

Transmission Network Forum 2020

#pqforum



Agenda



9.00am Welcome

9.05am CE address – State of the Network

9.45am 2023-27 Revenue Determination Process

10.15am Power System Planning

10.30am Q&A Panel Session

10.55am Wrap up and thank you

11.00am Next steps

Agenda



9.00am Welcome

9.05am CE address – State of the Network

9.45am 2023-27 Revenue Determination Process

10.15am Power System Planning

10.30am Q&A Panel Session

10.55am Wrap up and thank you

11.00am Next steps

State of the Network

Paul Simshauser
Chief Executive



147 SUBSTATIONS

TRANSMISSION NETWORK

NEM

1,700KM

SEQ = 60%
QLD LOAD

CAIRNS TO NSW

QNI

15,339 KMS
OF LINES

CUSTOMERS

ALMOST 5M
CUSTOMERS

NETWORK CONNECTIONS LARGE-SCALE GENERATORS

Customers at the centre



A message from our field teams



The Energy
Charter

We've got you.



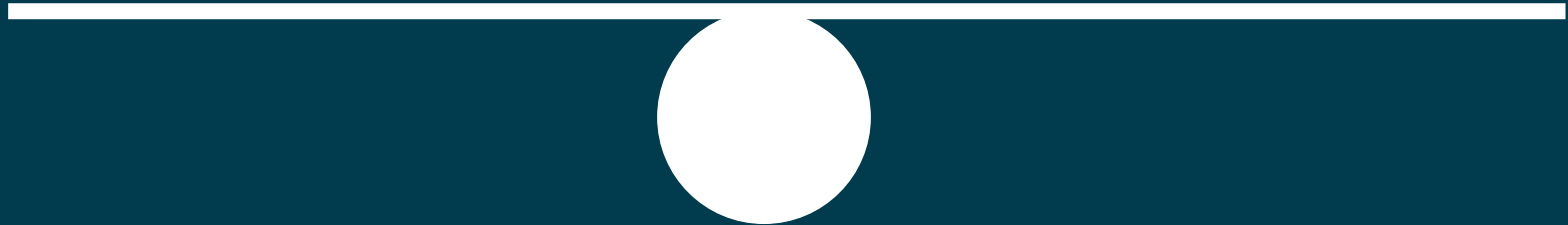
Supporting Queensland during COVID-19 pandemic



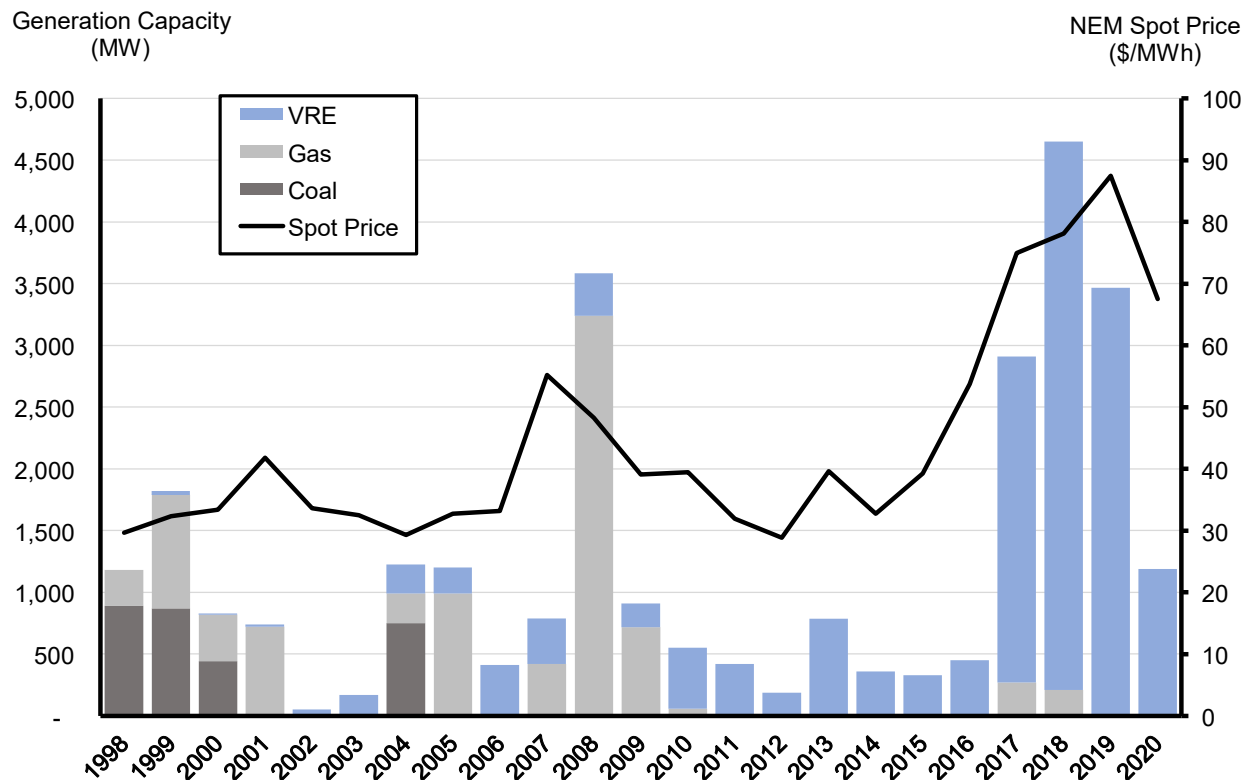
- System strength
- Minimum demand
- Network constraints
- Broader market impacts

