



The view from the see-saw:
energy pricing in the NEM

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Alternative Technology Association

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About ATA

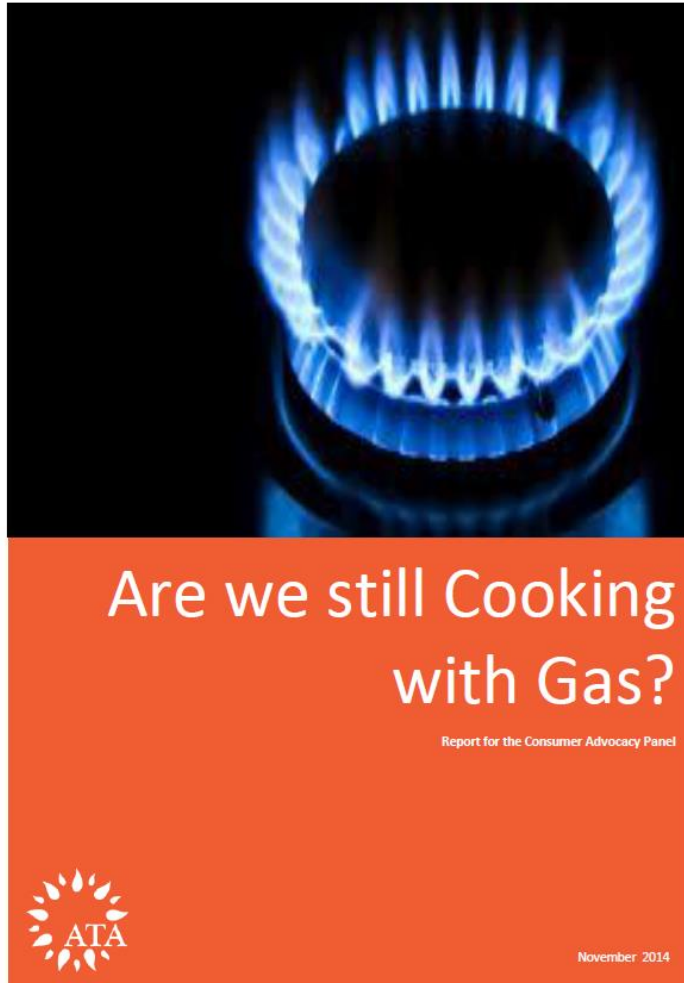
- Not for profit, **community** organisation
- Established **1980**
- 6,000 members, mostly **households**
- 14 member-run branches
- Australia's largest **green publisher**
- Energy projects to **tackle poverty** overseas
- Energy **policy and research**
- **Advocacy** for Australian energy users

ATA and electricity pricing

ATA supports moving to **cost reflective** pricing structures, with **opportunities** for consumers to **respond**, when supported by robust **protections** for **disadvantaged and vulnerable** consumers, and

- Engaged with **Power of Choice** reforms
- Engaged with AEMC and others in the **network pricing rule change** process in 2013/14
- Engaging with networks, AER etc to influence **TSS proposals and approvals** in 2015/16
- With support of CAP and ECA

ATA and gas



- **Advocacy** for household and business gas users
- **Research** into economics of fuel choice
- **Educating** consumers about the economics of fuel choice
- Residential gas demand **forecasting**

New rules for cost reflective electricity network pricing

- Reduce cross subsidies and send proper signals
- Long Run Marginal Cost principle promotes
 - Ditching **energy** (kWh) charges
 - New seasonal **peak demand** (kW) charges
 - Higher **fixed** charges
- But consumer impact principle promotes
 - **Slow transition** from kWh charges
 - **Spreading/smearing** seasonal kW charges
 - **Lower** fixed charges

How are networks responding to the new rules?

- Victorian networks proposing to phase in **peak demand charges** with (3 to 9pm working day) peak window for households from 2017/18
- New South Wales networks proposing **declining block tariffs** (how long have you got?)
- Other networks (in the NEM) proposing
 - **voluntary peak demand charges** for this TSS
 - aspirational goal of **mandatory charges** longer term (some longer than others)

