Australian Government
Clean Energy Regulator

RENEWABLE ENERGY TARGET

CER insights on DER trends

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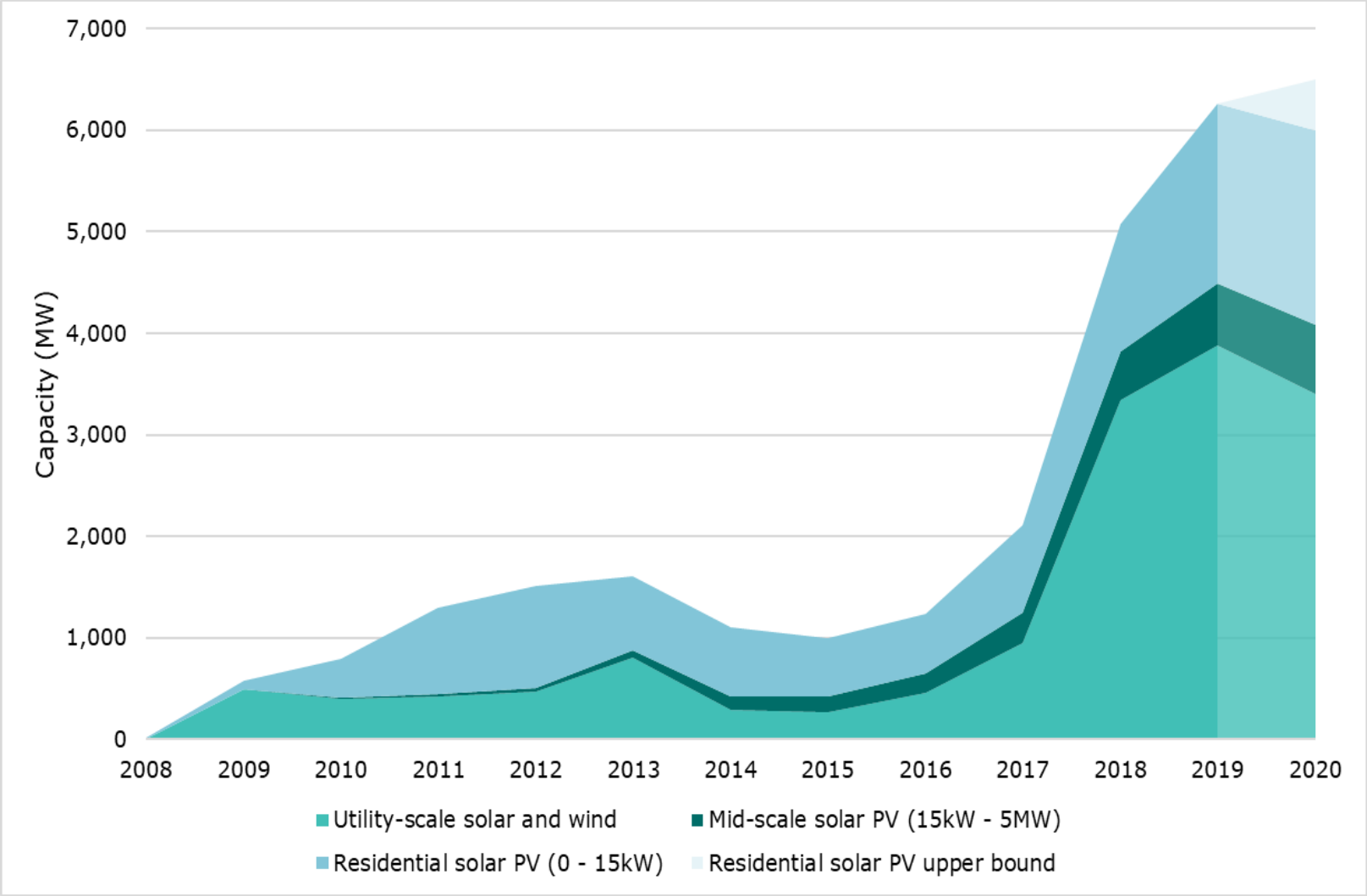
Overview

- Renewable Energy Target data and trends
  - 2.4 GW of rooftop solar installed in 2019, 2.1 GW in the NEM
- Small scale 0 to 100kw
  - System size
  - Household batteries
  - Drivers – sentiment, household investment decisions and interest rates, price and price thresholds, deeming rates and payback
  - Constraints, new homes, existing homes, penetration, new technology
- Mid scale 100kw – 5MW
  - Sectoral breakdown
  - LGCs issued to 2030 new projects eligible, floor price in LGCs anticipated