CHALLENGES

OPPORTUNITIES

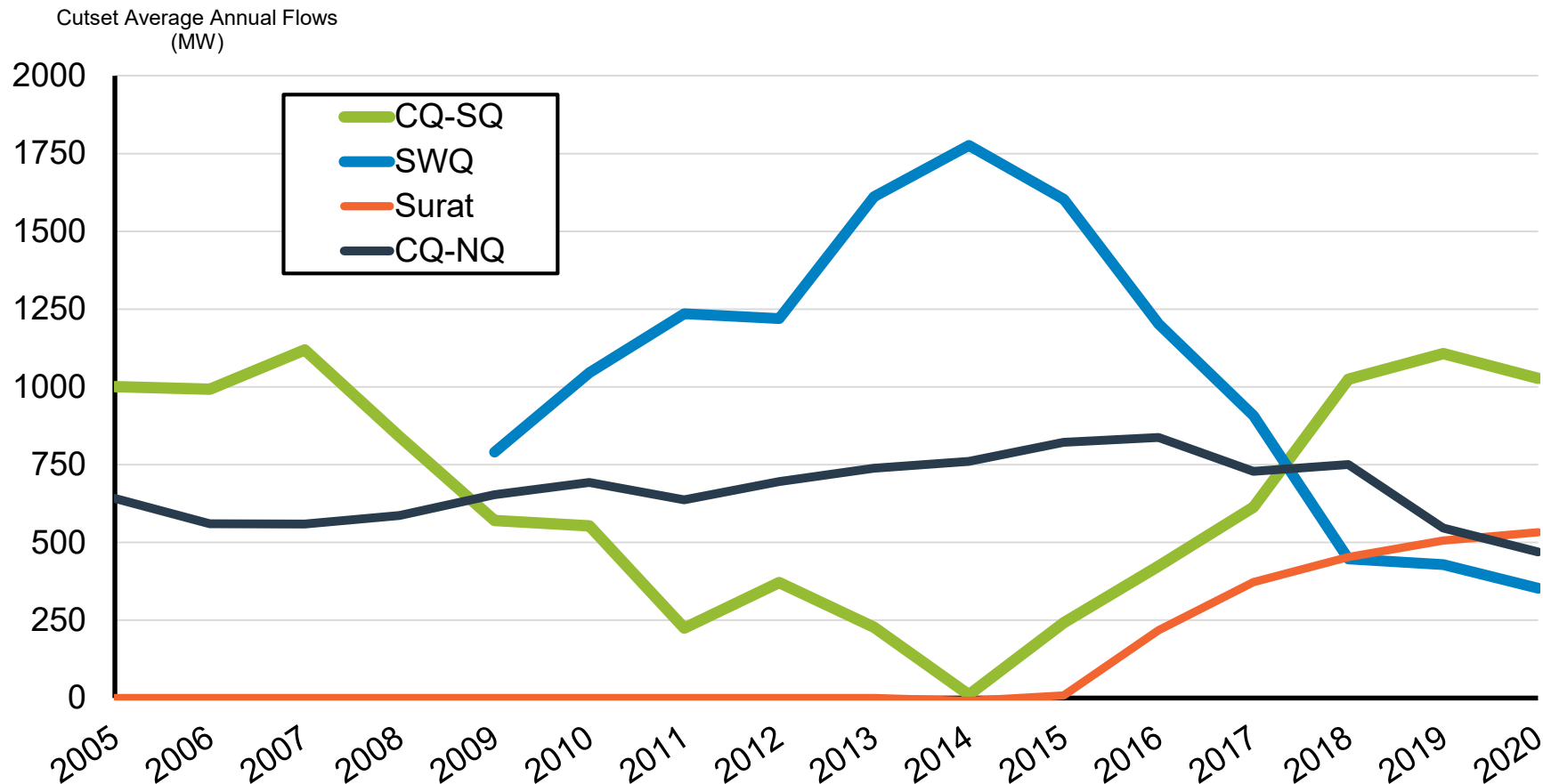


NEM total entrant plant commitments (1998-2020)

