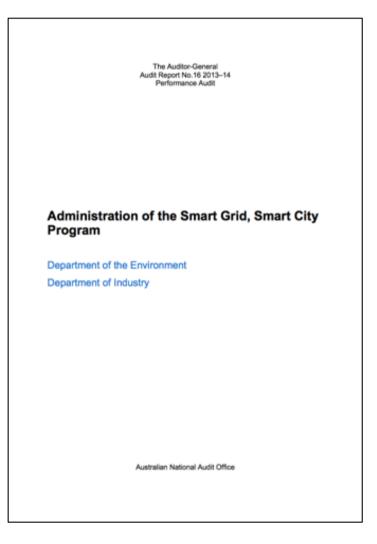
### Strong initial climate change focus

'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).



### Changing context

"The \$100 million Smart Grid, Smart City demonstration program was established to implement or trial a range of new technologies in a challenging environment. These challenges included technological issues, consumer resistance to smart metering technologies, regulatory reform in the electricity sector, and responsibility for the program being transferred across four [government] departments between 2009 and 2013." (ANAO 2014: 16)



### **Disappointing outcomes**

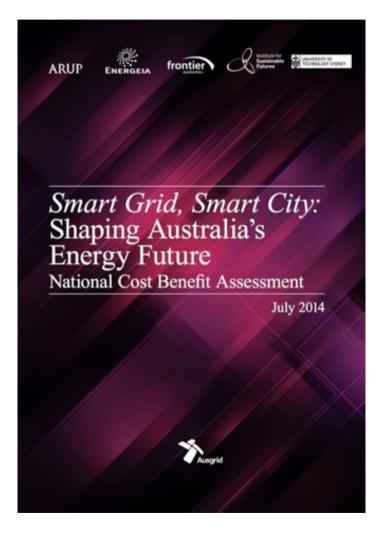
#### Annual financial benefits:

- anticipated \$5billion (DEWHA 2009)
- actual \$887million (AEFI 2014)

#### Annual GHG emission reductions:

- anticipated 3.5 Mt of CO2-e (DEWHA 2009)
- actual 2.15 Mt of CO2-e (scenario 1), 7Mt and 13Mt increase (scenarios 2 & 3)

**Customer applications trial**: cost was average of \$5000 per customer (ANAO 2014)



### SGSC an example of memory fade?

- Lack of memory about it as key people dispersed
- Technology selected quickly became outdated

"The Smart Grid, Smart City project... was in a different building... across the road from head office ... It operated in a complete bubble and struggled to get any engagement with the business as usual people. In fact, it was highly resented by any business as usual things and seen as an impost on anybody else when they needed to do something. You can see how the people that were involved in it ended up making themselves redundant." (Interview, Industry consultant, Jan 2017).

### b. The State of Victoria Advanced Metering Infrastructure (AMI) Program





SMART METER



## Explicitly named as a policy failure, including by government

"...analysis shows that if you were looking at it from a blank sheet of paper you probably wouldn't go down this [AMI] path. There are actually more detriments to consumers, or costs to consumers as the result of the project as a whole, compared to the benefits. But we're not starting with a blank sheet of paper. We're starting with the mess we've inherited from the Labor government."

(Victorian Energy Minister Michael O'Brien, Dec 2011) http://www.abc.net.au/news/2011-12-14/smart-meter-roll-out-continues-despite-costblow-out/3730522





Given an F: Smart meters.

VICTORIA'S experiment in rolling out so-called "smart electricity meters" is unlikely to be seen in New South Wales soon, with the head of one of the largest electricity distributors casting doubt on their merit.

Last year in Victoria, the cost of the program blew out to \$2 billion from initial estimates of \$800 million.

"Is the business case in place? I'd have to say it's not," George Maltabarow, the managing director of Ausgrid, told a forum recently. "Victoria is a very good example of that.