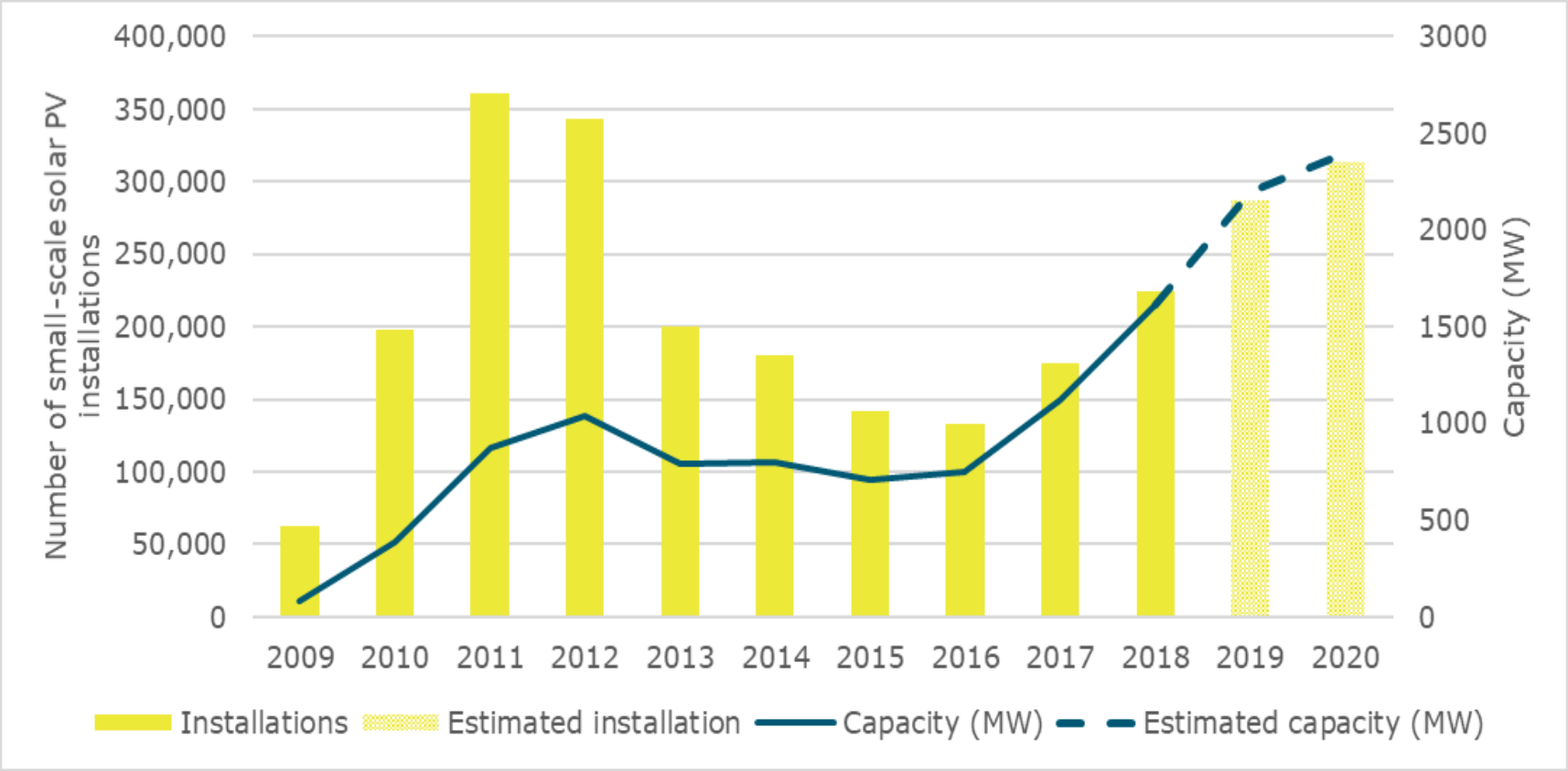
(All data is national in this presentation, NEM typically represents 80-90 per cent of national data)