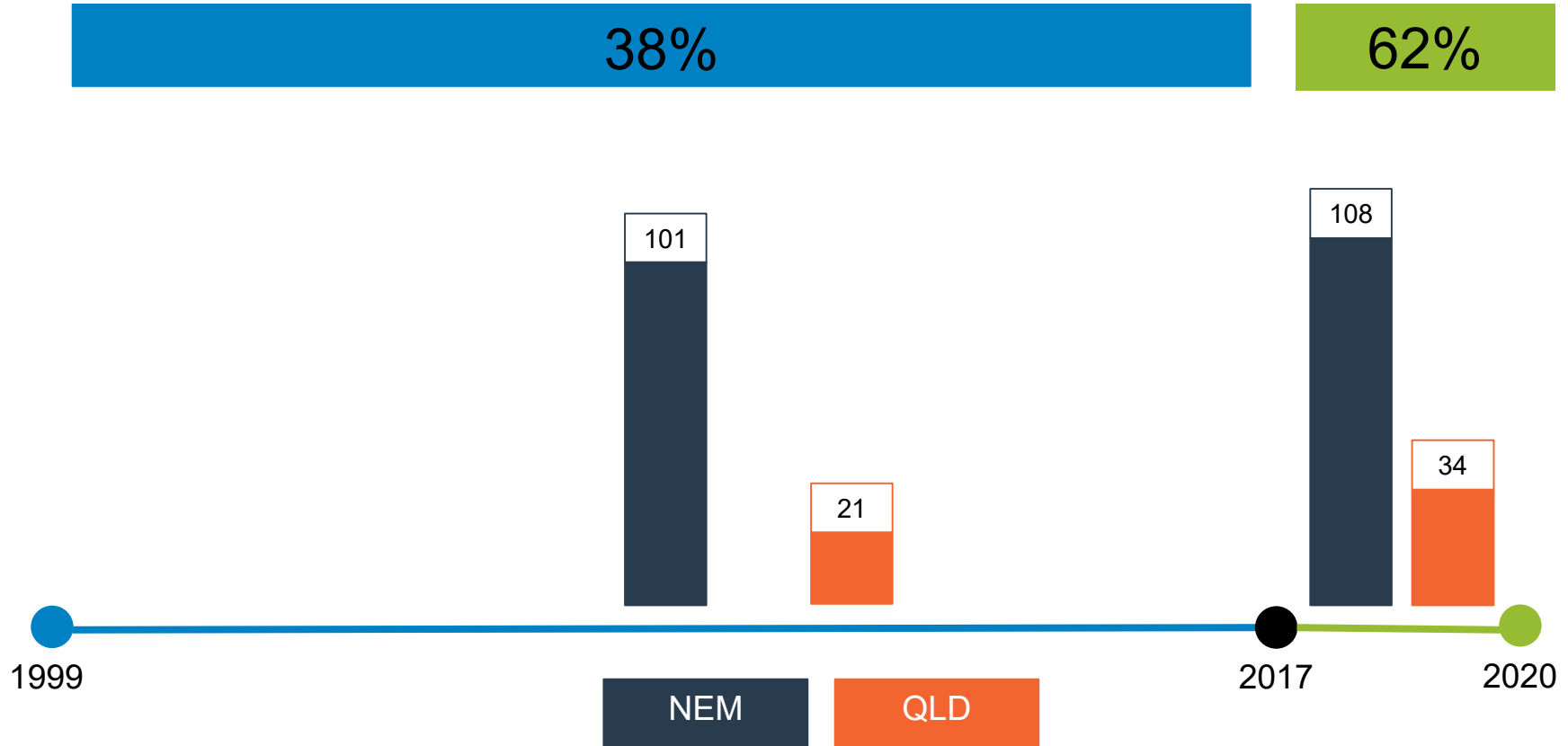


Source: BNEF, ESAA, Company Reports: 2013-2014 CO₂ tax effects removed

Average flows and price



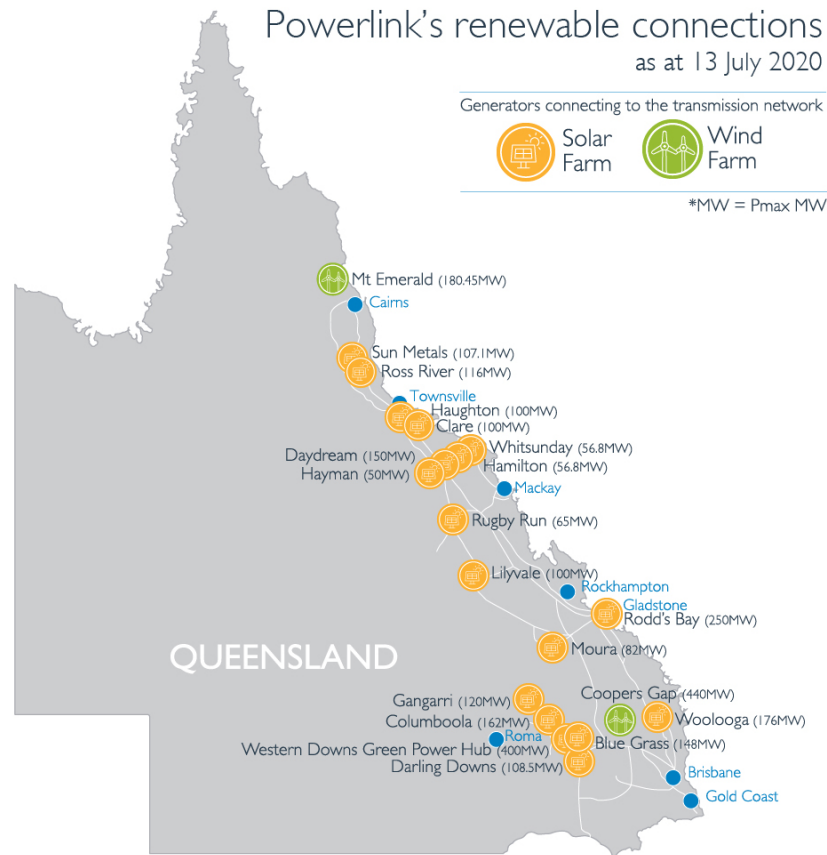
Sharp rise in network connections



Growth in large-scale renewable connections

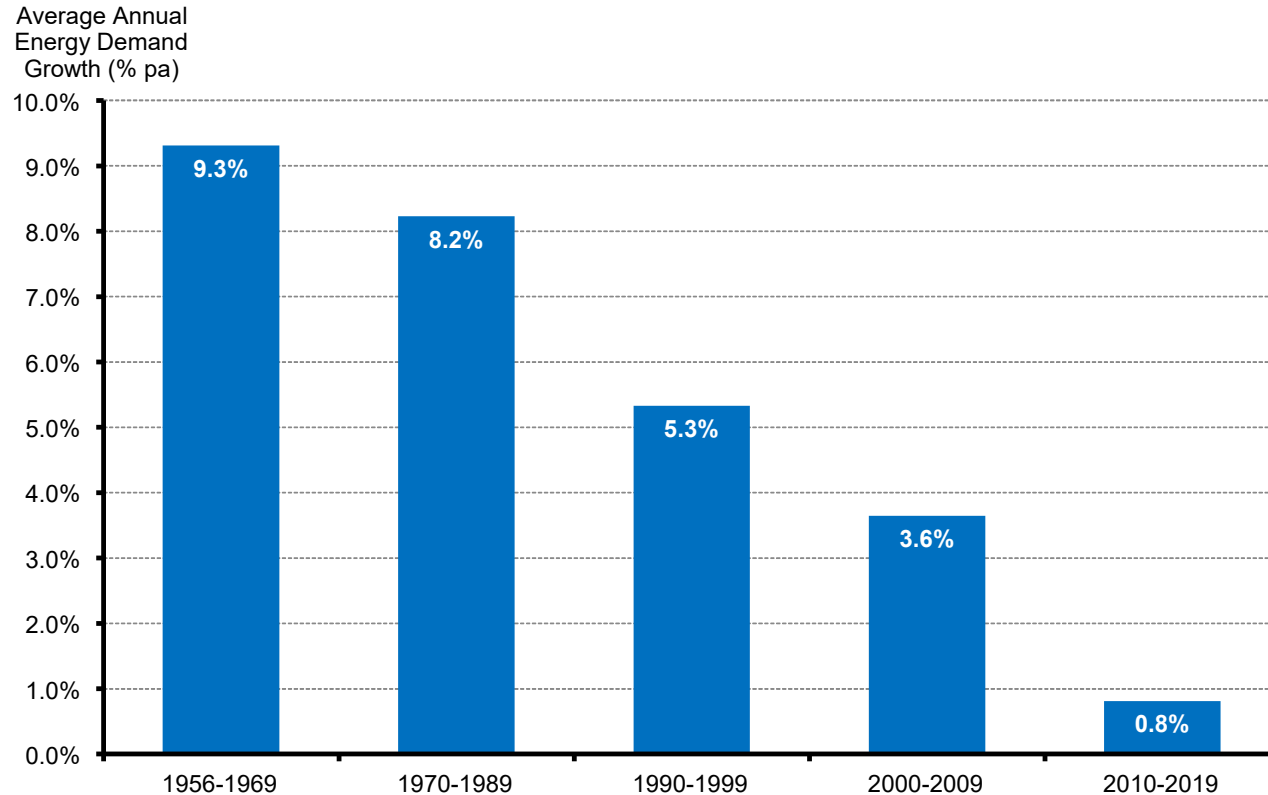


- In 2019/20 we reached connection agreement with a further seven renewable generators - 1,300+MW of generation capacity
- Number of projects in the pipeline - showing no signs of slowing