(Some of) the big questions on cost reflective network tariffs

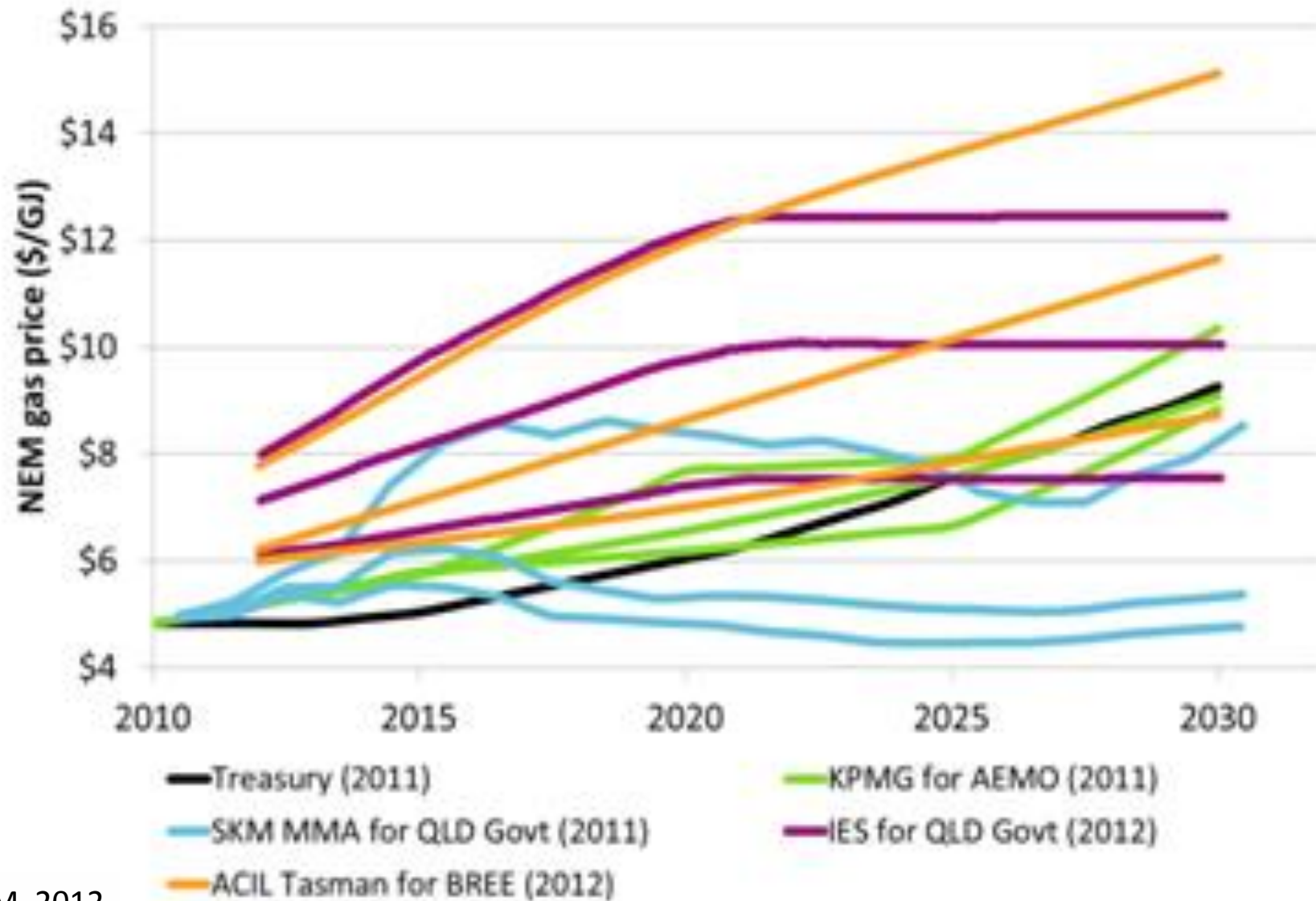
- Will jurisdictional arrangements or nervous governments stall the reforms?
- Will the AER accept some networks' more creative interpretation of the rules?
- Will retailers pass through the price signal?
- Does it matter if they don't?
- Will consumers respond to signals en masse?
- Does it matter if they don't?

Households gas prices have risen...

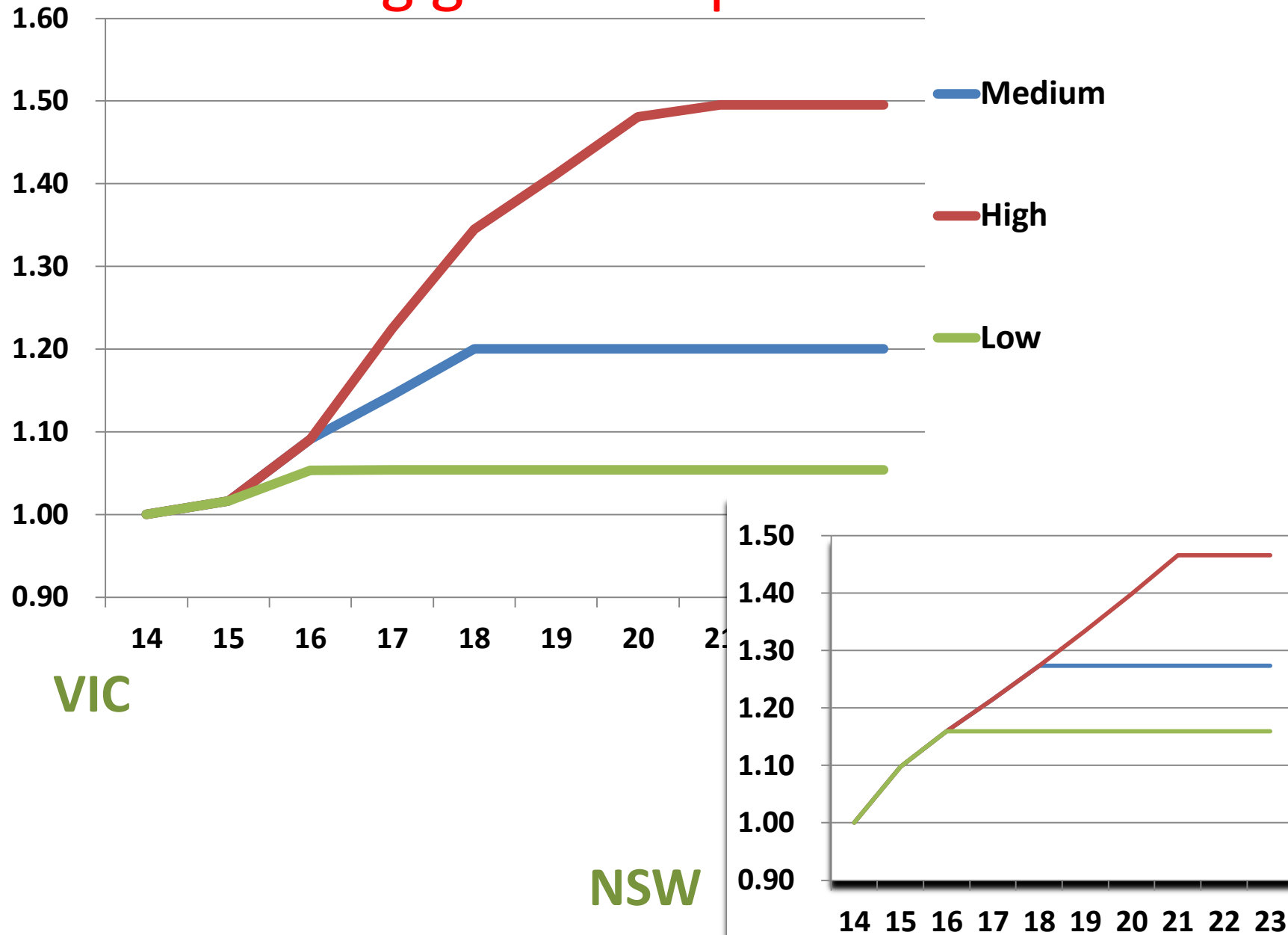
*“Household gas prices have **already risen 33 per cent** in real terms since 2008-09, largely unnoticed because all the attention has been on the more rapid growth in electricity prices over the same period (53 per cent).”*

