



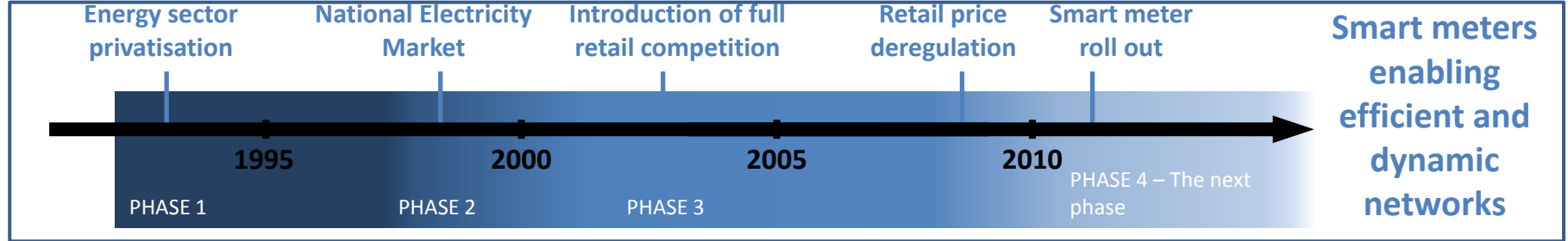
Energy markets – current challenges for Victoria

Mark Feather
Executive Director, Energy Sector Development

Today's presentation

- Network tariffs – drivers for reform
- Gas market reform
- Retail competition in Victorian electricity market

Victorian electricity market reforms



Phase 1: Privatisation of the Victorian energy sector

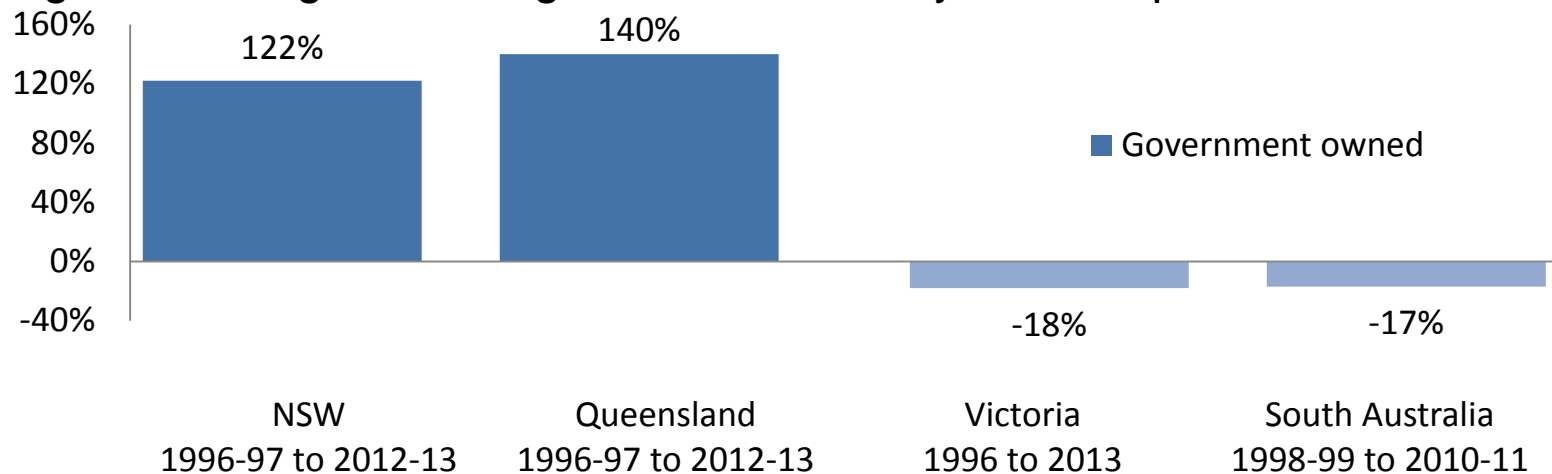
Phase 2: Establishment of the National Electricity Market

Phase 3: Full retail competition and price deregulation

Phase 4: The next phase – efficient and dynamic networks

Victorian has benefited from network reforms such as privatisation

Long term change in average annual electricity network prices



Source: Ernst & Young, Electricity network services:
Long term trends in prices and costs, 2014

