



AUSTRALIAN
ENERGY
REGULATOR

DER and network regulation

AER

6 March 2019

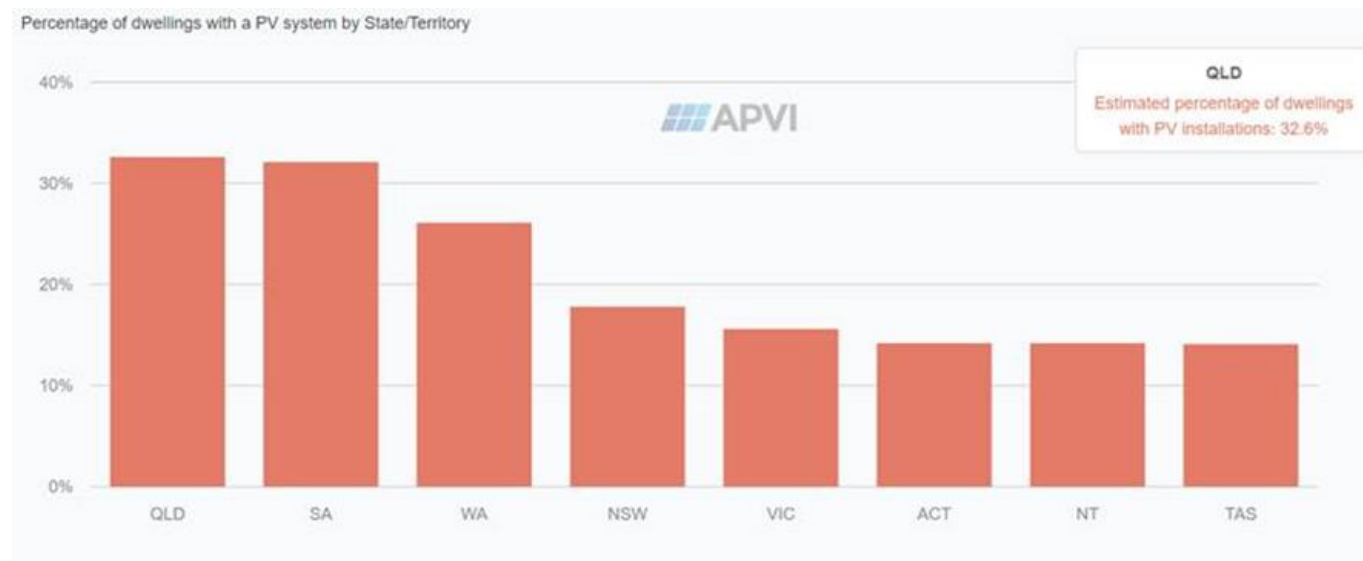
aer.gov.au

Our presentation

- Overall thoughts
- Our experience of the energy transformation
- What does that mean for incentives?
- What have we been doing to promote efficient expenditure
- Totex pros and cons