Victorian Council of Social Service, 2014

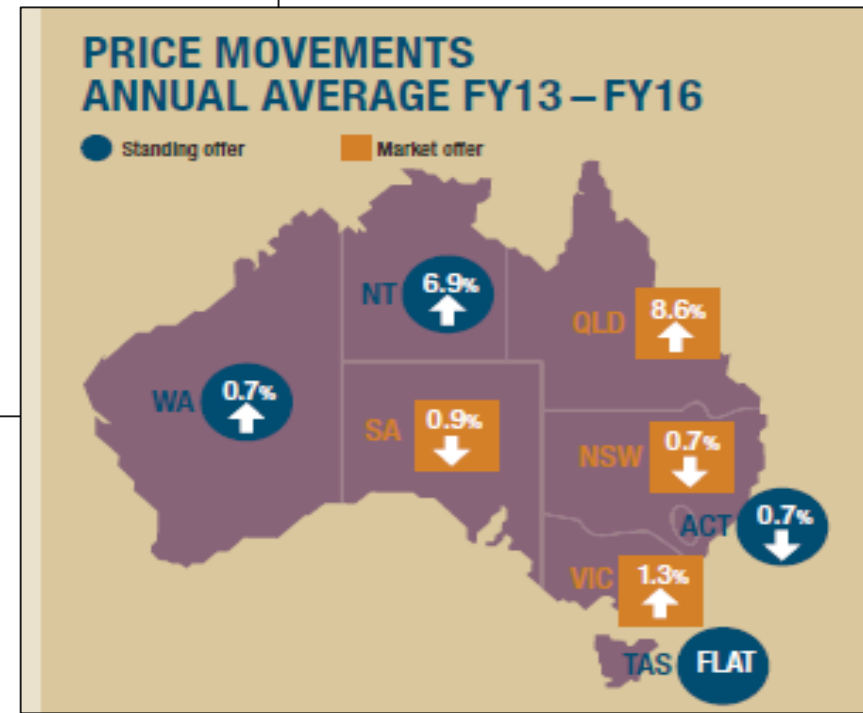
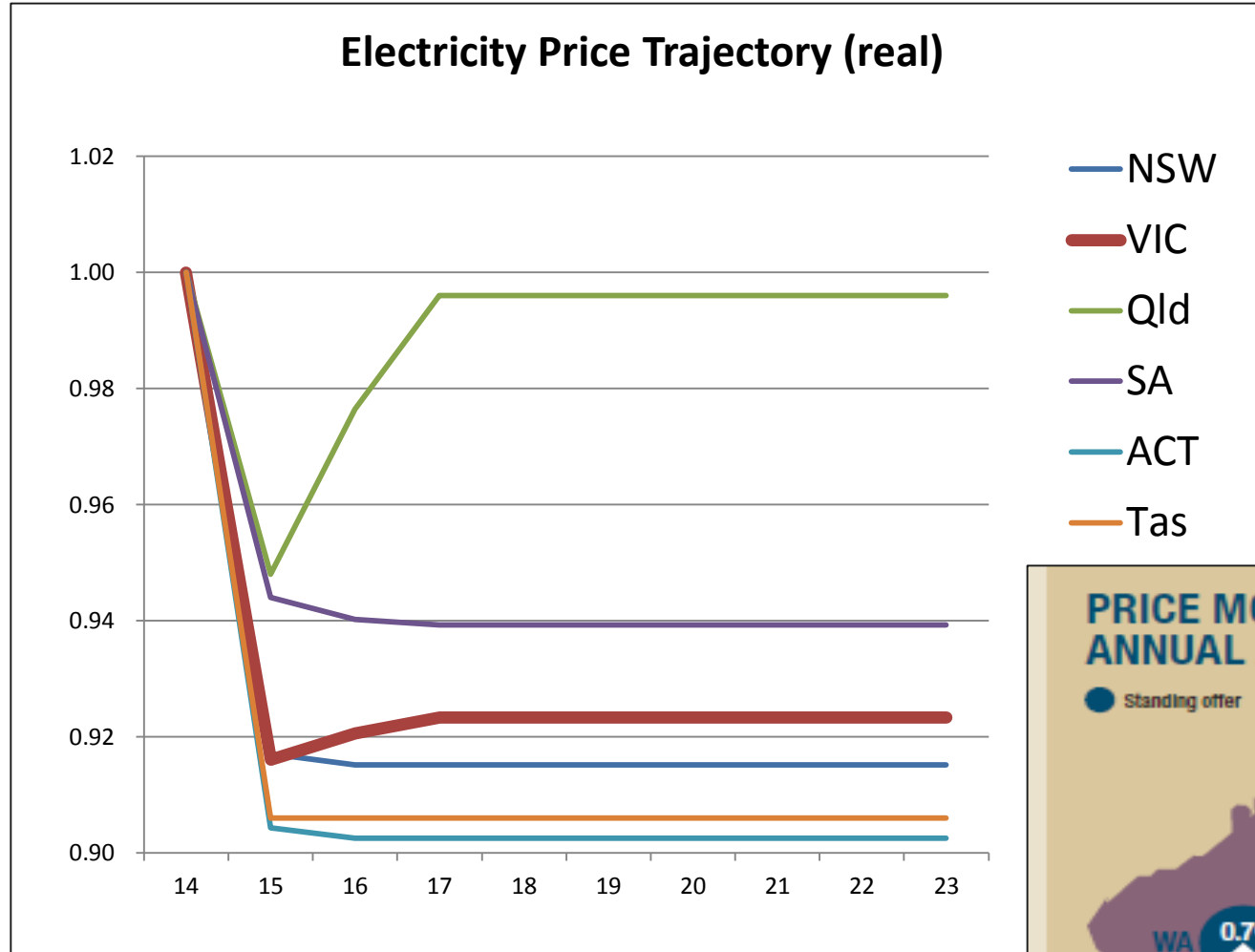
... wholesale gas prices rising further...



... taking gas retail prices with them.