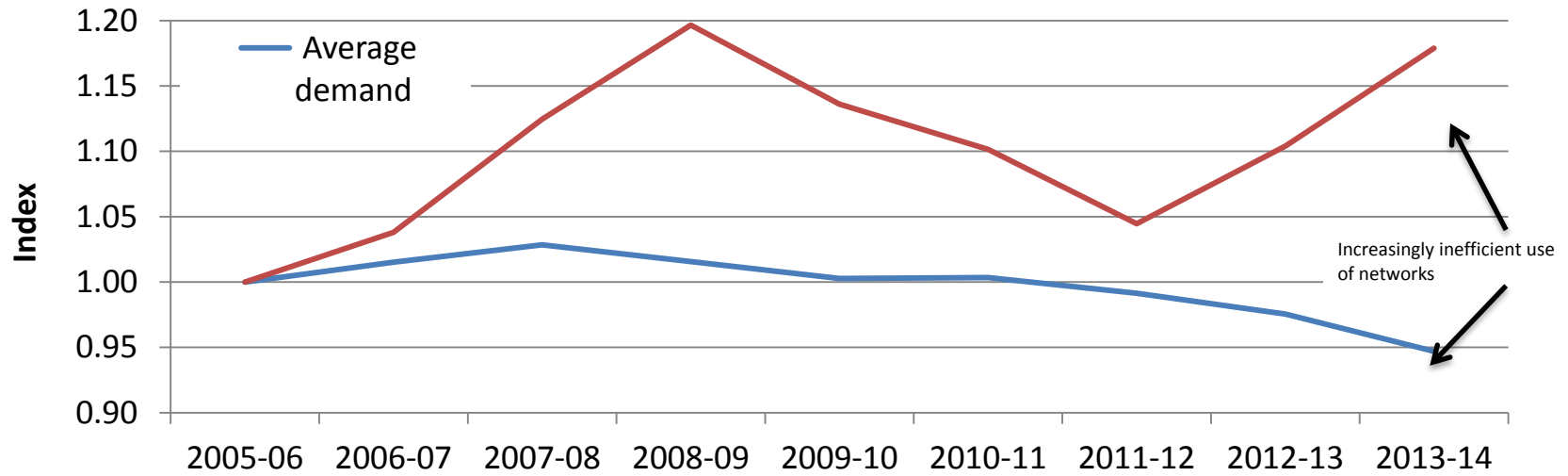
...but, the operating environment for networks has changed

- Decreasing average demand, peaks volatile
- Lack of cost-reflective pricing
- Increasing solar PV
- Emerging technologies, higher levels of consumer engagement

Drivers for network tariff reform

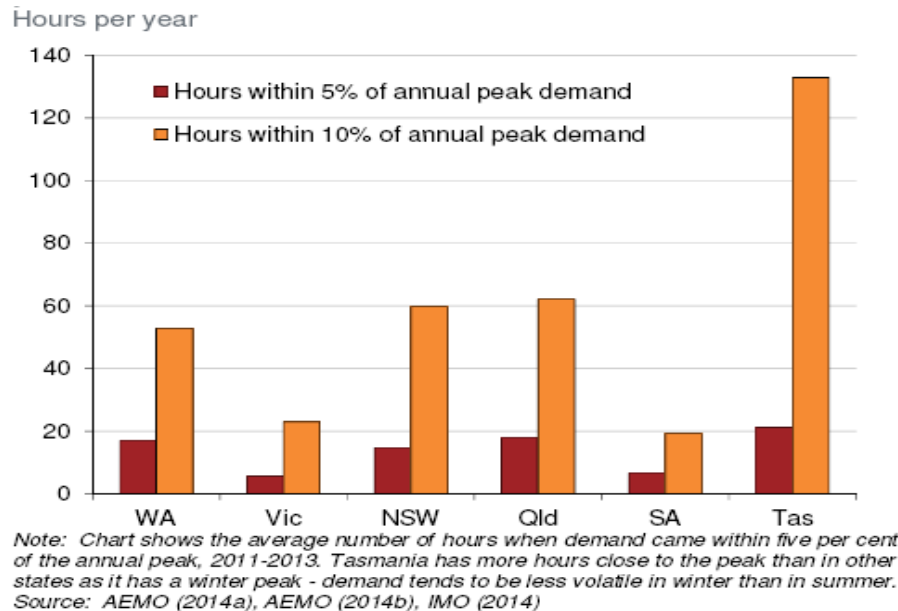
Current tariff structures encourage inefficiency

Peak versus average electricity demand - Victoria



Peak energy usage...substantial investment for only a few hours a year.