Estimated accredited and installed capacity, 2008 to 2020

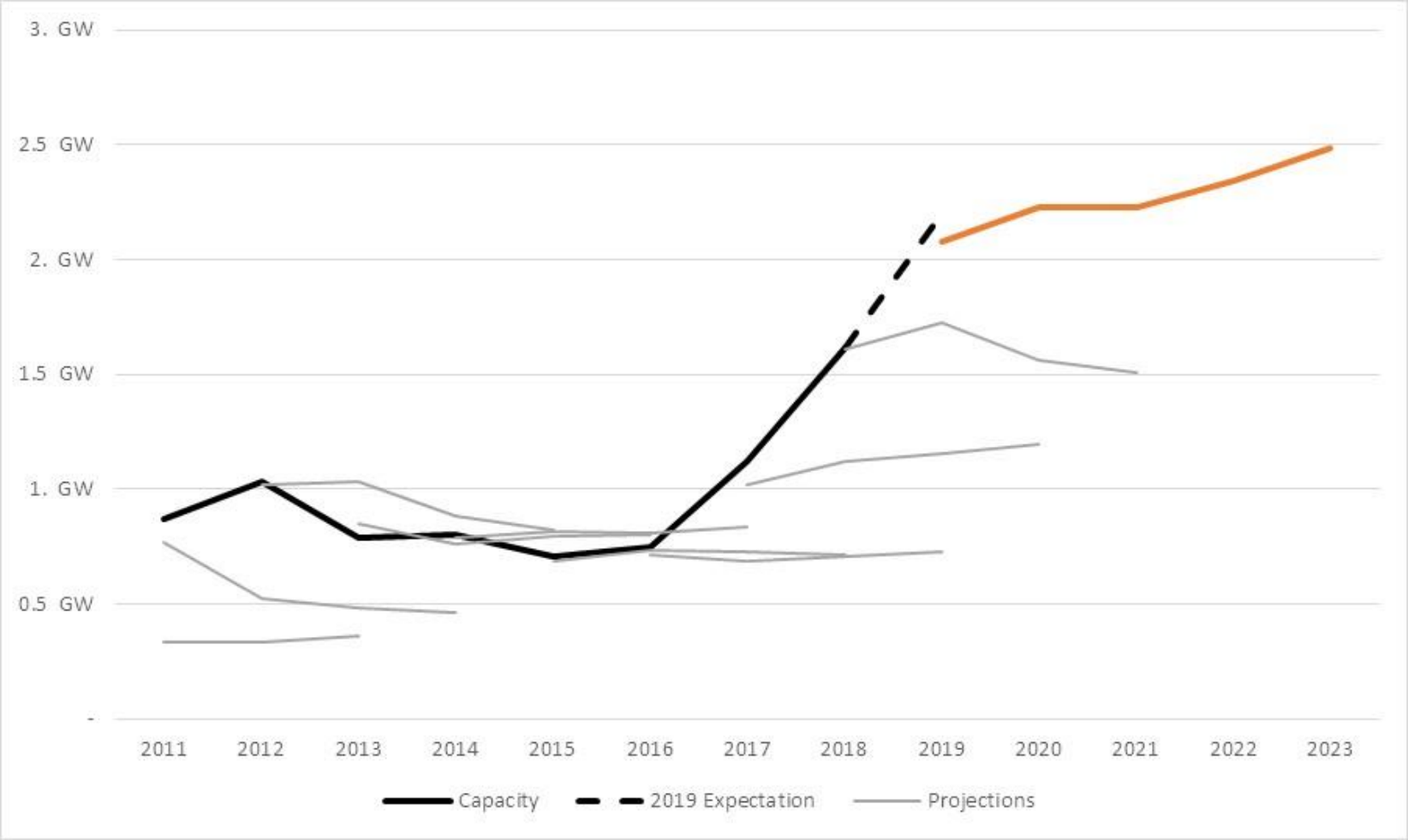


Small-scale solar PV installations and capacity, 2009 to 2020

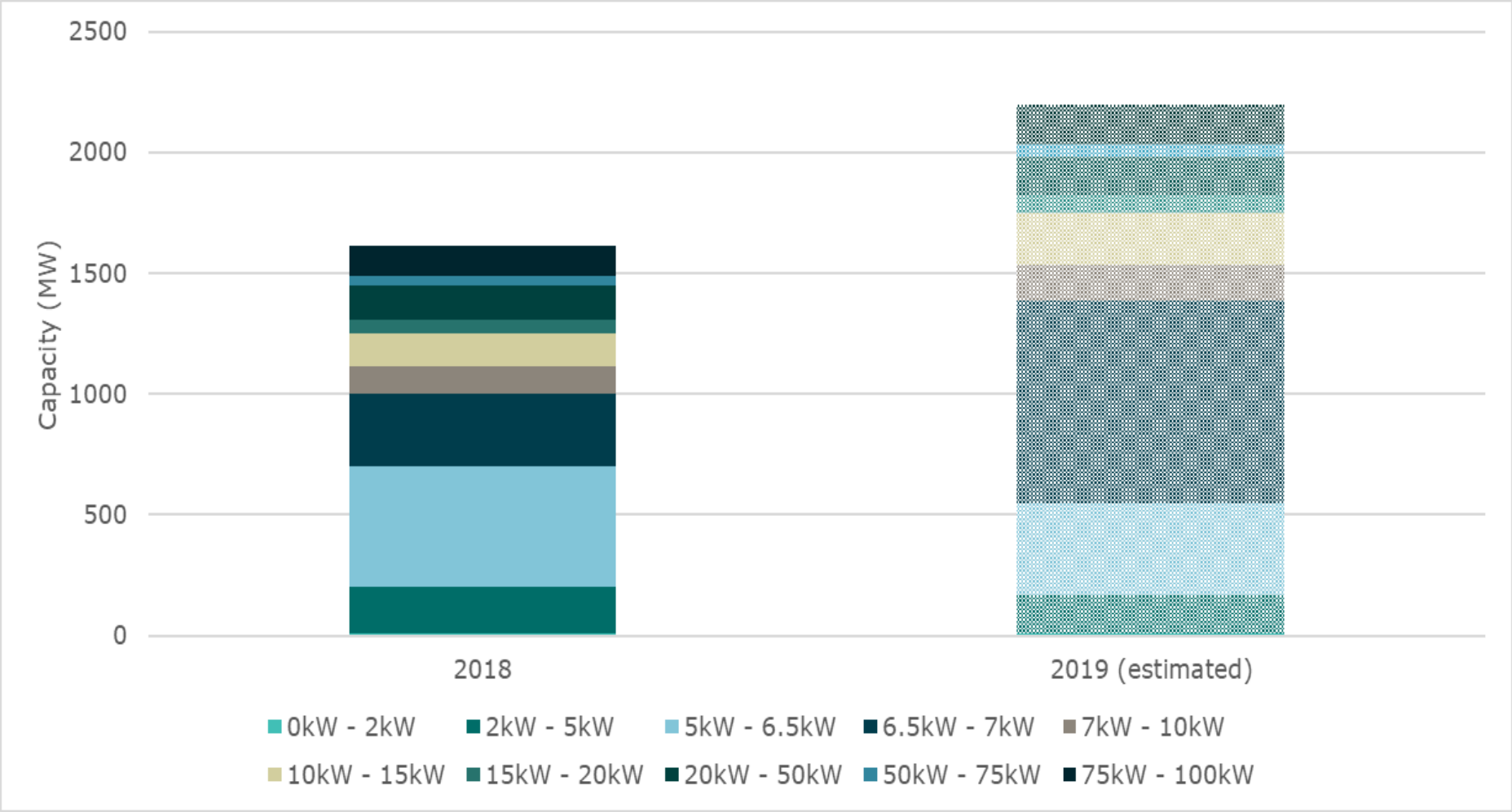
(lower bound estimate shown for 2020)