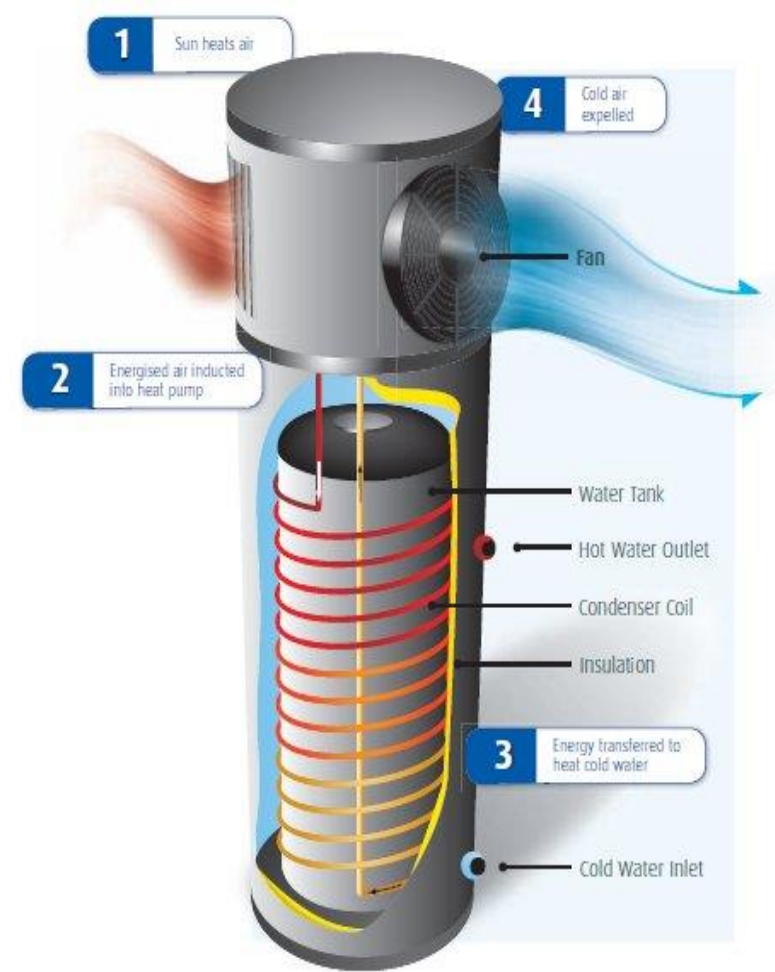


Electricity prices are stabilising (and might drop)



AEMC Residential Electricity Price Trends, Dec 2013

At the same time....



...electric technologies are
have become cheaper and
more efficient

New homes and gas



- 1. In Australia, it is not cost effective to connect a new home, or existing all-electric home, to mains gas if the efficient electric alternative are an option.**
- 2. It may be cost effective to connect a home to gas when efficient electric options can't be installed or the cost of new gas appliances and pipes is (heavily) subsidised.**

Existing Dual Fuel Homes



The case for dual-fuel homes to replace some / all their appliances with efficient electric is dependent on multiple factors:

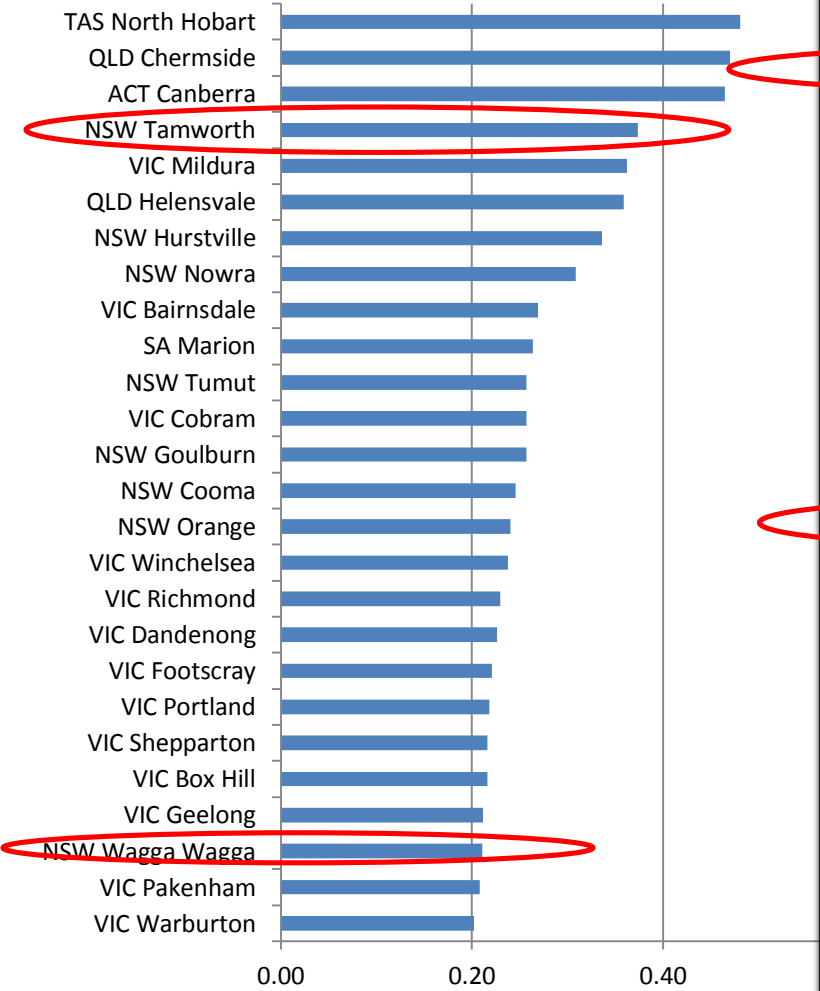
- **Age or condition of the existing gas appliance**
- **Whether the replacement allows the customer to disconnect from the gas**
- **Whether the household is able to install efficient electric appliances**
- **Whether the existing gas supply is mains or bottled gas**
- **The marginal cost of gas on a declining block tariff**
- **Climate**
- **Ratio of gas to electricity price**

