

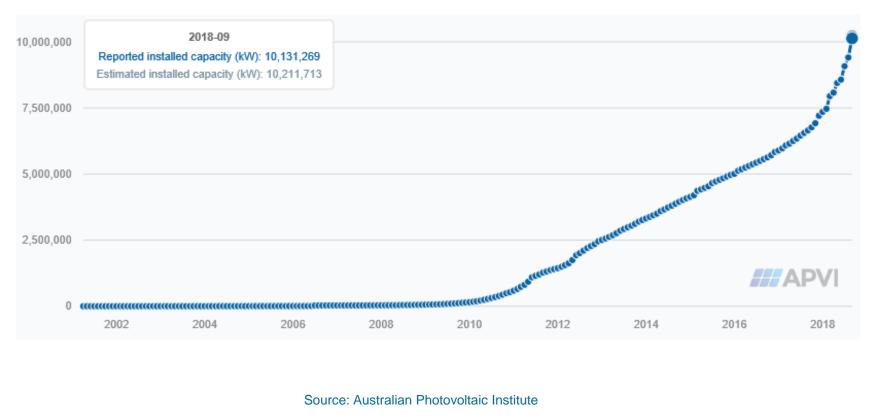
# Challenges and opportunities for distributed energy resources in Australia

Paula Conboy, Chair

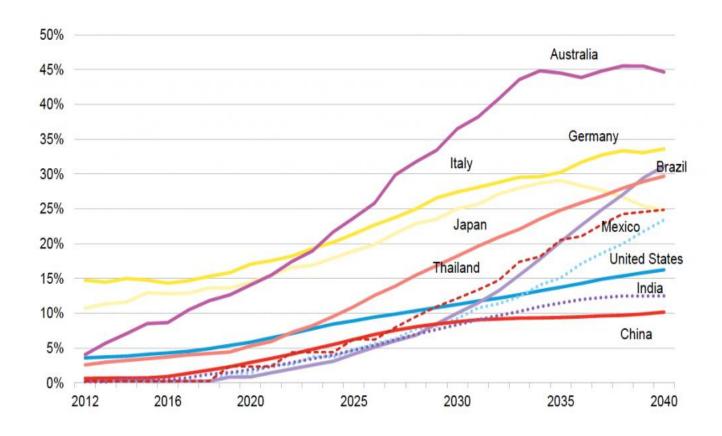
28 November 2018

### High level of solar PV penetration

#### Australian solar PV installations since April 2001

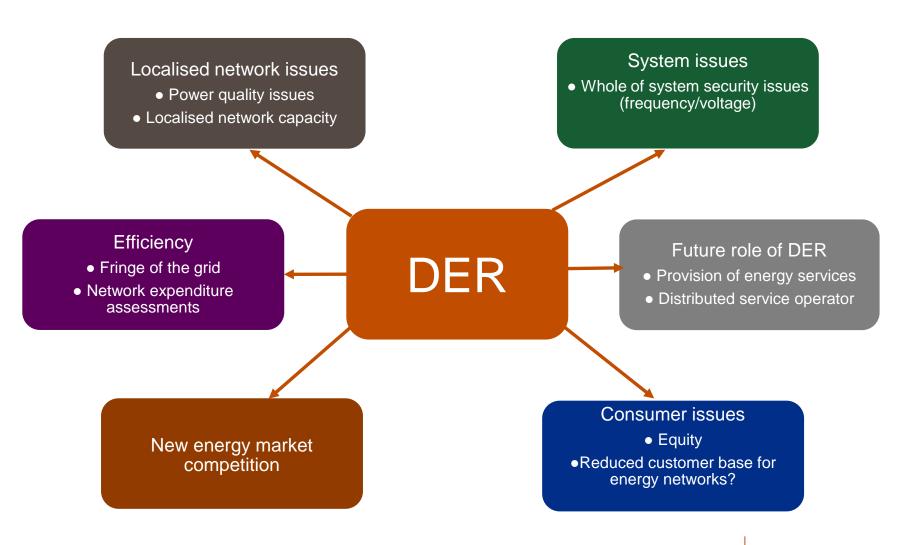


# Australia predicted to be the world's most decentralised electricity system



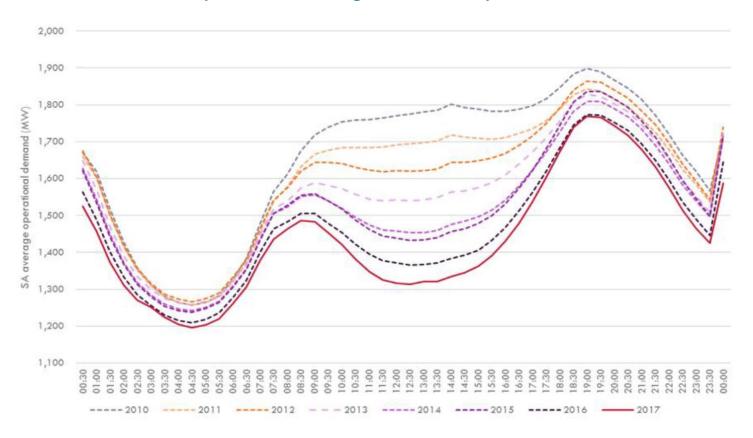
Source: Bloomberg New Energy Finance

#### Overview of DER issues



## Emerging challenges – system stability

#### South Australian daily demand for grid electricity



Source: Australian Energy Market Operator

# Potential benefits of solar and other DER to Australian consumers

- Reducing the emissions intensity of generation.
- Reduced power bills and potential income sources.
- Greater consumer control of their energy.
- Improved grid reliability and reduced losses.
- Potential deferral or avoidance of network expenditure.



# Ensuring that the incentives-based regulatory framework is fit for the future

- Optimisation of network expenditure.
  - Are networks achieving efficient trade-offs?
  - What is the optimal timing and value of network expenditures to support DER penetration?
  - Are the incentives right?
- Reducing DER costs are revealing pockets of supply that may now be more efficiently serviced from Stand Alone Power Systems.
  - This pattern will increase as DER costs continue to reduce, placing an inefficient cost burden on all connected consumers.
- The right price signals for solar customers.
  - Many Australian consumers are still on flat tariffs.
- Promoting competition in the new energy market.

### How we're responding

- Implementing recommendations from the Finkel report.
  - Energy Security Board formed to coordinate this work.
- The Australian Energy Market Operator establishing a DER register.
- New regulations on the contestability of energy services.
- Working with the rule maker, the Australian Energy Market Commission on the future of the economic regulatory framework.
- Examining emerging network models with networks and DER providers.



### Thank you – any questions?