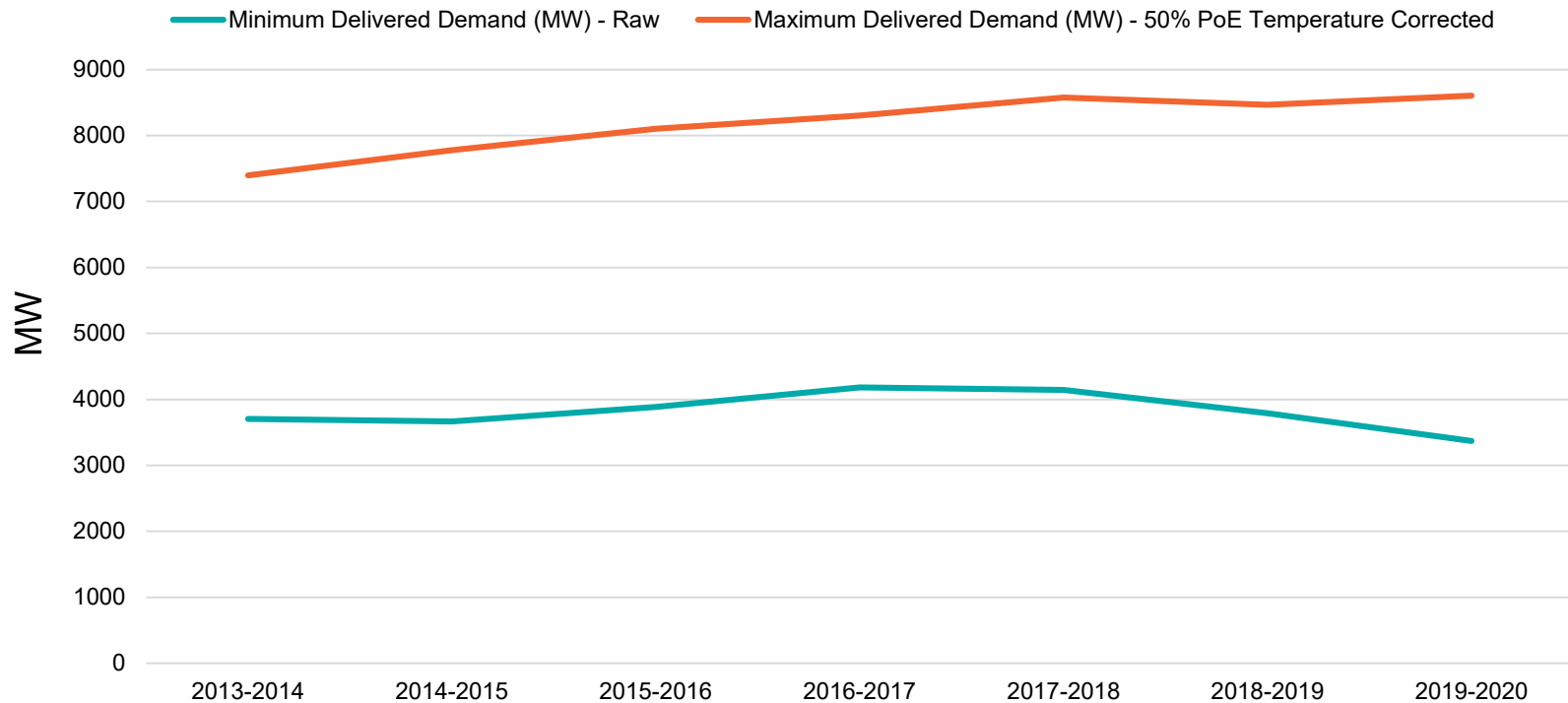


Low demand growth environment

QLD Network Load Growth: 1955-2020

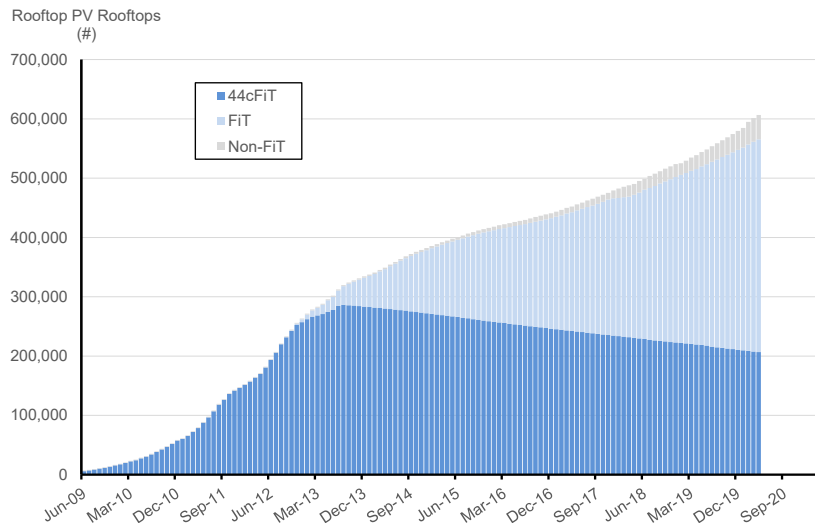


Evolution of Maximum and Minimum Demand