Dual Fuel Homes

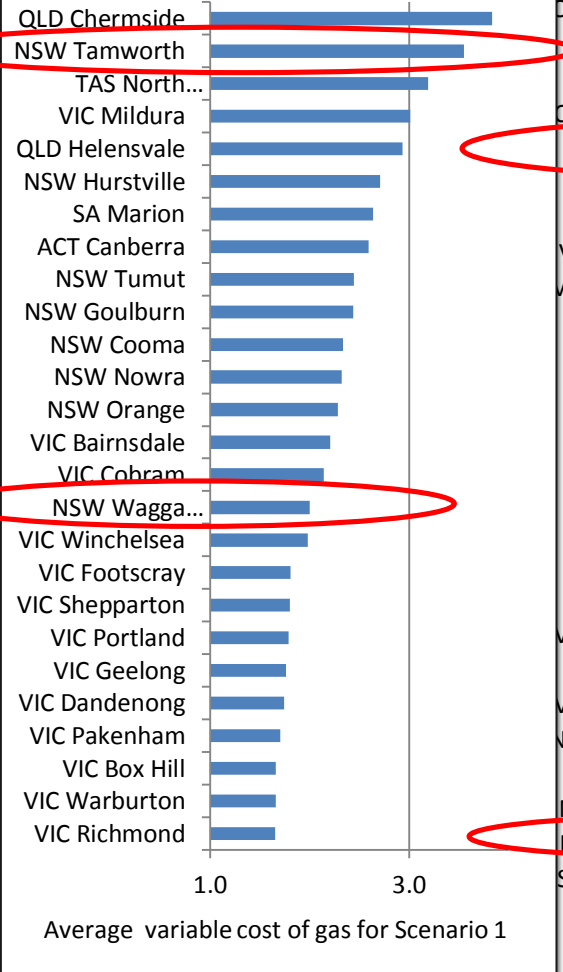
- 1. Its very cost effective to replace gas heaters - regardless of condition - with multiple RCACs.**
- 2. Heat pump HW cost effective where the relative price of gas (versus electricity) is higher or where the climate is warmer.**
- 3. Switching from gas to induction cook tops/electric ovens is cost effective when avoiding high fixed charges**
- 4. Customers in new gas zones pay more for gas**

Location, location, location...

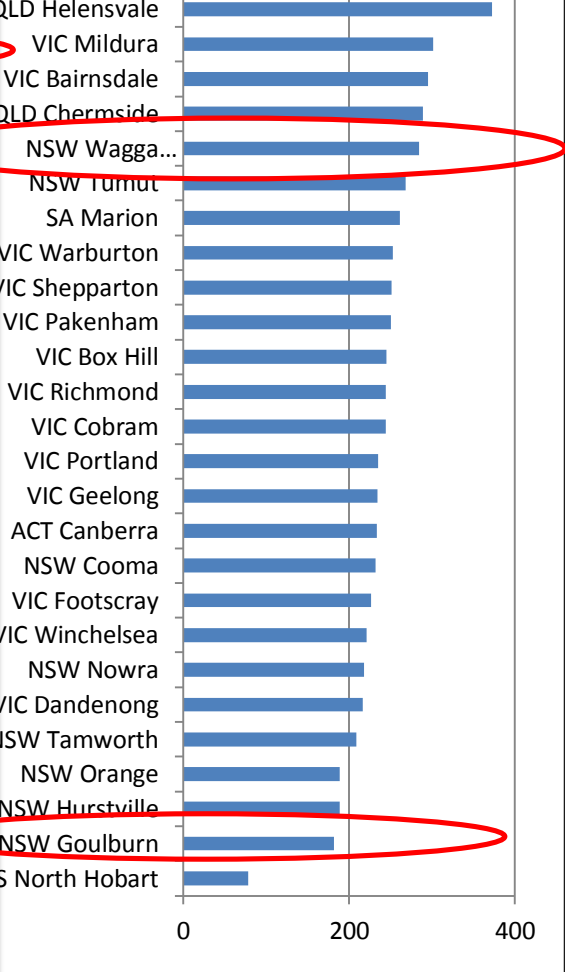
Cost of gas v/s electricity, 2014



Gas usage charge (Average c/MJ, 2014)



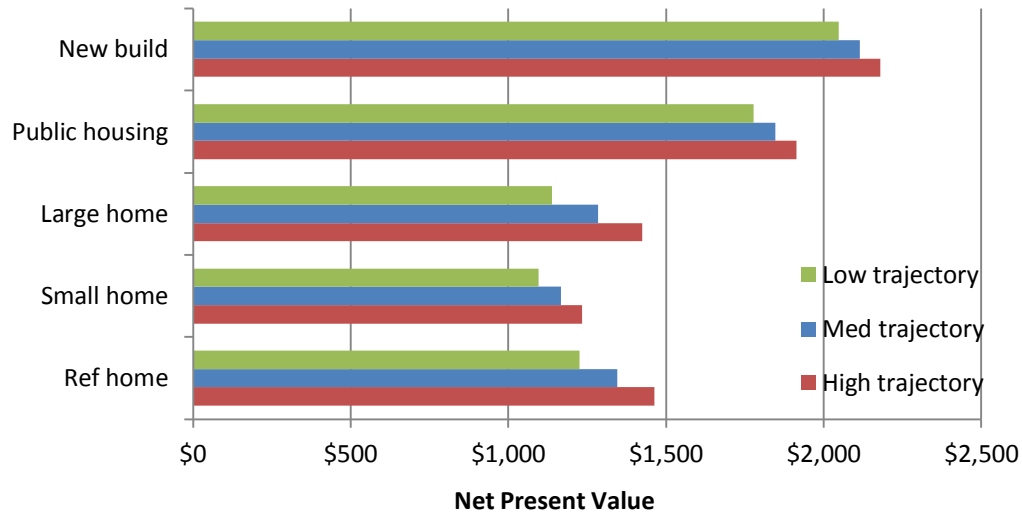
Gas fixed charge (\$/annum, 2014)