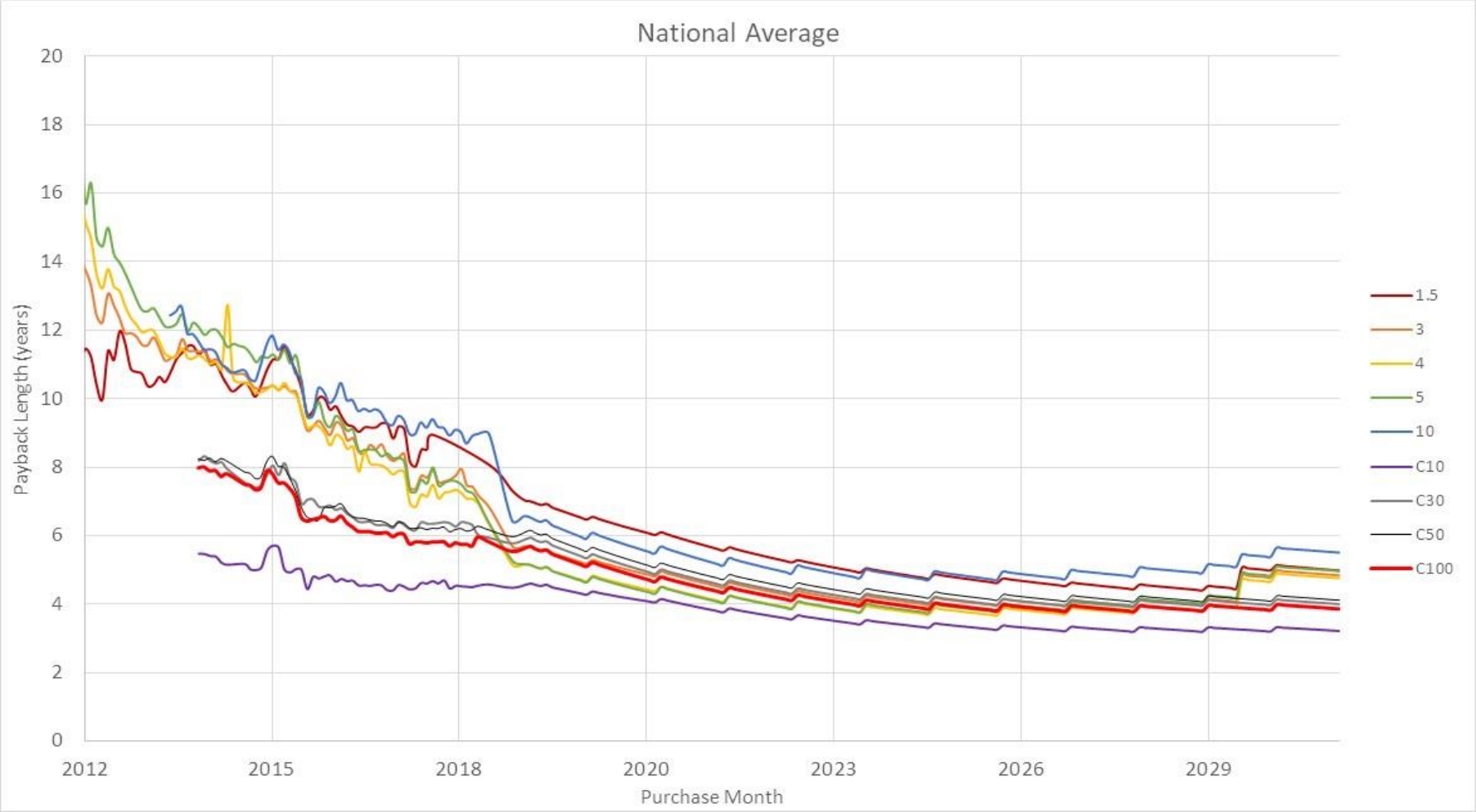
Small Scale Technology percentage forecasting results vs actual 2011-2019