- Energy Use Approaches peak levels for only a few hours a year
- 20-30% of \$60bn of electricity network capacity used for less than 90 hours a year. (AER)



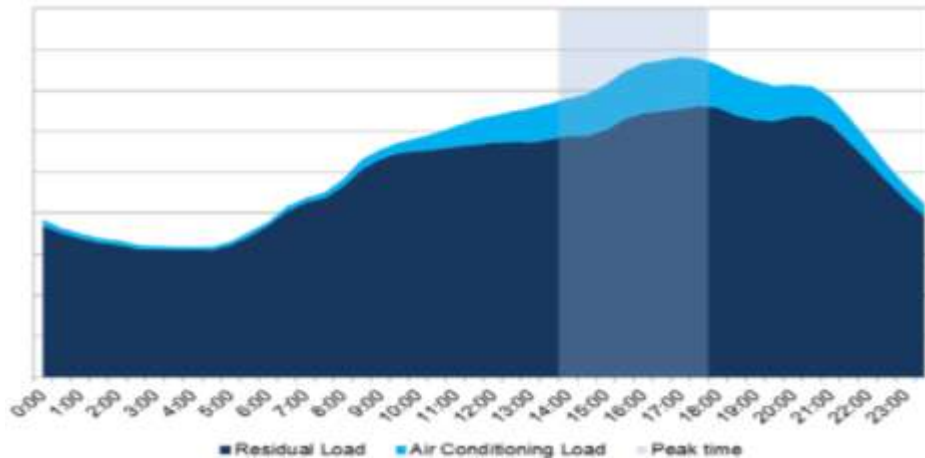
Network tariffs – efficiency and equity issues

- Meeting the network peak accounts for around half of network costs, but households do not pay more to use power at peak times- charges are volume based
- Household air conditioning use is a major driver of peak demand
- Grattan (2014) - Standard cycle air conditioner can add \$1200-\$1500 to cost of network, but its owner would only pay extra \$53.40 a year in network charges
- PC (2013) – System wide cost of reverse cycle air conditioner is \$2500 providing implicit cross subsidy of \$350 per year to customers who use air conditioners at peak times.
- AEMC (2014) – Consumer with large 5kW air conditioner in peak times causes \$1000 a year in additional network costs. The consumer pays extra \$300 and the remaining \$700 picked up by all other consumers
- Rooftop solar take up accentuates issues – remaining users pay more as solar reduces network usage (but not necessarily at the peak).