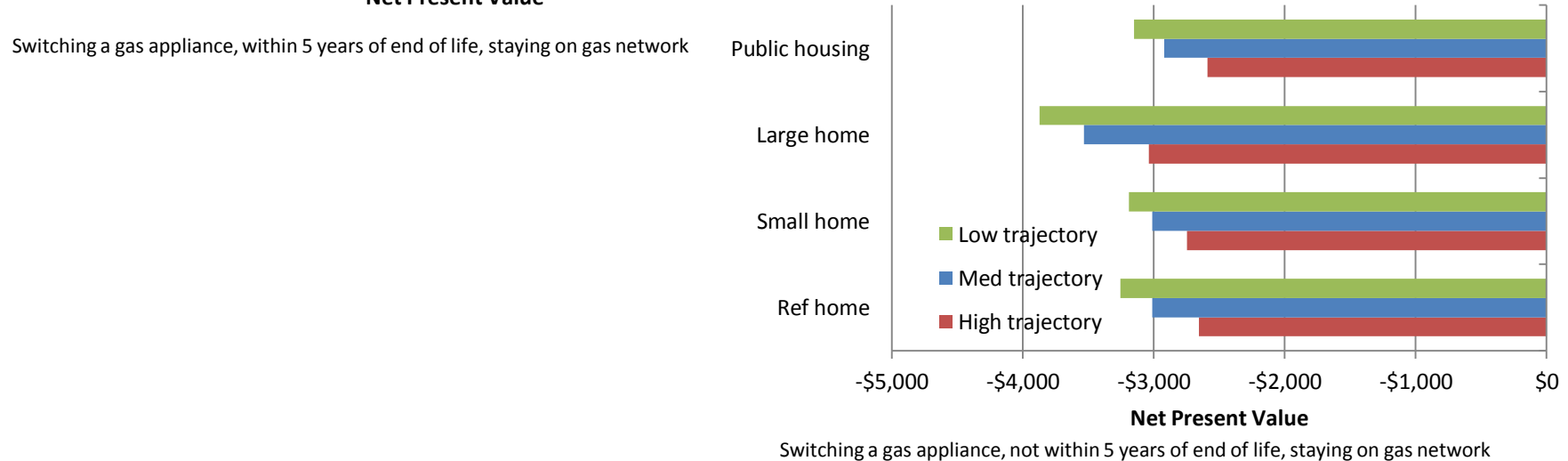
Variable cost of gas c/MJ * 3.6 (to kWh) / Variable cost of electricity c/kWh

Gas price trajectory has minor impact on fuel choice economics ...

Hurstville, Syd - Space Heating

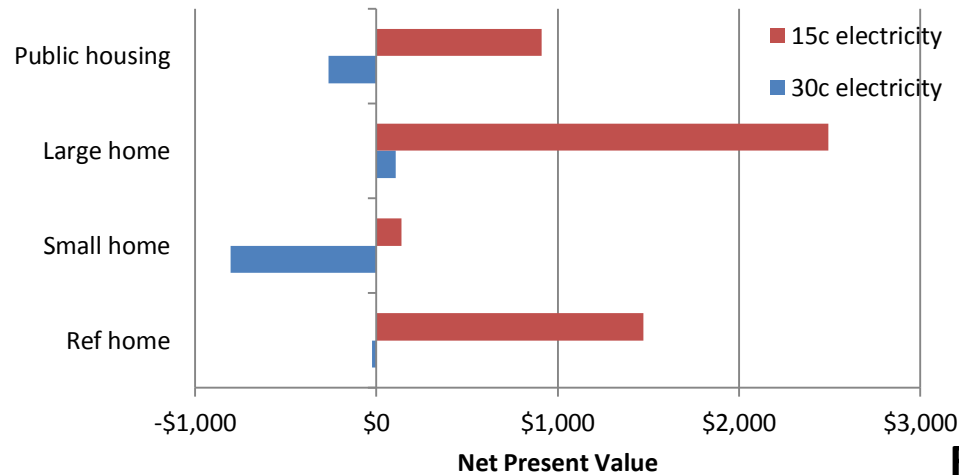


Richmond, Melb - Hot Water



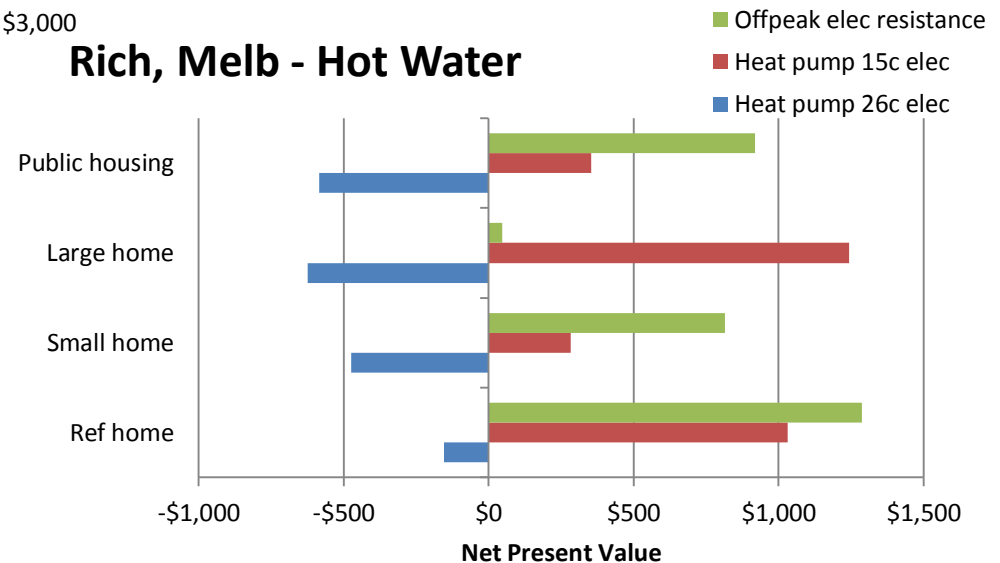
... but cost reflective electricity pricing has major impact

Mildura Hot Water - Single appliance



Switching a gas appliance, within 5 years of end of life, staying on gas network

Rich, Melb - Hot Water



Switching one gas appliance, of any age, disconnecting from gas network

Hang on ... what about the gas network costs?

