

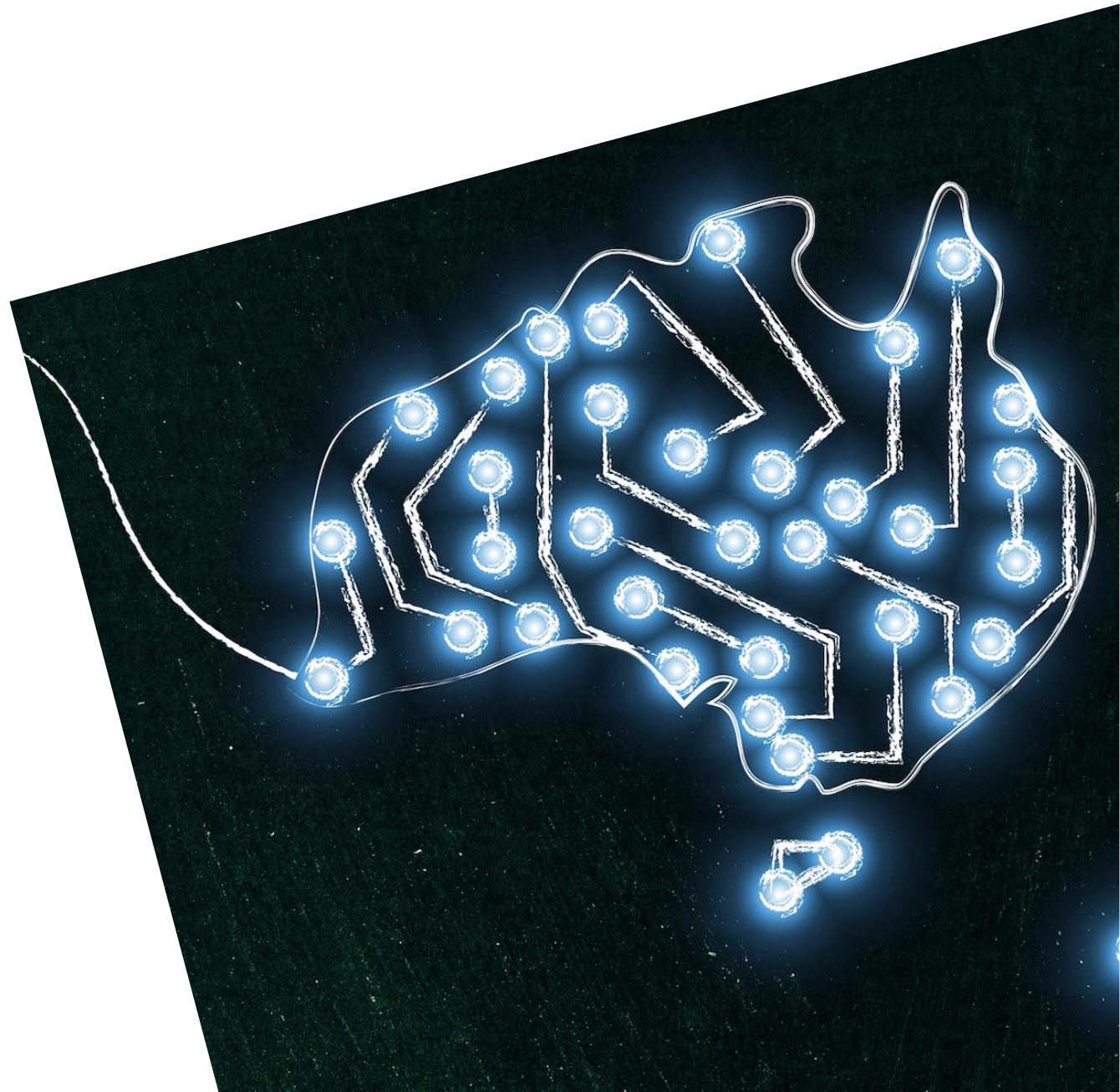


Quarterly Energy Dynamics Q3 2020

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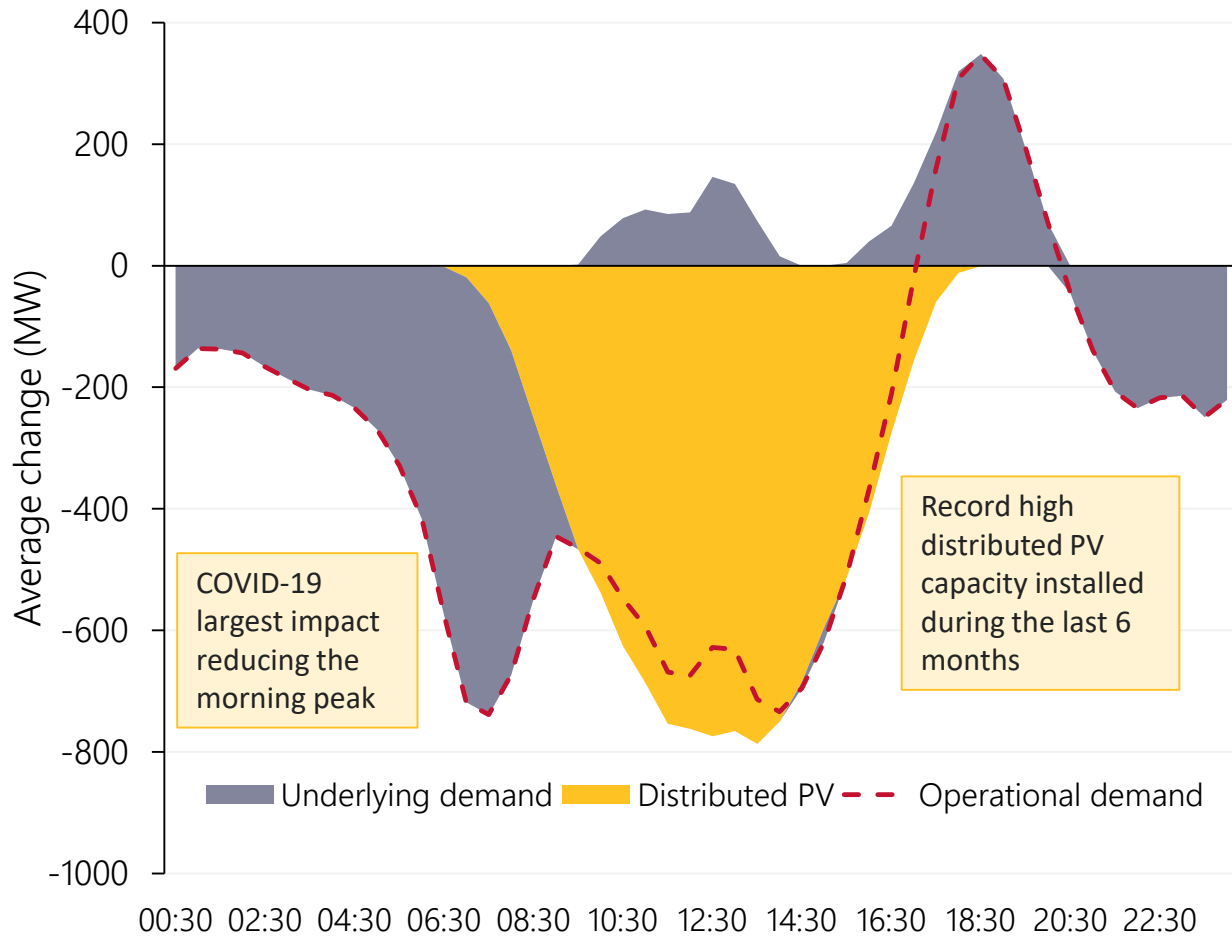