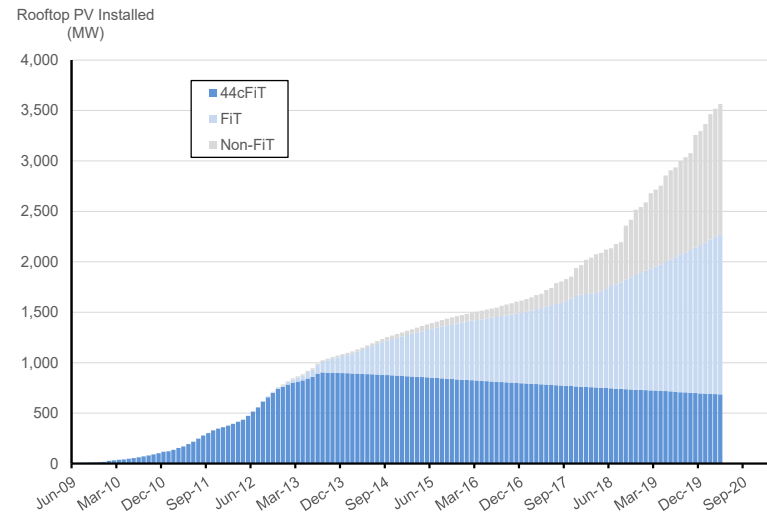


Queensland Rooftop solar PV

Number of Rooftop Installations



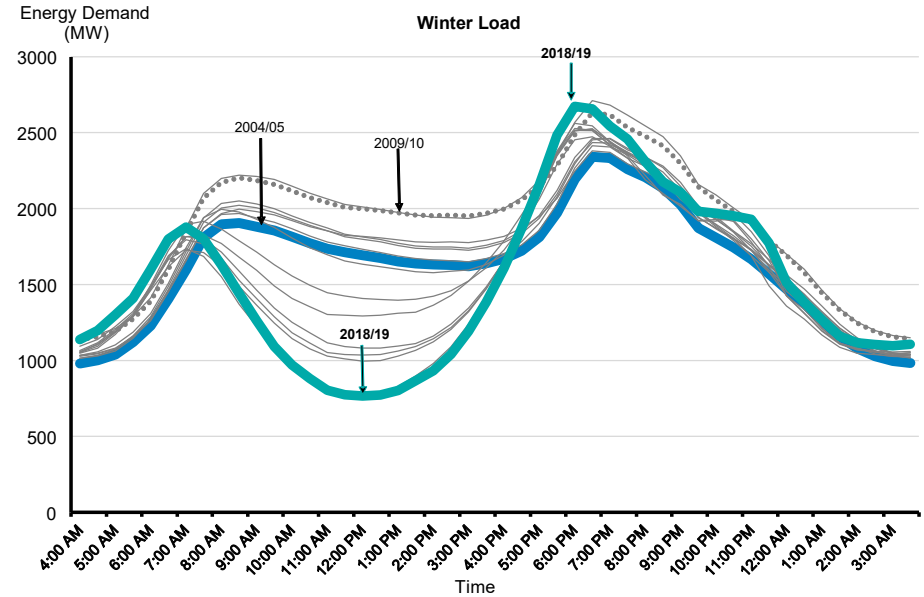
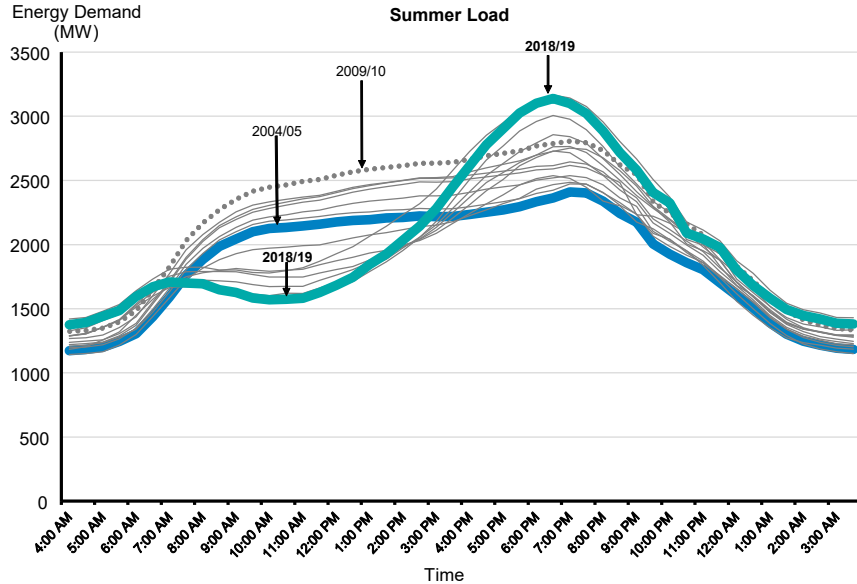
Capacity of Rooftop Solar PV