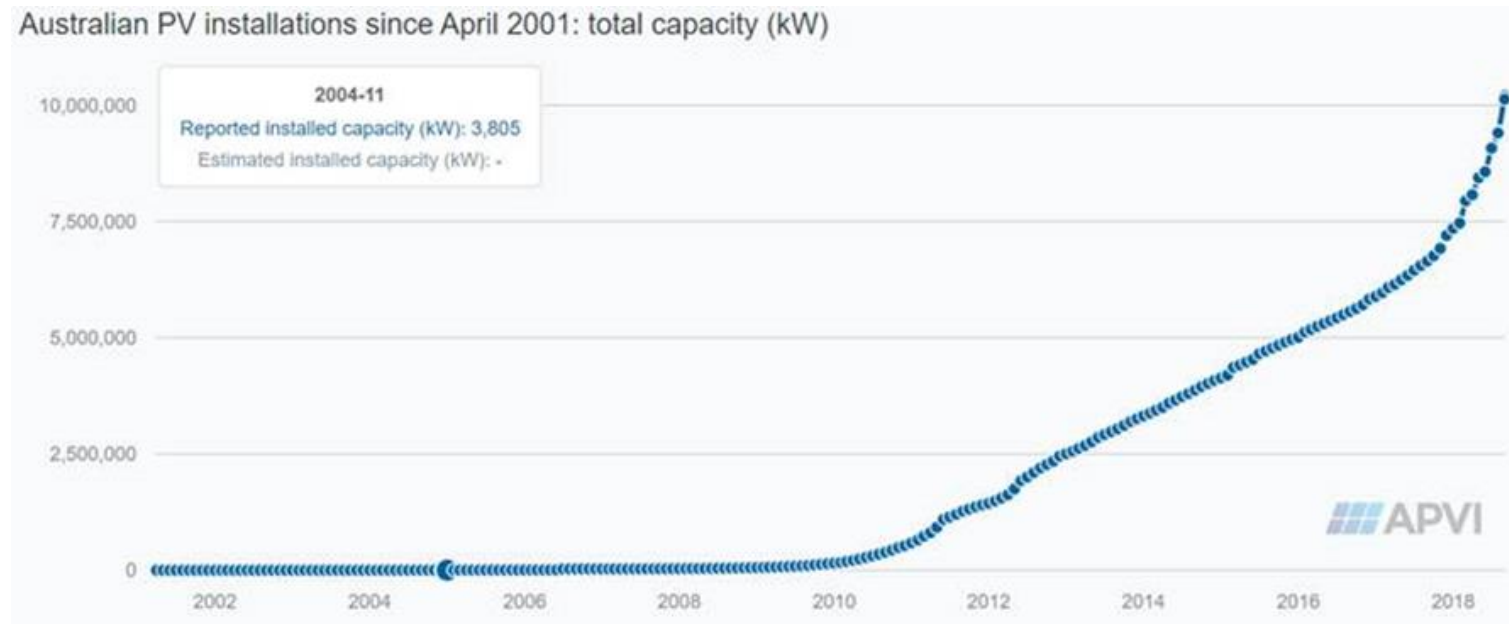
Overall thoughts

- Efficient integration of DER into network regulation creates a range of opportunities and challenges, importantly noting that these challenges and the opportunities won't necessarily be uniform between regions



Our experience of the energy transformation

- DER penetration has been under way for a number of years. To date, it has not been a big driver of capex.