Figure 10-1: Estimated change in typical network customer bills, 2015-20 (\$real)

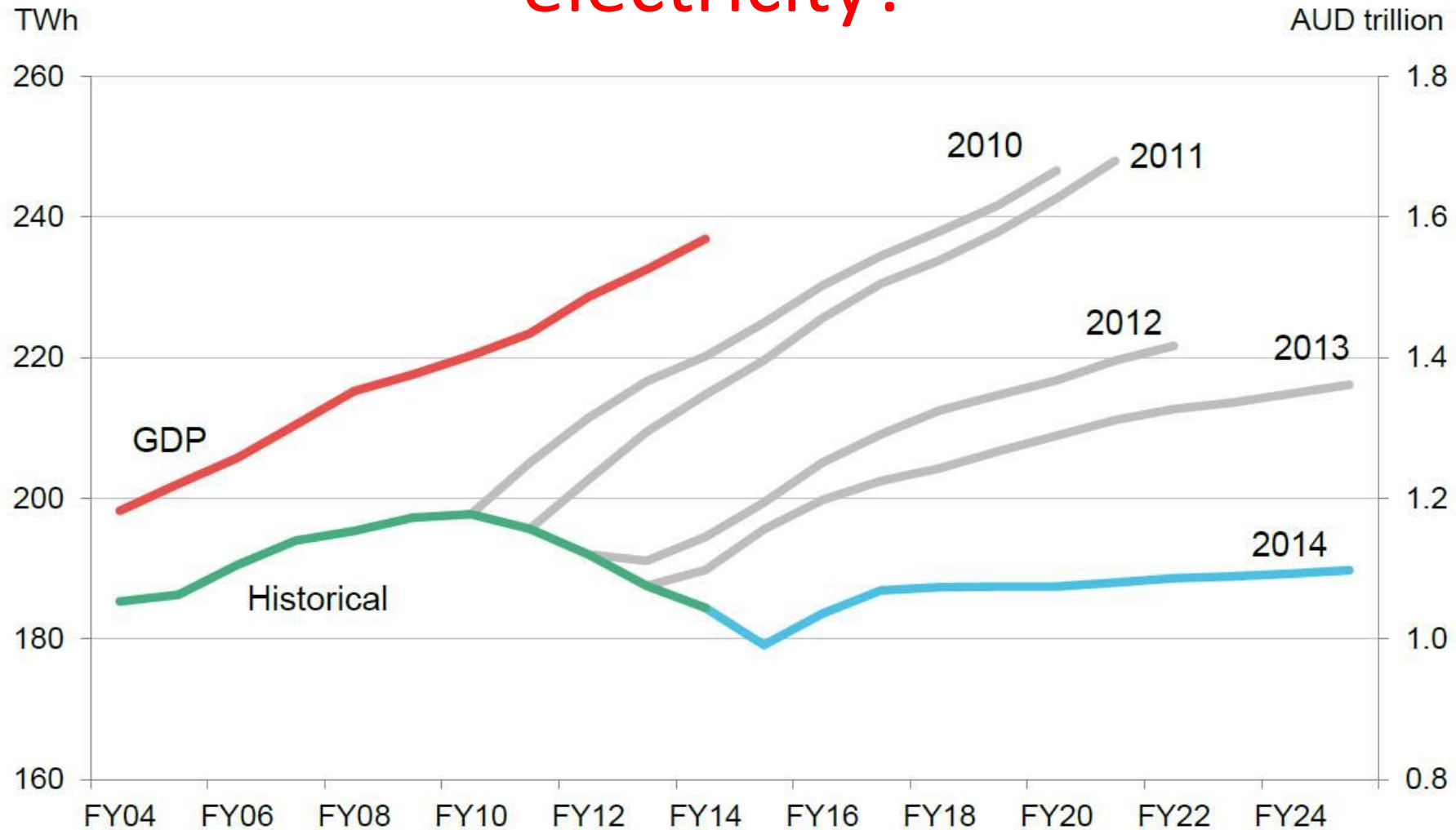


(Some of) the big questions on gas prices

- Will other networks go the way of Jemena?
- Even if they do, will retailers pass through the price signal?
- Will consumers ditch gas en masse?
- Will international price parity hit the domestic market as feared?
- Will consumers ditch gas en masse anyway?