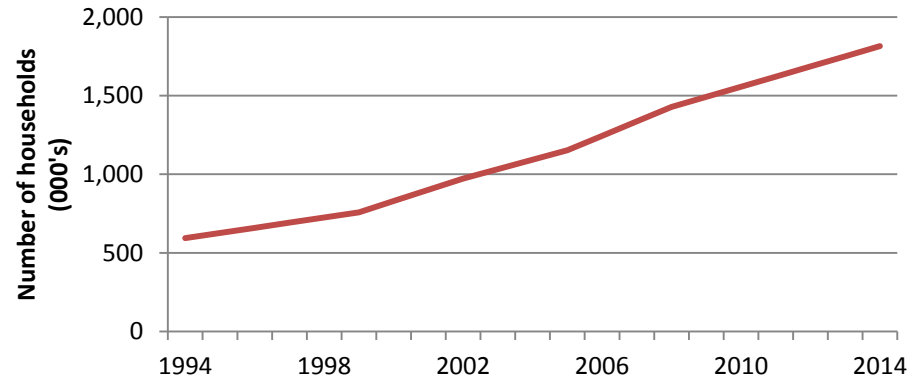
Drivers for network tariff reform

Air-conditioners place pressure on the network

Air-conditioner load - Victoria



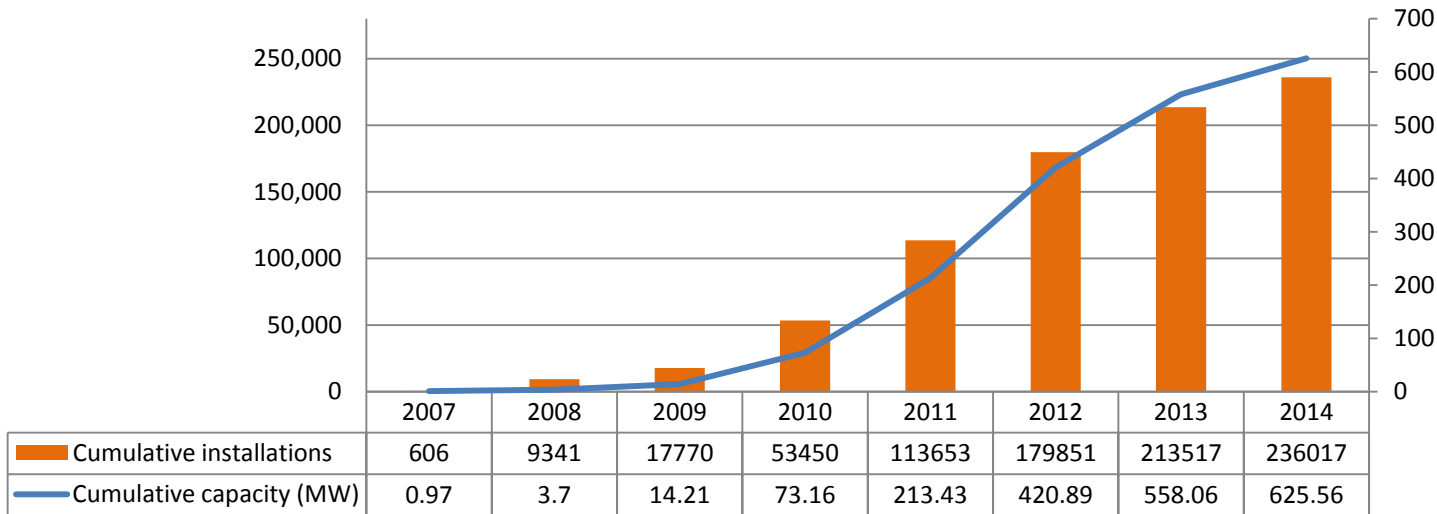
Victorian households with one or more air-conditioners



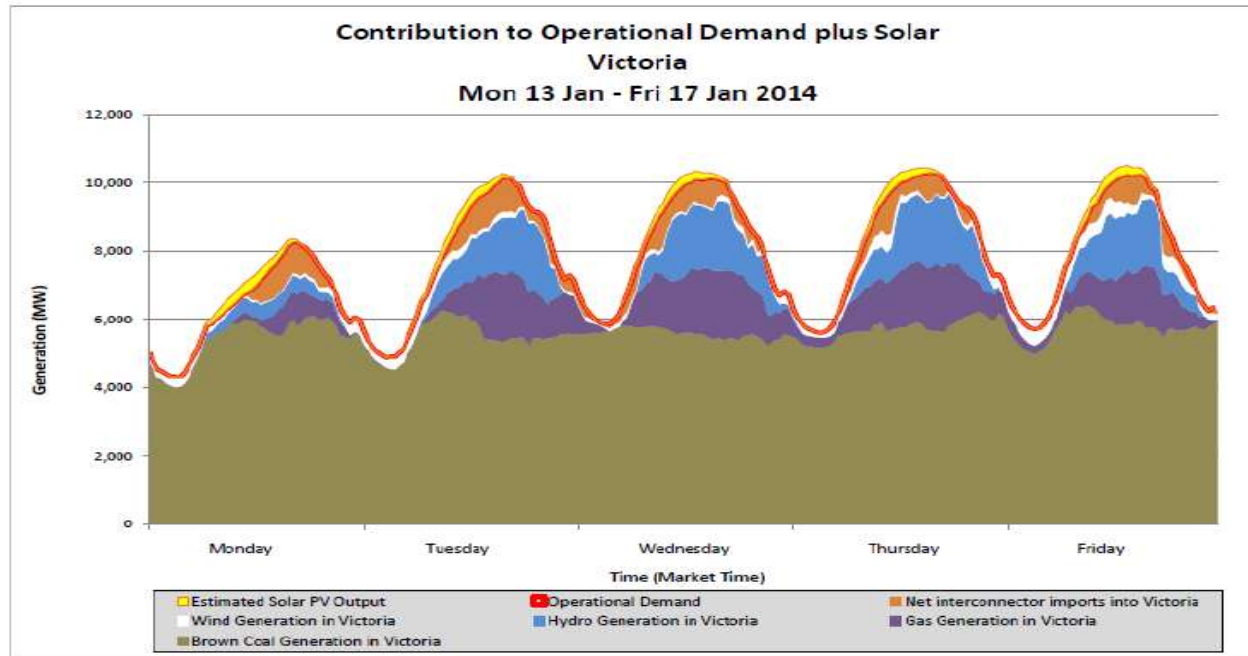
The number of air-conditioners in Victoria has doubled since 2001