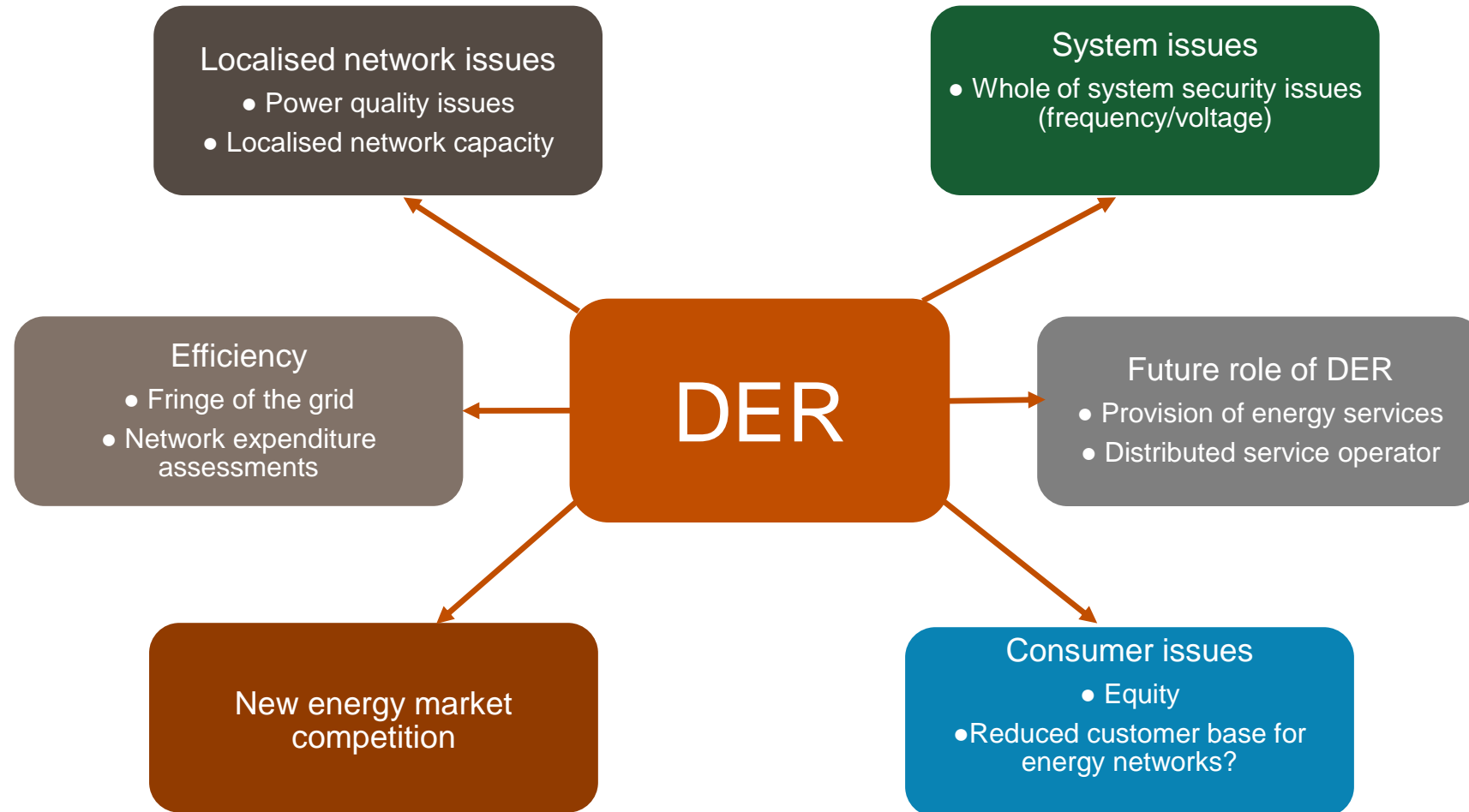
Our experience of the energy transformation

- Capex proposals coming to us now show an increasing focus on responding to solar-PV penetration: monitoring and addressing constraints
- There are potentially major demand drivers on the horizon (e.g. electric vehicles)
- There are related potential developments for managing supply and demand fluctuations (batteries, pumped storage, synchronous condensers etc)

Our experience of the energy transformation

- There are also a range of different directions that the overall management of DER could take
- eg passive DER vs active DER
- The rate of change of technology also heightens the risk of asset stranding- timing and value of investment is critical

Overview of DER impacts on network regulation



What does this mean for incentives?

- Greater range of options beyond traditional network-solutions; contestability and capex incentive issues
- There are conceptual and anecdotal arguments to support a conclusion of capex bias but it is very difficult to test empirically

Work we have been doing to promote efficient incentives

- Establishment of CESS and DMIS
- Binding rate of return instrument
- Changes to RITs to better accommodate non-network alternatives
- Tariff round-tables, TSSs
- Participation in steering groups (eg DEIP)

Could totex help?

- Potentially. The pros and cons depend on what type of totex model you are considering, but in general:
 - It can mitigate against financial drivers of capex bias;
 - It diminishes the materiality of differences in capitalization policies

Implications to be aware of

- Disconnects revenue from capital funding and depreciation from the economic usefulness of the assets. Could have long term implications.
- Material price impacts from the choice of 'slow-money' proportion, which is by nature somewhat arbitrary

Overall

- The energy transformation heightens the importance of a framework that can accommodate flexibility in expenditure assessment and incentive mechanisms.
- We support a network regulatory framework which allows the flexibility for evolution in:
 - Assessment
 - Incentives
 - Consumer engagement in those assessment processes