Sources: Energex, Ergon

Residential & SME final demand

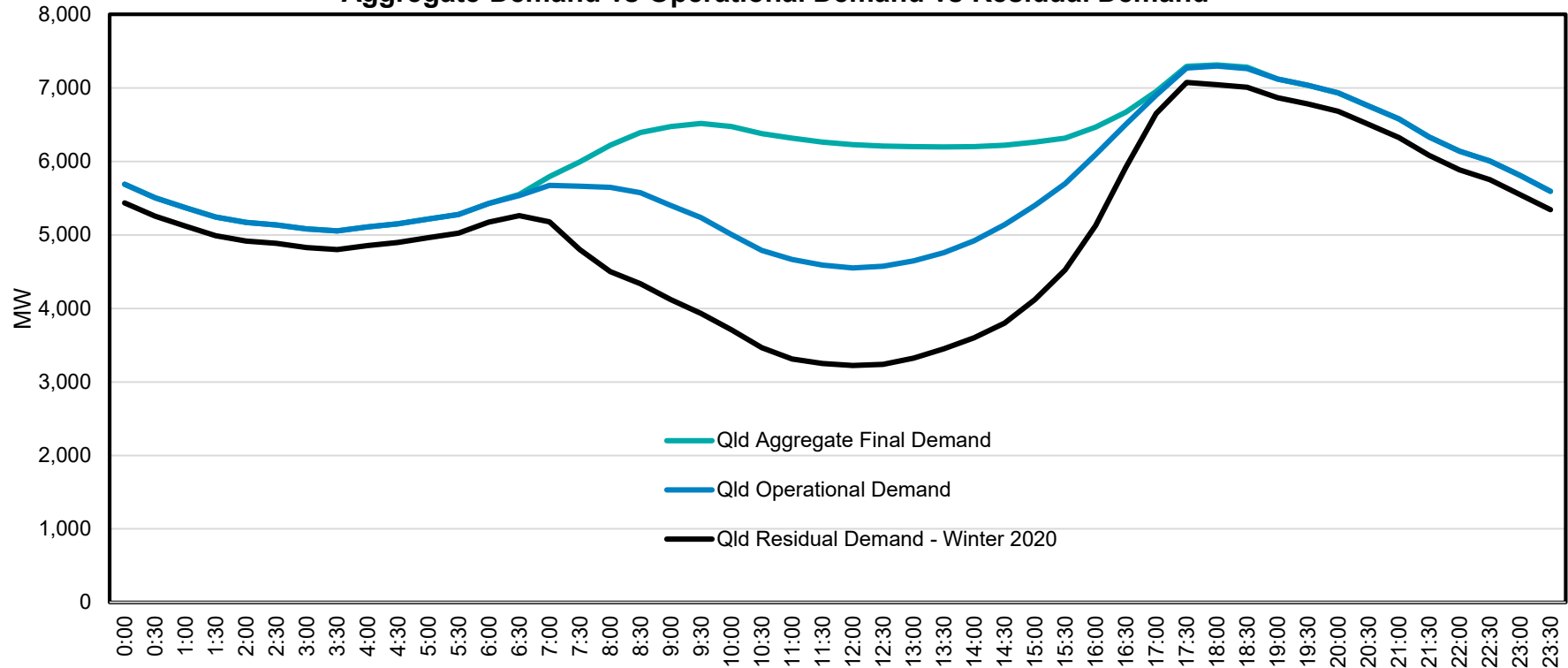
Qld 'Mass Market' Net System Load Profile (90-day summer & winter average)