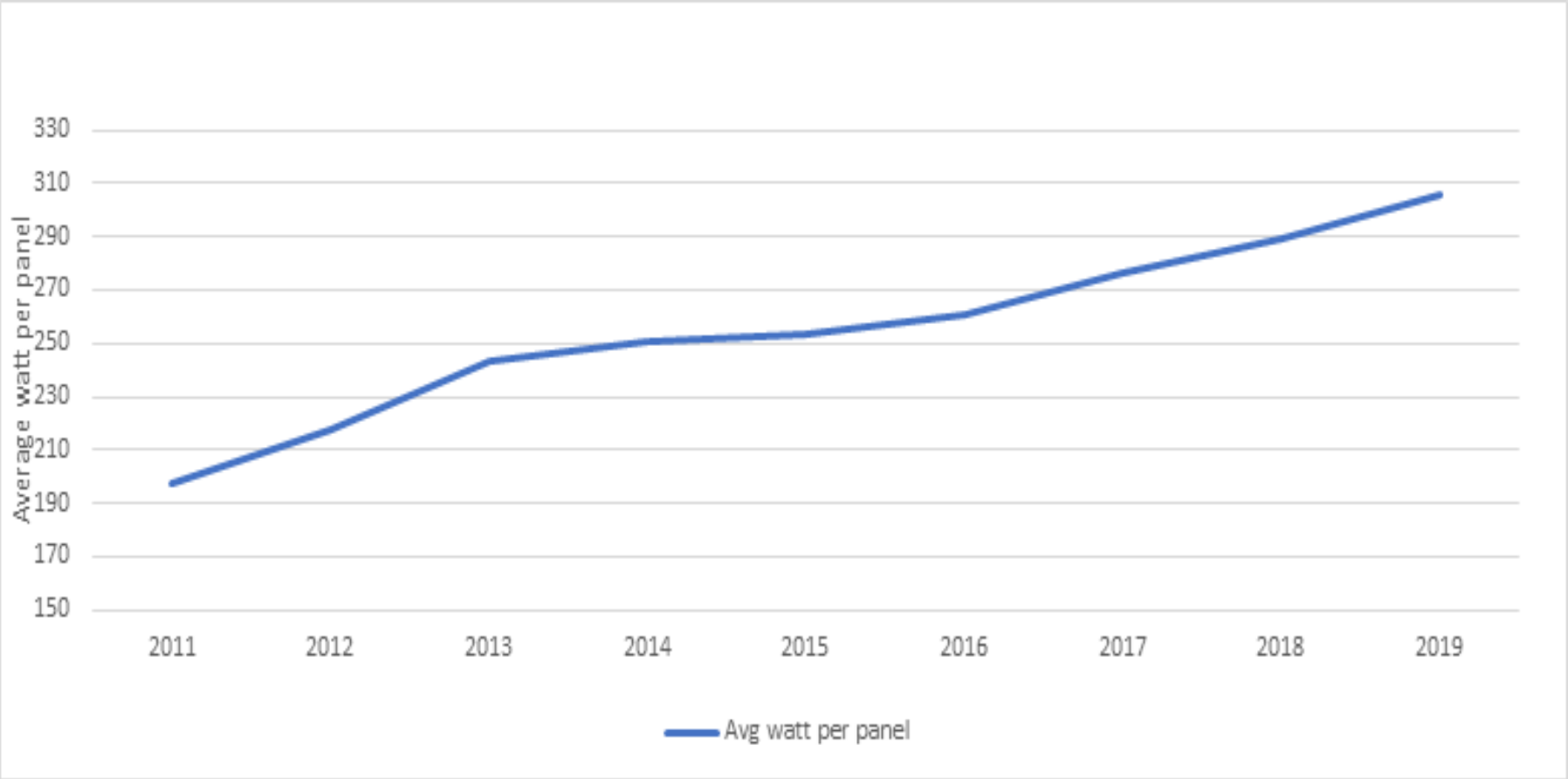
System size 0-100kW 2018-2019



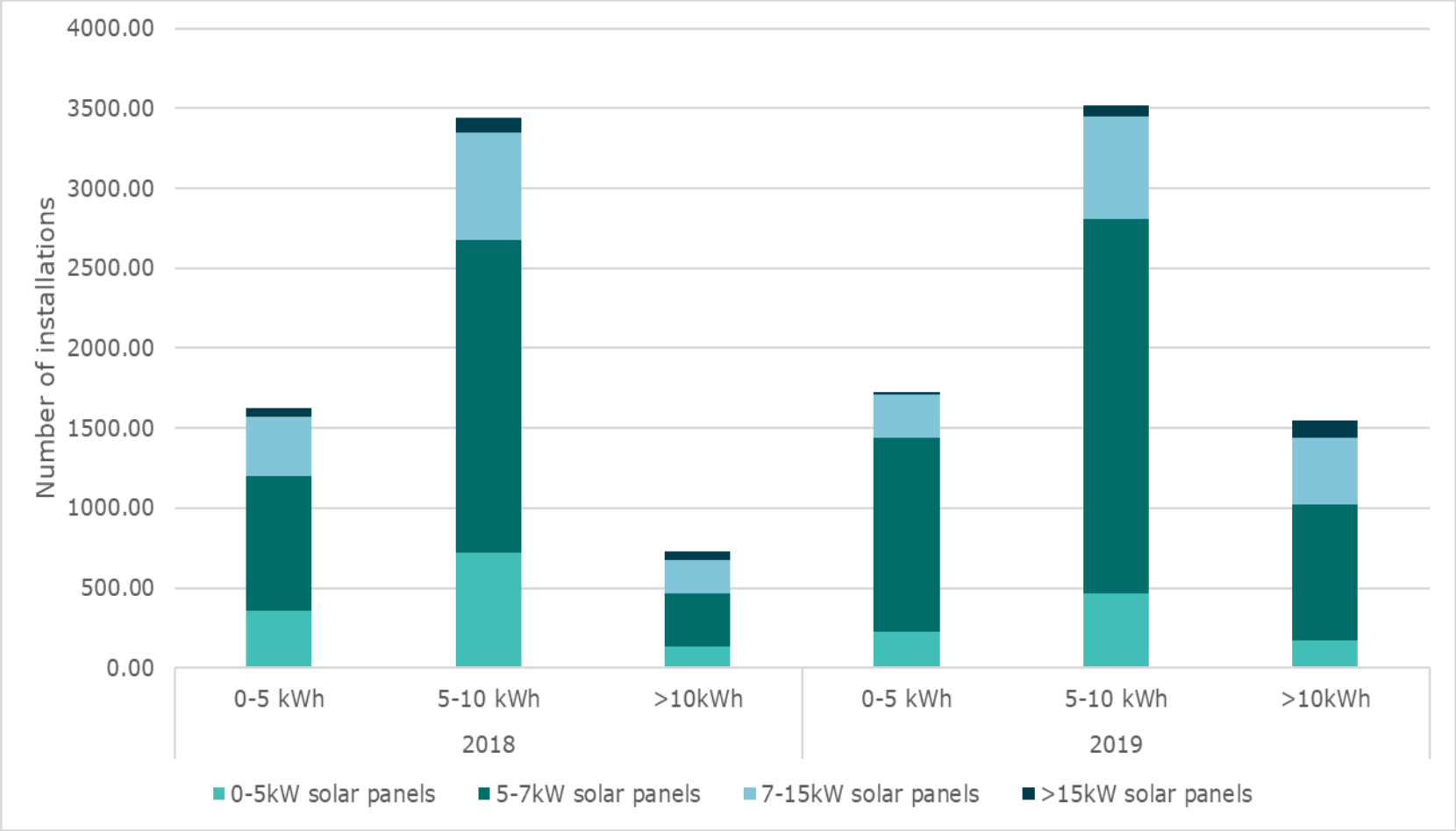
Deeming and payback- CER scenario system costs maintain long term downward trajectory