Take up of solar PV

Number of solar PV installations in Victoria



The January 2014 heatwave



Achieving network tariff reform

Objectives:

- **Efficient networks:** lower demand on the energy system at peak times with the aim of deferring network investment
 - **Equitable outcomes for consumers:** reduce cross-subsidies and manage transition to cost reflective network tariffs
- Roll out of smart meters in Victoria means reform can be delivered
 - Examples of new network pricing models Victoria could adopt:
 - **Critical peak pricing**– to encourage more efficient use of electricity and reduce network investment
 - **Capacity charge** – to reflect maximum load over a given timeframes and reduce cross-subsidies

Challenges in delivering network tariff reforms

- Government has important leadership role
- Coordinate reform, consult with stakeholders (including customer groups) and develop transitional arrangements
- Public response and managing consumer impacts – there will be winners and losers
- Ensuring vulnerable consumers are protected
- Securing cooperation of distribution businesses

Transitioning to new network tariffs

Introduction of flexible pricing as a template

Introduction of cost-reflective pricing:

- Stakeholder management
- Communications and tools to assist consumers
- Transitional arrangements, including consumer protections

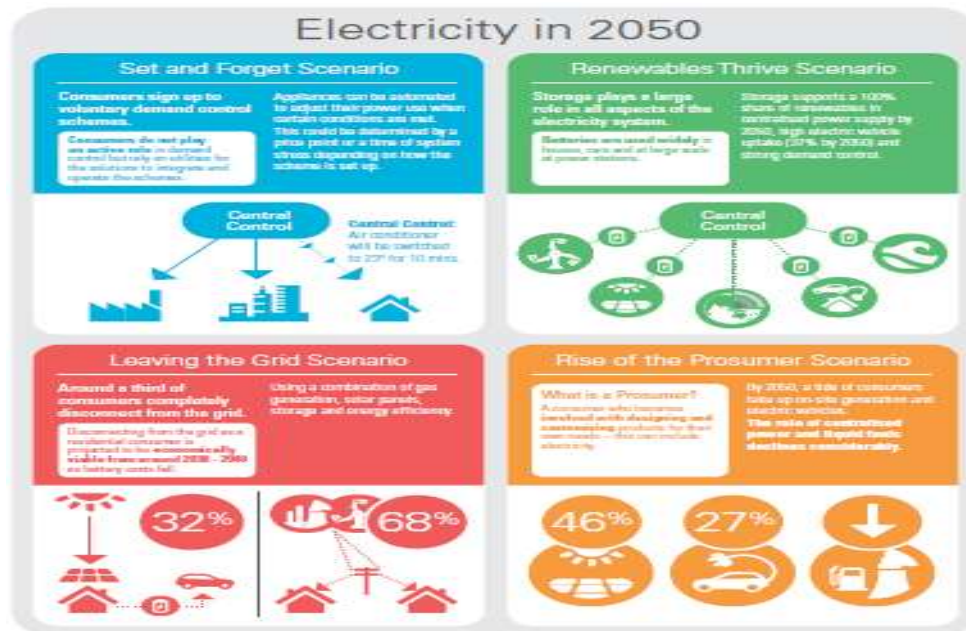
Introducing the Flexible Pricing Profiler

With the Flexible Pricing Profiler you can learn:

- how the 3 flexible pricing rates (peak, off-peak and shoulder) will work
- how to view the typical Victorian household electricity usage over a weekend or weekend day so as to identify when electricity use is at its peak
- how shifting the time of day that major electrical appliances, such as dishwashers and washing machines are used, can result in savings if you choose a flexible pricing plan.

Continue ►

Looking to the long term- networks will continue to change



**CSIRO Future Grid Forum, Change and Choice Summary,
December 2013**

What does this mean for regulation?

