



Centre for Energy and
Environmental Markets

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THE UNIVERSITY OF NEW SOUTH WALES
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Integrated Energy Policy development: *National energy markets*

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The challenge of looking, planning ahead

- "Prediction is very difficult, especially if it's about the future."
 - Nils Bohr, Nobel laureate in Physics
- "The best qualification of a prophet is to have a good memory"
 - Marquis of Halifax,
- "If you have to forecast, forecast often"
 - Edgar R. Fiedler in *The Three Rs of Economic Forecasting*
- "This is the first age that's ever paid much attention to the future, which is a little ironic since we may not have one. "
 - Arthur C. Clarke
- "Many of us who keenly observe the energy sector can take a pretty good guess at what our next big challenges are"
 - Senator MacFarlane, 10th September 2014





To achieve energy prosperity, security and sustainability, the government has put in place policies to:

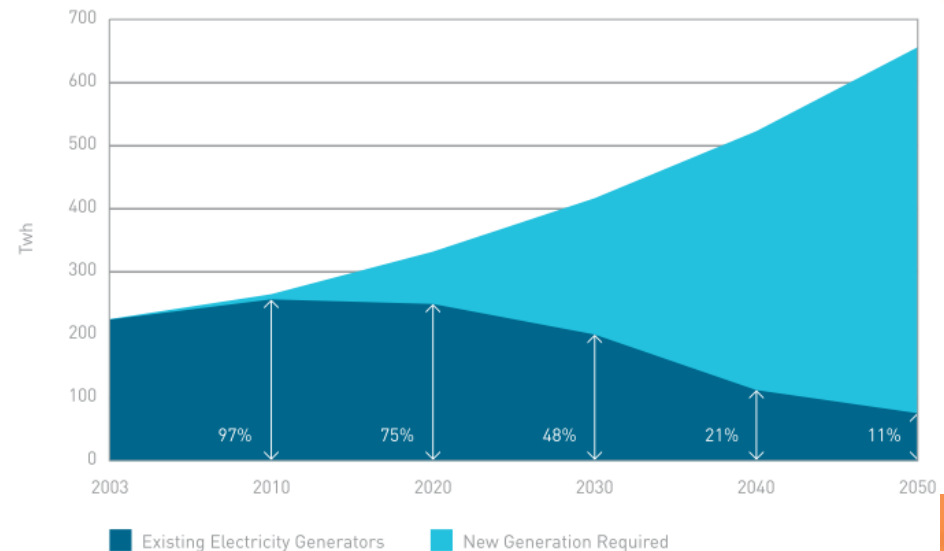
- attract investment in the efficient discovery and development of our energy resources for the benefit of all Australians
- deliver a prosperous economy while protecting the environment and playing an active role in global efforts to reduce greenhouse emissions
- encourage development of cleaner, more efficient technologies to underpin Australia's energy future
- develop effective and efficient energy markets that deliver competitively priced energy, where and when it is needed into the future
- minimise disruptions to energy supplies and respond quickly and effectively when disruptions occur
- establish an efficient energy tax base, restricting fuel excise to end use and applying resource rent taxes to offshore projects
- ensure Australia uses its energy wisely.

Earlier effort: EWP 2004

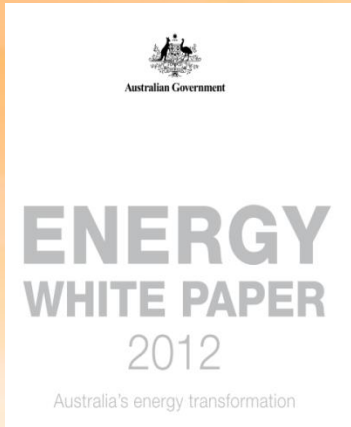


- Virtually no discussion of potential:
 - CSG (CSM)
 - East Coast LNG export
 - Falling demand
 - Falling costs and growing of Wind, PV

Figure 3: Demand/Supply balance for electricity—Medium electricity demand scenario