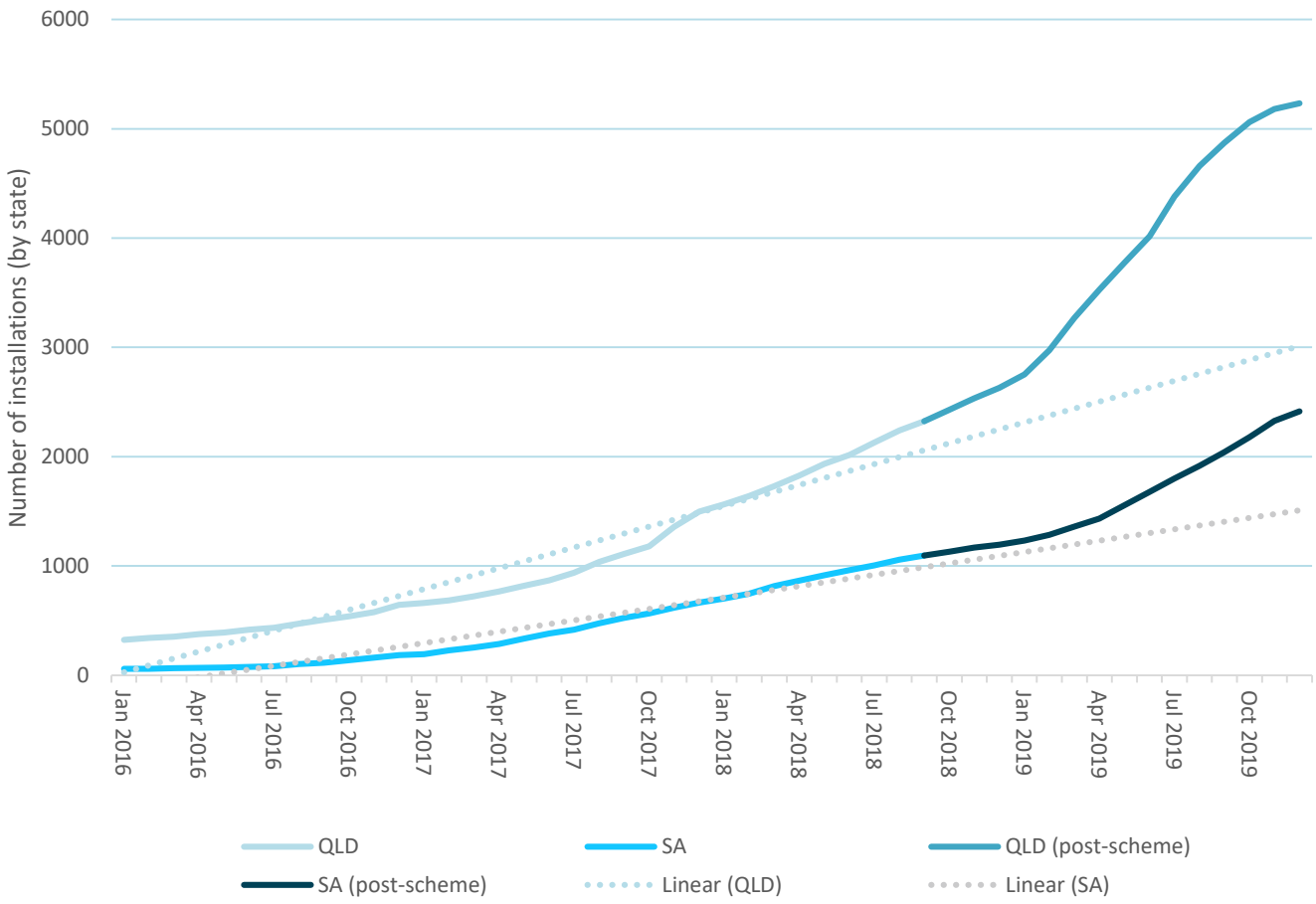
Panel size continues increasing: Average panel size for installations 0-100kw