- Current regulatory framework focussed on network revenues for 5 year regulatory period – cost of service regulation
- Networks shielded from many of the normal risks of doing business and regulatory framework locks in long life investment decisions
- Are networks sufficiently incentivised to deliver innovative network management?
- Networks arguably starting to face competition – customers on solar PV self generating.
- Important now to consider strategic questions on future of network regulation framework
- COAG Energy Council led scenario exercise to model challenges and risks facing electricity networks

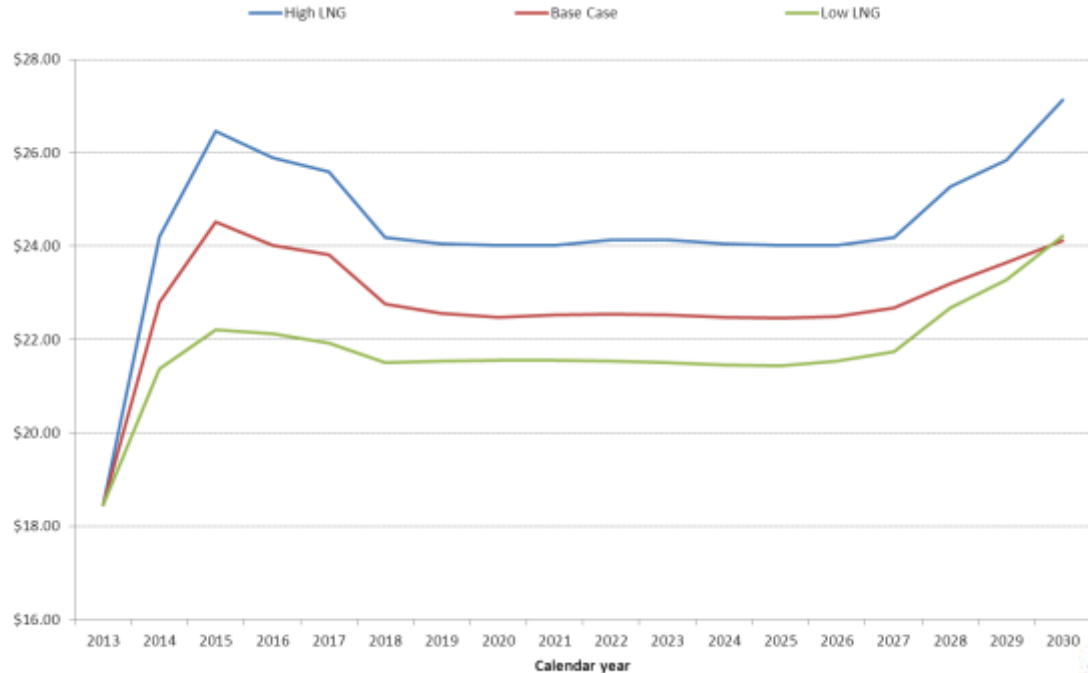
Gas market challenges

Fundamental changes occurring in the gas market....



Source: AEMO (2012a)

East coast gas markets linked to international LNG markets



Problems with east coast gas market...

- Important to consider opportunities to improve competitiveness of east coast gas markets to mitigate impacts of price rises
- East coast gas markets are fragmented, lack transparency, liquidity and competition – compares poorly to overseas markets
- Lack of transparency and lack of liquidity and forward markets hinders ability of parties to manage price risk.
- Information on availability of pipeline capacity and access to spare pipeline capacity is also critical to moving gas to meet demand.

Time is right for market reform

- Premier's Gas Market Taskforce identified significant concerns with competitiveness of east coast gas markets
- COAG Energy Council Gas Market Development Plan requires more strategic direction and vision – although important to recognise success (e.g. Wallumbilla trading hub)
- Opportunity exists to explore potential for increased market integration across east coast markets to reduce barriers to trade and drive competition

Going forward

- Increased advocacy for reform through Energy Council – strategic vision and practical options for reform
- Stakeholder engagement important
- Industry participants making some progress on pipeline capacity issues – e.g. APA capacity trading services
- AEMC review of risk management in Victorian wholesale gas market

Energy Retail Competition in Victoria

- By many measures, the retail market in Victoria is competitive.
- **Choice:** There are now 17 active retailers selling to Victorian residential customers.
- **Switching:** In 2012-13, approximately 28 per cent of Victorians switched electricity providers and around 23 per cent switched gas providers.
- **Engagement:** 39 per cent of residential customers investigated switching retailers in the last twelve months, compared to the NEM average of 31 per cent.
- **Savings available:** Evidence that consumers can save using by switching.

Energy Retail Competition in Victoria

- Concerns about high retail margins in Victoria compared to other jurisdictions.
- There may be more we can do to strengthen competition.
- AEMC recommendations:
 - Standing offers may provide an artificial benchmark for retailer pricing strategies and require further investigation
 - Further promotion of Victoria's price comparator website will encourage consumers to shop around for a better offer