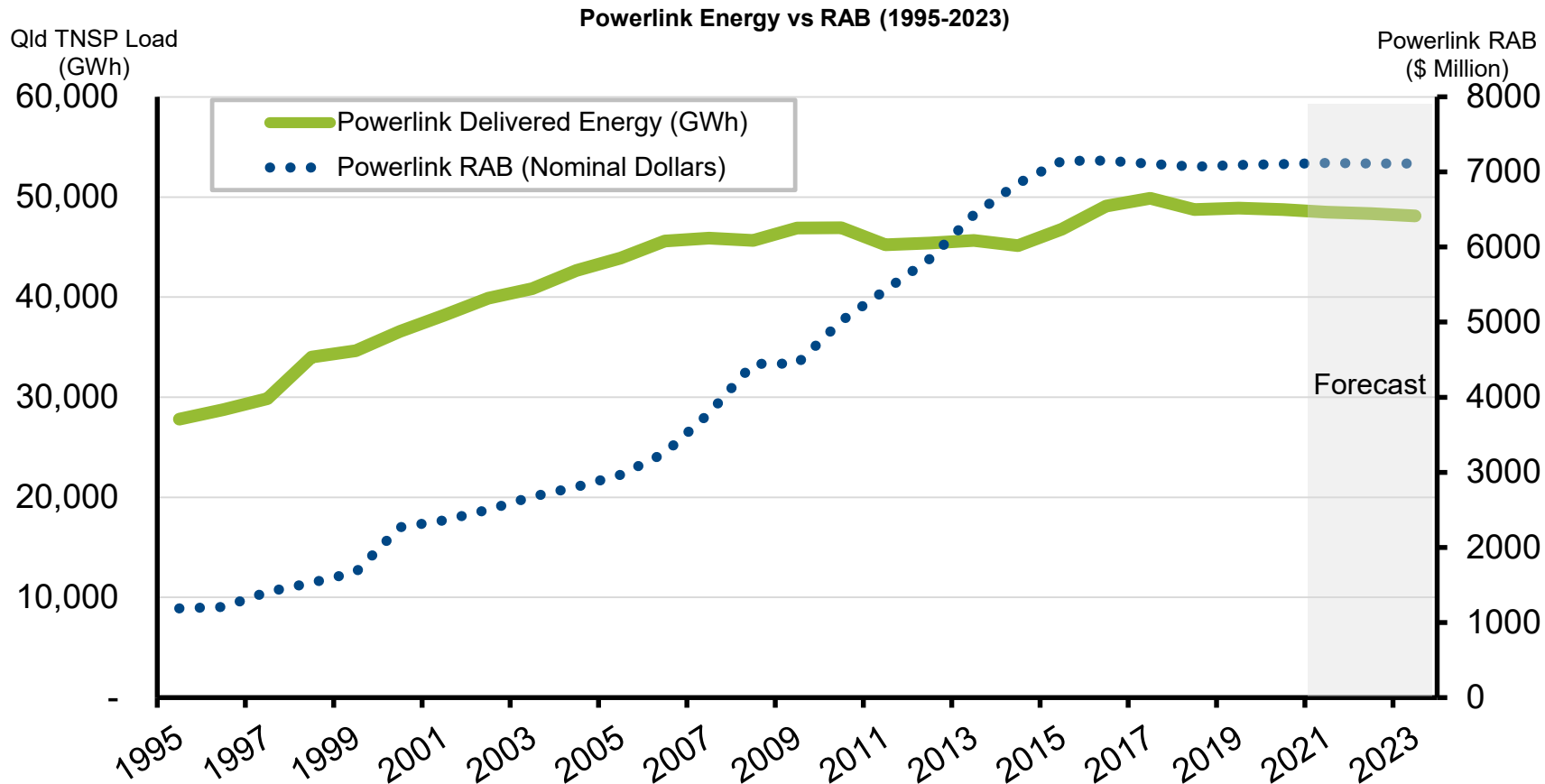
Queensland final demand



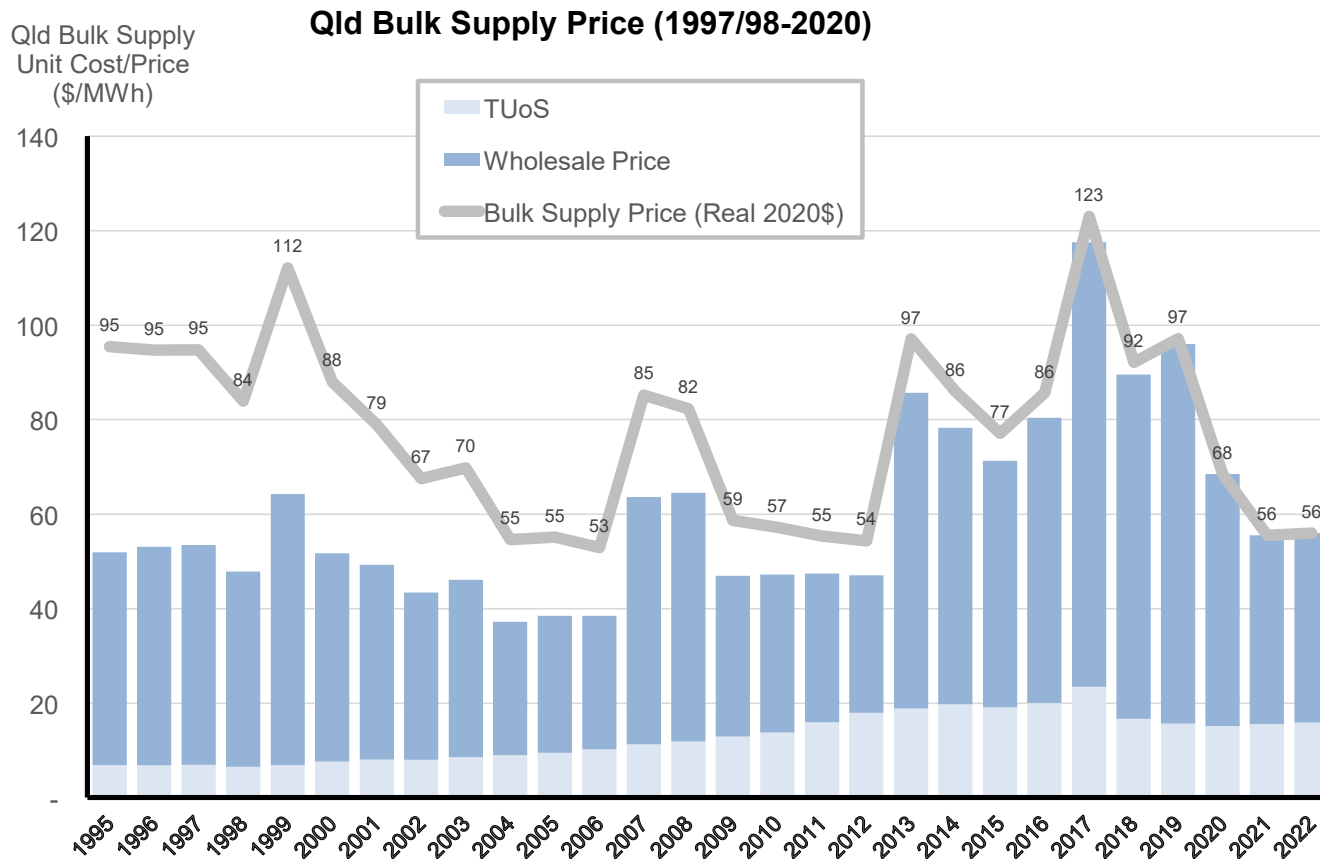
Aggregate Demand vs Operational Demand vs Residual Demand