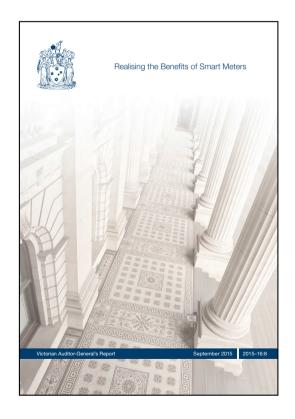
"All the meters have been deployed, but there is not a single product on those meters and the customers are not getting a single benefit."



"The reality of the smart meter rollout is that the state approved a program, many of the costs of which it could not directly control, nor drive many of the benefits ascribed to it" (2015: viii).

John Dovle, Victorian Auditor Auditor-General General, Sept 2015

"Disappointingly, the department has failed to satisfactorily respond to the issues raised by my report. I strongly urge the department to review its position in the interests of all consumers, and to fully address my recommendations. I intend to closely monitor the department's progress in this regard. Lastly, I note the department has misleadingly suggested that my report exhibits 'systematic pessimism' that is not justified by the evidence." (2015: viii).



### Policy failure and willful amnesia

- i. Government processes
- ii. Ignoring the successes
- iii. Policy rebound AEMCMetering CompetitionRule Change

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### *i. Government processes*

 evidence that traditional forms of institutional memory capture such as archiving and handover processes did not function well

"...[After leaving the AMI Program] I was still in government for six months on a short-term contract, and that was my negotiation with the department... Effectively, I'll stay around and I'm available to say whatever, to write down, to do whatever you want. Largely, on an expectation of being asked to handover knowledge really.

*Interviewer:* And how did that play out?

Well, I think I was probably asked one question in the six months. The replacement person I would go for coffees with, but by and large it was not a structured handover of knowledge, nor was there note-taking or anything else. All activities that I would have been expected to have been involved in.. So I think government does struggle with capturing knowledge and history and retaining that in a way that can be useful for the future...

Interviewer: And how would you explain what happened during that six month period, that your expertise and your experience wasn't draw on? Was it something particular with the AMI program?

I would have expected those engagements to have occurred around me. You'd expect to also provide for the handover to the person coming in."

(Interview, former Director of the AMI Program, Victorian Government, Nov 2016)

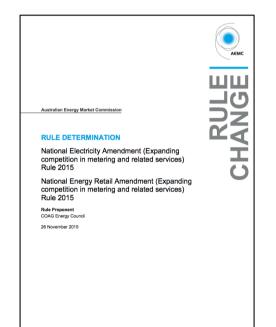
### ii. Ignoring the successes

• Successes don't fit with the clear narrative of failure, so are left out and not taken into account

"smart metering provides information, not just about consumption, but also about power quality, which is essential to the distribution businesses. It is really valuable. In fact, the distribution businesses have found better benefits in this regard than were anticipated.... it's a big plus to them...It's probably one of those areas where if you were still running a program, you would go back and say, right, now let's quantify this. Let's fully evaluate this."

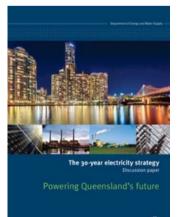
(Interview, Victorian Government employee, November 2016)

### *iii. Policy rebound?*



shift to a totally different method of implementing digital meters – customer choice, implemented by electricity retailers

 a reaction to what happened in Victoria "No minister wants to do anything that looks like the model in Victoria." (Interview, consumer advocate, May 2015)



"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)

### **3. SUMMARY & CONCLUSIONS**

### Summary

- Selective memory in the 2 smart grid case studies, for different reasons
  - Smart Grid Smart City: memory fade
  - Victorian AMI: policy failure, willful amnesia, policy rebound
- Problematic because memories are lost and learning is hampered

# Key practical insights for energy & climate policy

- i. Reflect on the past even if its painful
- ii. Cherish experienced individuals
- iii. Provide forums that allow institutional memories to be consolidated and shared
- iv. Recognise that narratives about past policies leave out detail that does not fit the narrative, and that this detail is important

### Thank you

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