Household battery size to system size



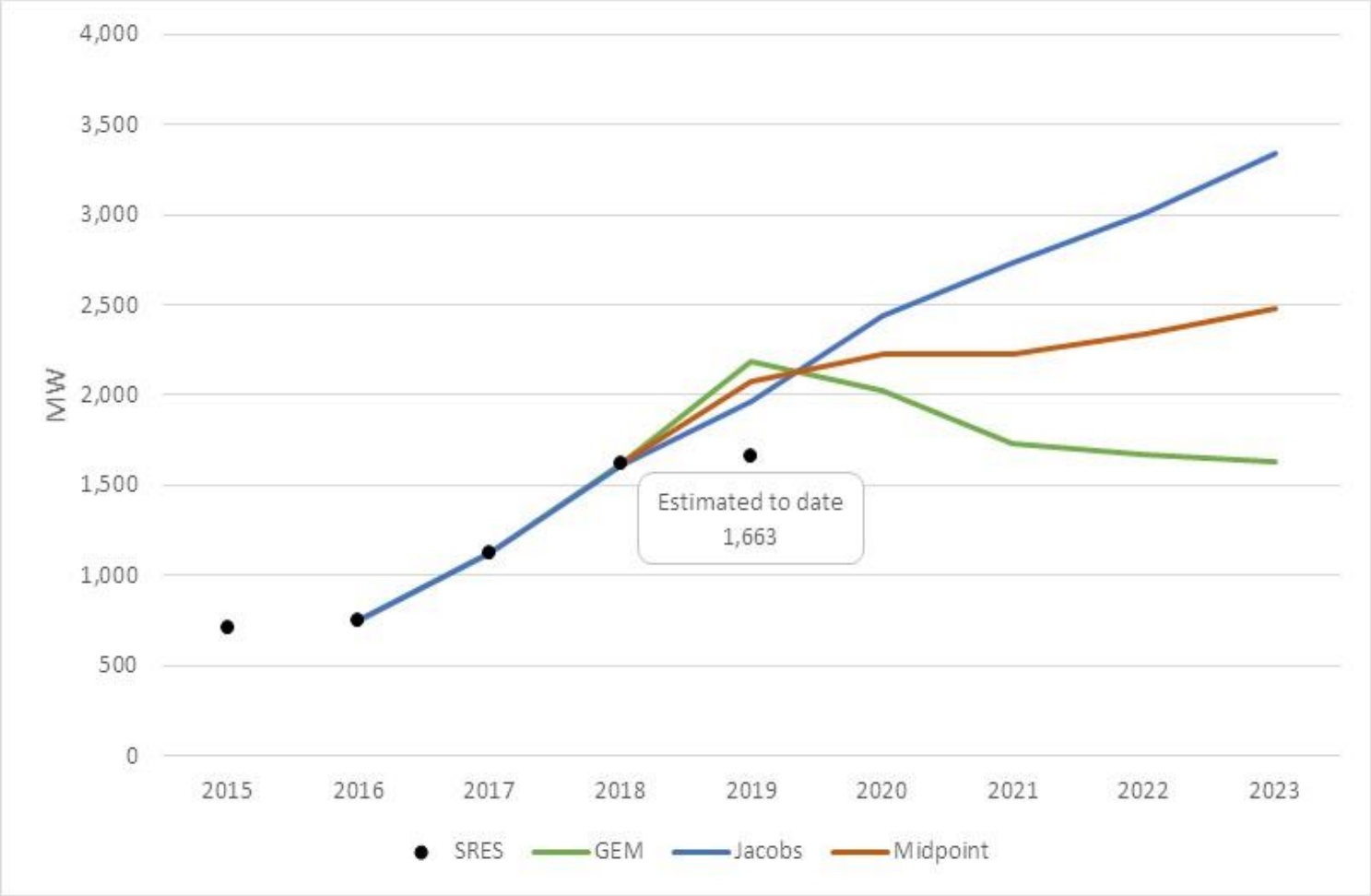
Household batteries uptake QLD and SA



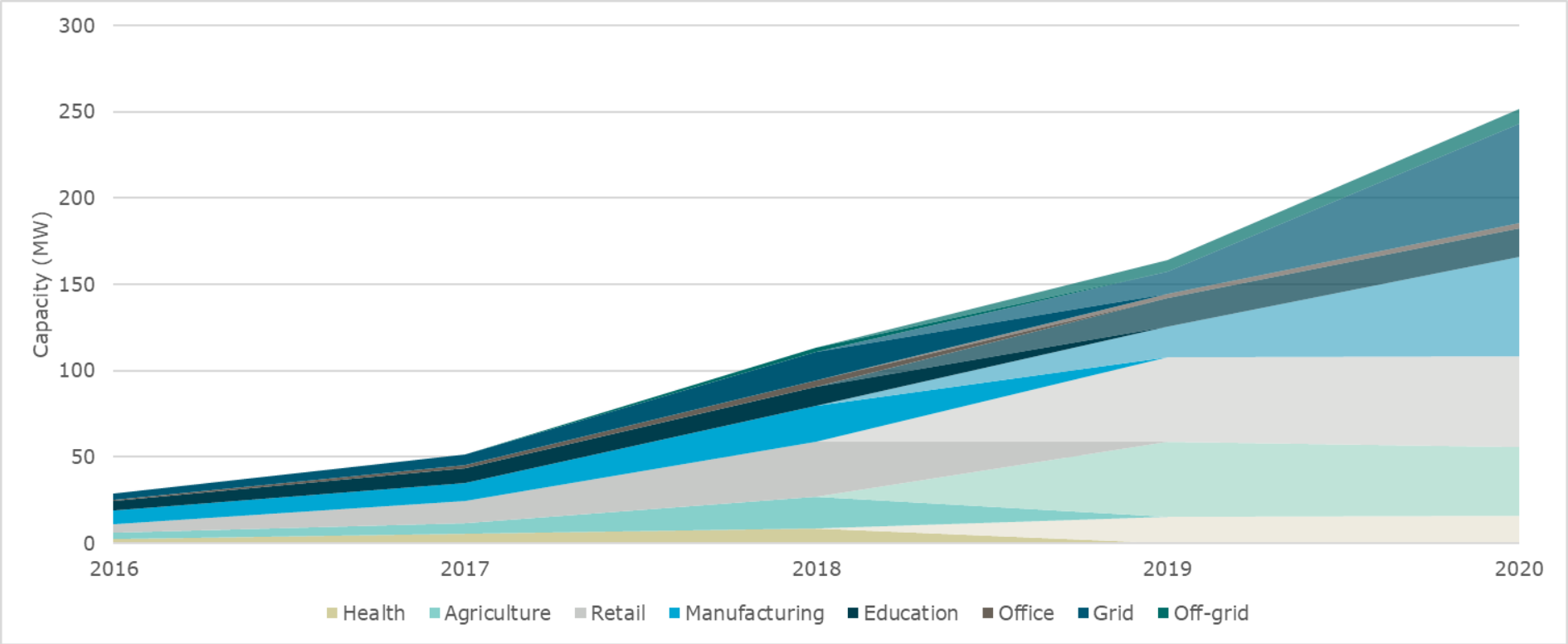
Are there constraints on rooftop PV penetration?

- penetration rates continue to increase to very high levels in some suburbs
- new homes – some new developments now offer solar and battery as standard, high penetration in newly designed suburbs
- 1 million systems approach 10 years old, larger replacement systems are coming
- Technology and market innovation keeps coming:
  - community scale batteries, home batteries and VPPs emerging
  - more potential for smart inverters, demand response and load shifting
- DNSPs planning for and seeking to facilitate rooftop solar

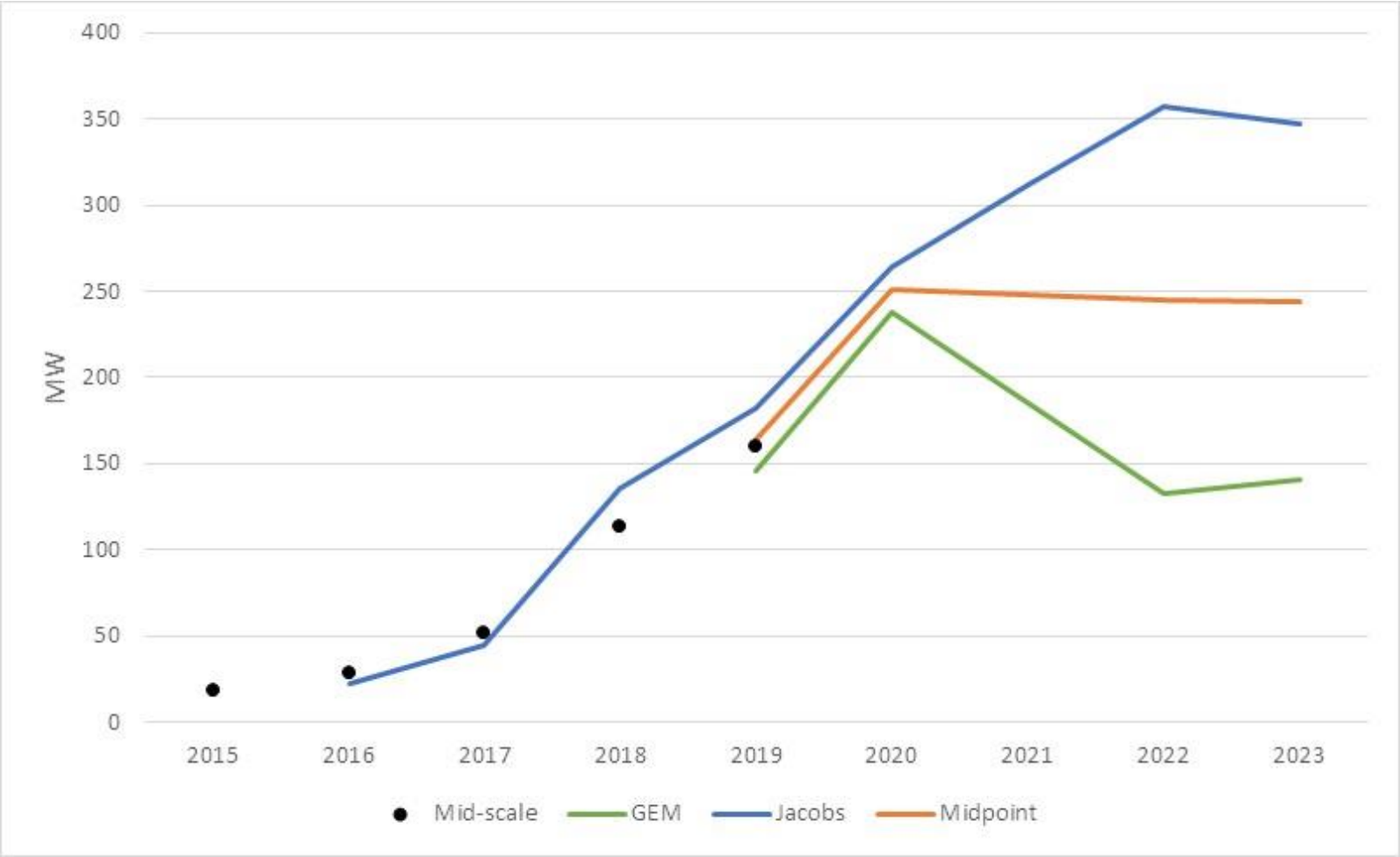
Divergent views of the future dependant on model design – CER interim SRES modelling