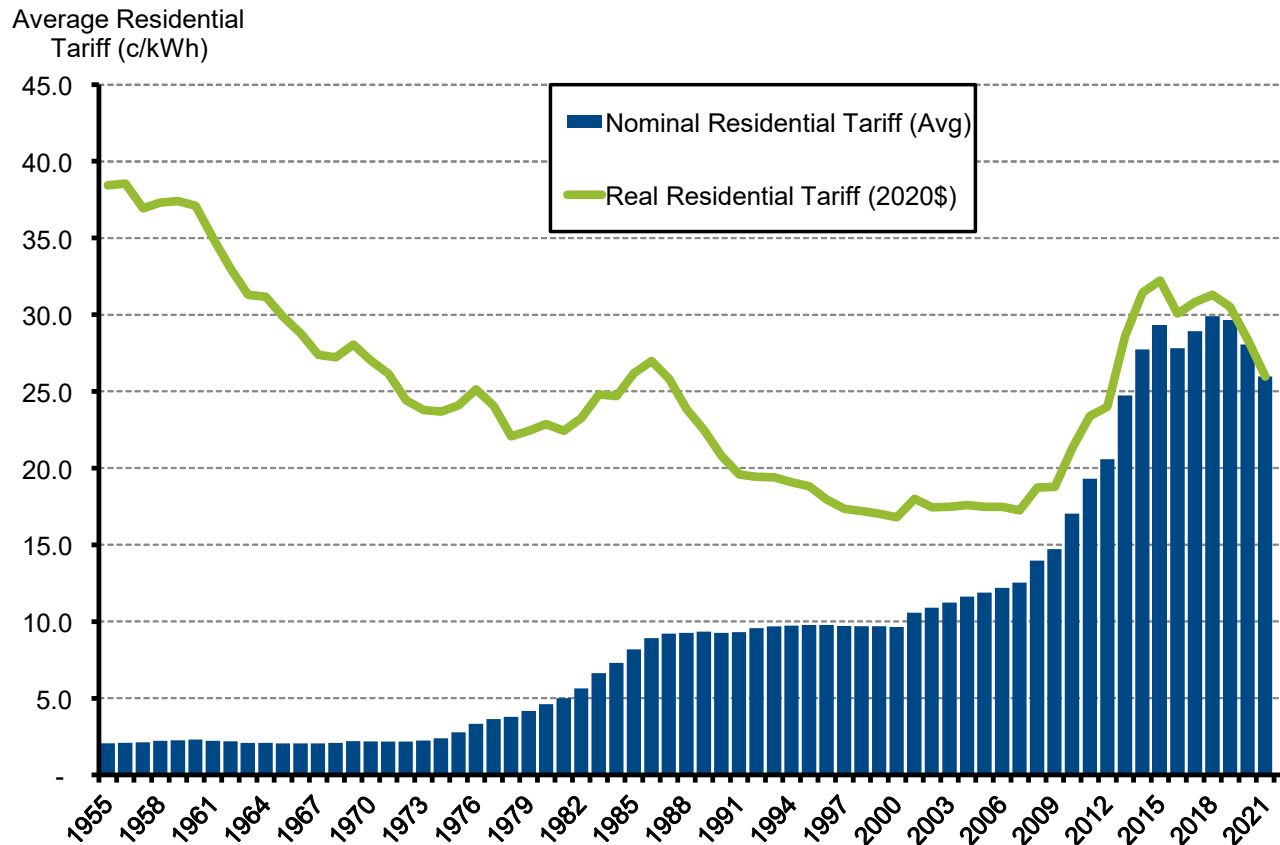
Powerlink delivered energy



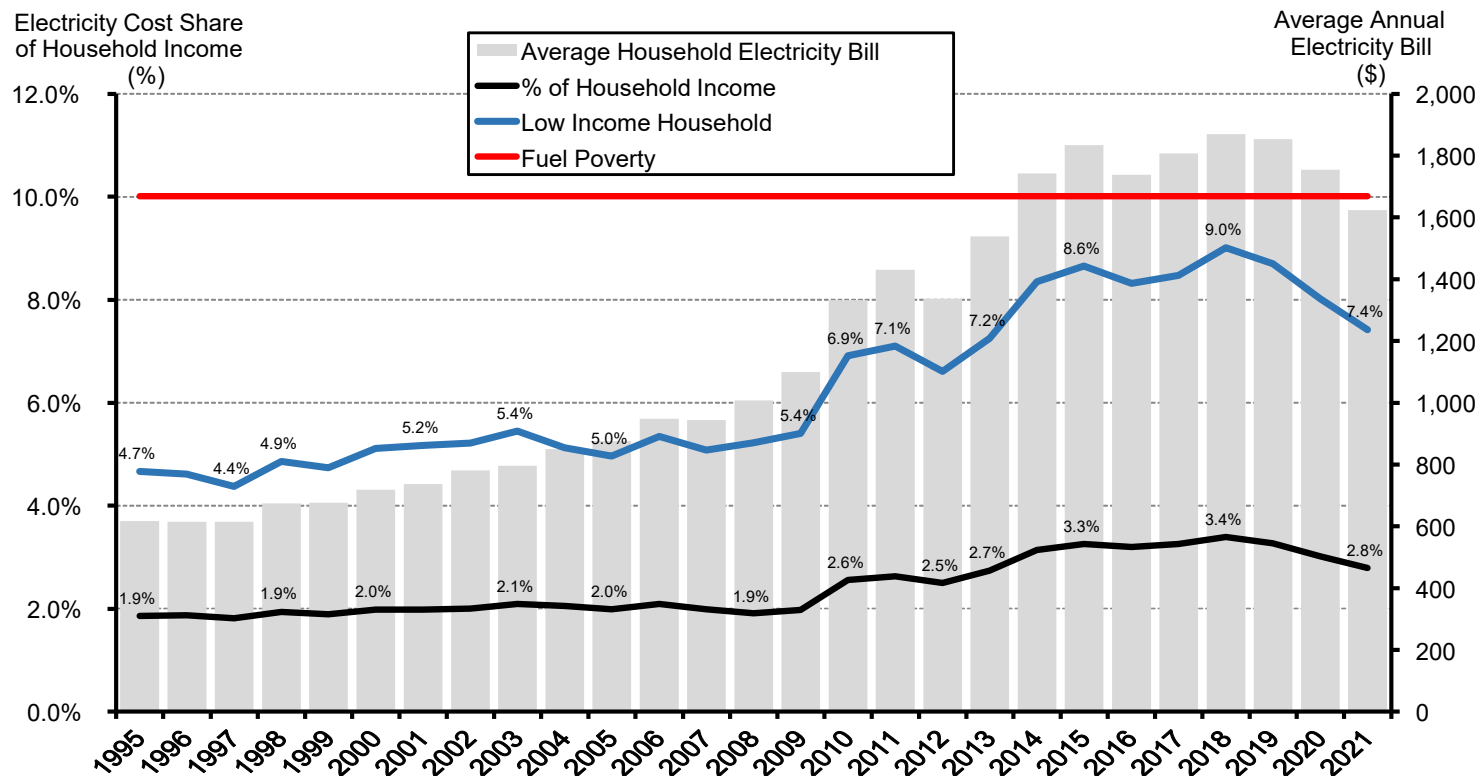
Queensland bulk supply price



Queensland Residential Tariffs (Average)



Electricity Bill and Household Income (pre-concession)



Sources: ABS, ESAA, AEC, QCA

Fuel poverty: household cannot afford its energy supply at reasonable cost, given its income (i.e. > 10% of disposable income).

A large, light gray circular graphic containing a map of Queensland, Australia. Overlaid on the map is a network of white lines representing power transmission infrastructure, with several circular nodes indicating key substations or interconnectors.

To undertake engagement to deliver a Revenue Proposal that is capable of acceptance by our customers, the Australian Energy Regulator and Powerlink.

Questions