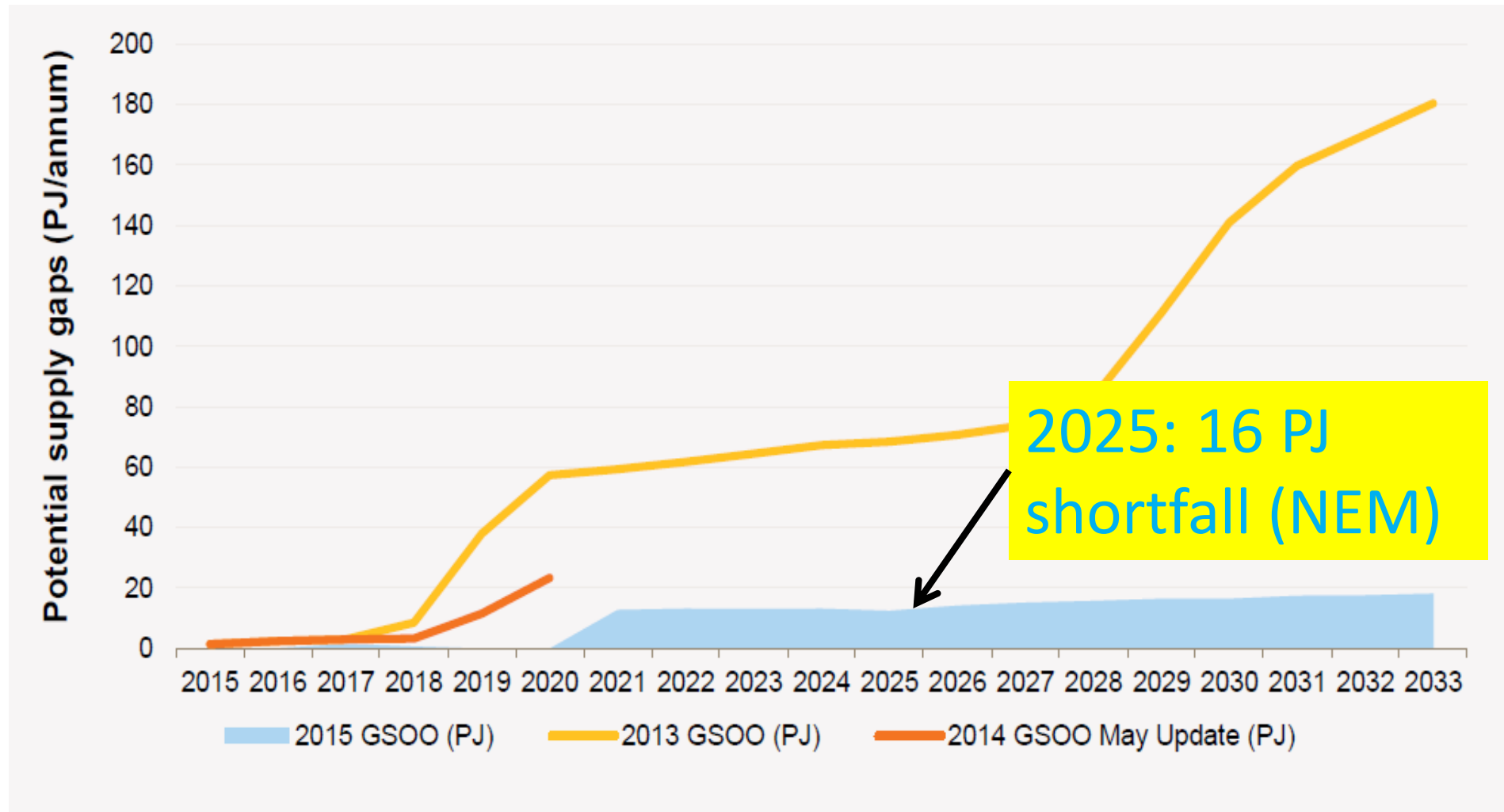


Q. Could gas demand go the way of electricity?

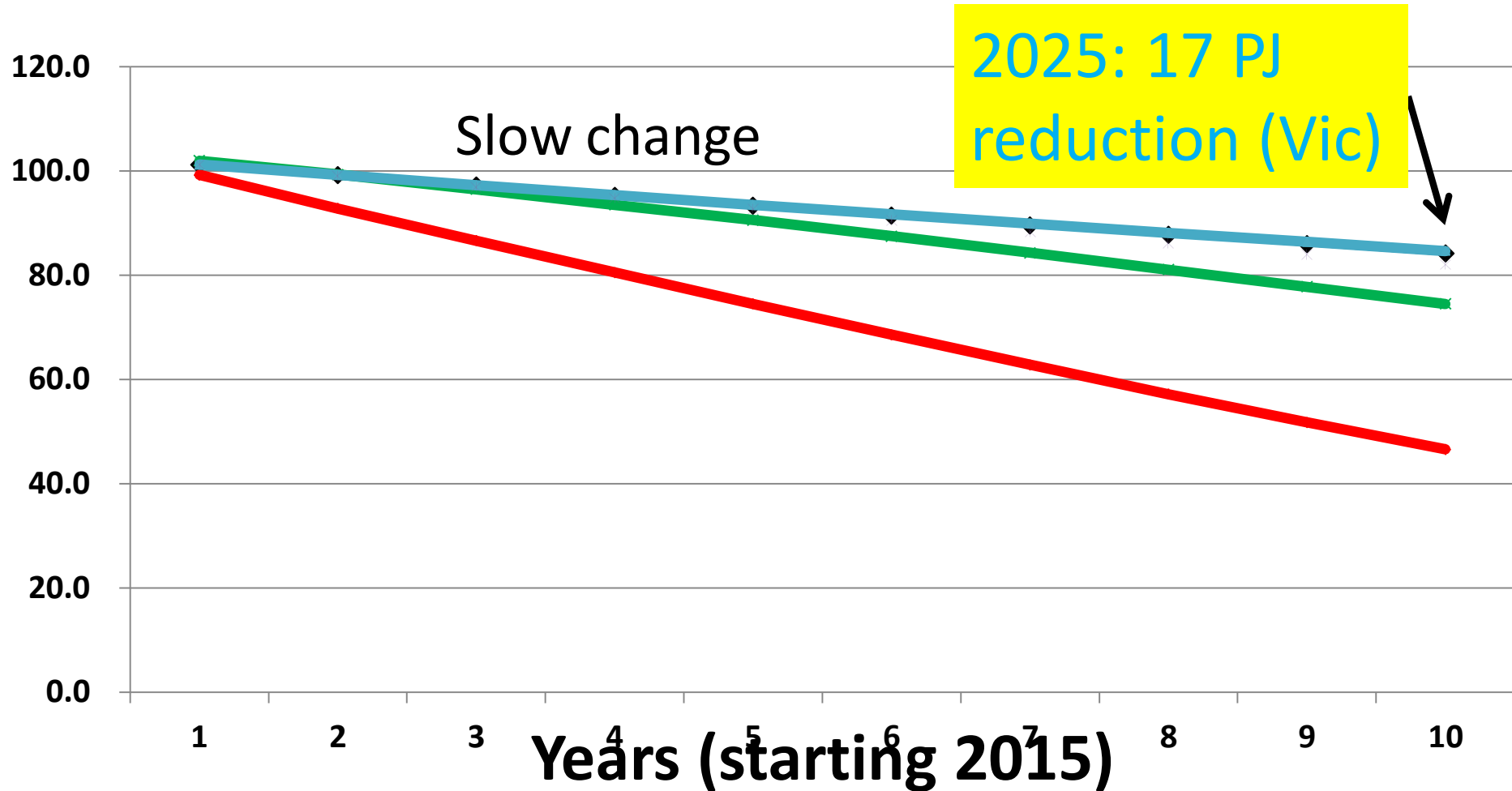


Source: Australian Energy Market Operator, Reserve Bank of Australia, Bloomberg New Energy Finance

A. It already is AEMO forecast gas shortfall



Victorian residential gas forecast (using bottom up approach)



Victorian residential gas forecast (using bottom up approach)