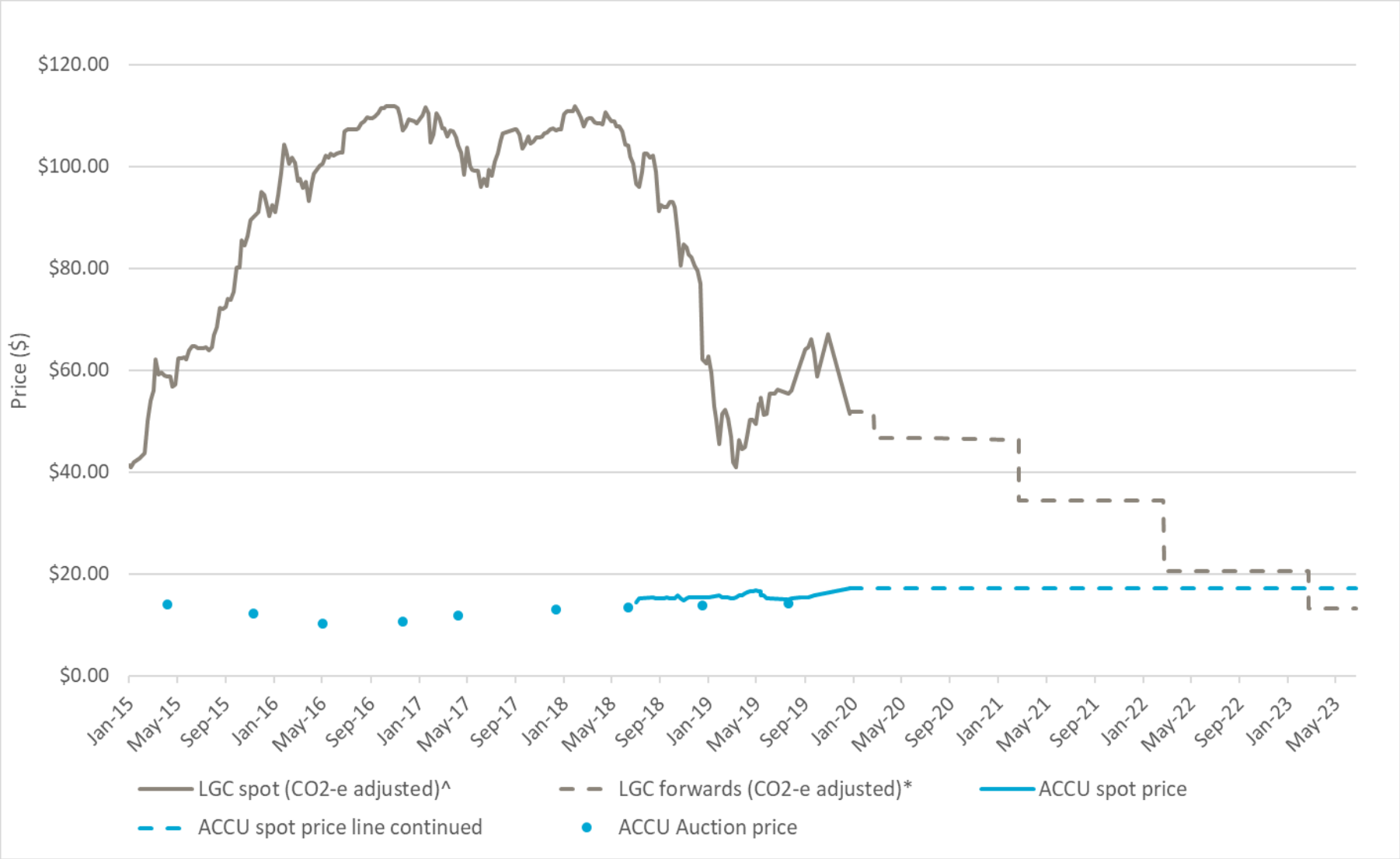
Mid Scale 100kW-5M sectoral breakdown, combined models



Mid scale 100kW–5MW CER modelling results – data to August 2019



LGC floor price potential and convergence of carbon markets



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  - 2019 Q4 coming 24 February 2020
- Renewable Energy Target monthly market data
- Small-scale technology percentage modelling reports

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