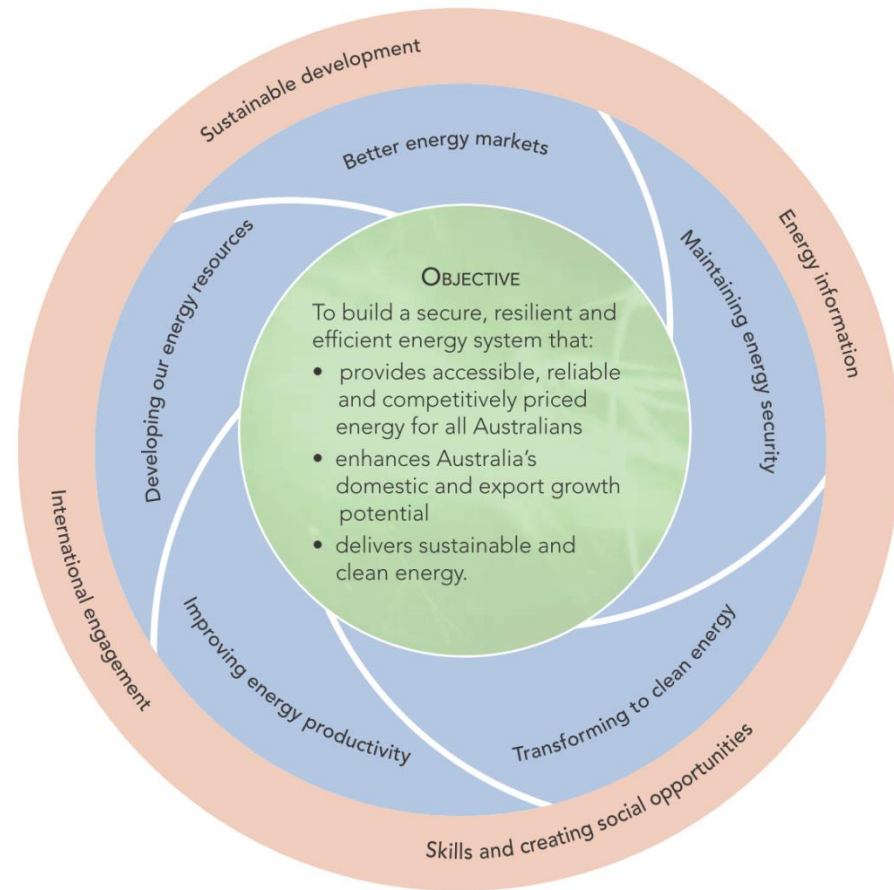


More recently



- Internationally generally well regarded (CEF) – eg. IEA
- However, no real discussion of potential for
 - Carbon Price Repeal
 - Reduction in RET target
 - Removal of ARENA, CEFC

Figure 1.1: Key elements of national energy policy



Now, here we go again



The Energy White Paper will consider:

- policy and regulatory reform to secure reliable, competitively and transparently priced energy for a growing population and productive economy, including the efficiency and effectiveness of regulatory bodies;
- the appropriate role for government in the energy sector;
- opportunities to drive the more productive and efficient use of energy;
- energy related distribution infrastructure to deliver efficient national markets;
- alternative transport fuel sources;
- workforce issues, including national skills development needs;
- emerging energy technologies and new energy sources; and
- future growth in exports of energy products, including our world leading services industries.

The Energy White Paper will be led by the Department of Industry. An Issues Paper will be released by mid December 2013 to initiate consultation. A Green Paper will be released for consultation in May 2014. The Energy White Paper will be completed in September 2014.

The strategic opportunity and risk...

- Stated intention to develop “integrated national energy policy” welcome - EWP should outline *how* this will be achieved
 - why has this has been so hard to achieve in the past?
Decade long efforts to respond to energy security, economic development, climate change concerns barely considered in issues paper
 - what will be done differently in future.
- Ideal process
 - prioritised **objectives**
 - assessment of **status quo**, policy coherence and comprehensiveness
 - Targeted strategies – a focus on **policy robustness** against surprises, good and bad
 - description of steps, resourcing, time and risks to **implement**.
 - How progress will be **measured**, how plan itself will evolve



Some key opportunities

- International markets
 - Invariably high levels of government participation on the buy side, supply-side too
If NSW should worry about importing gas from Vic, SA, Qld, what about our o/s customers
- Domestic gas markets
 - Many opportunities to improve efficiency b/c of limited efforts to date
- Future NEM
 - Wholesale market arrangements have worked reasonably well to date, except for environmental externalities where largely a failure, and a major market distortion
 - Strong case required for major design changes like capacity markets – *international and WA experience mixed; efficient capacity price right now apparently negative*
 - Network issues poorly managed – not issue of distributed generation. Tariffs part of solution but inevitable limitations. *Important that non-discriminatory, focussed on efficient investment*
 - Privatisation opportunity but also risk in time of transition – *what type of business being sold?*
- Beyond questions of market design and regulation lie questions of structure
 - hard to design markets that work well with oligopolies which is where we seem to be heading
- Market efficiency
 - Key efficiency is dynamic – ability to facilitate, manage innovation – rather than productive, allocative efficiency which tends to get all of the attention
- Market competition
 - Key competition driver is new entry – technologies and participants
 - Demand-side participation a key opportunity – promising progress but needs sustained effort
- Climate change not going away



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Thank you... and *discussion*

Many of our publications are available at:

www.ceem.unsw.edu.au