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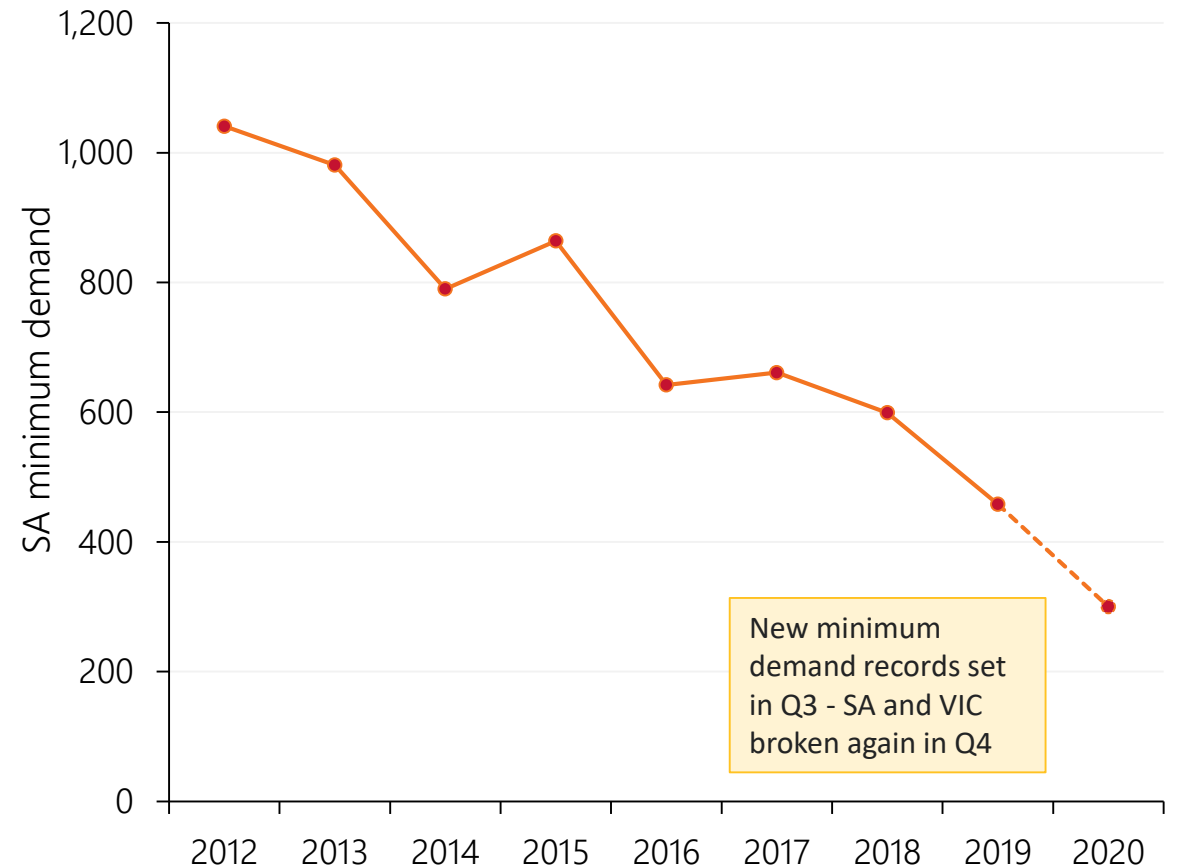


Distributed PV and COVID-19 shaped NEM operational demand

NEM operational demand down 1.4%

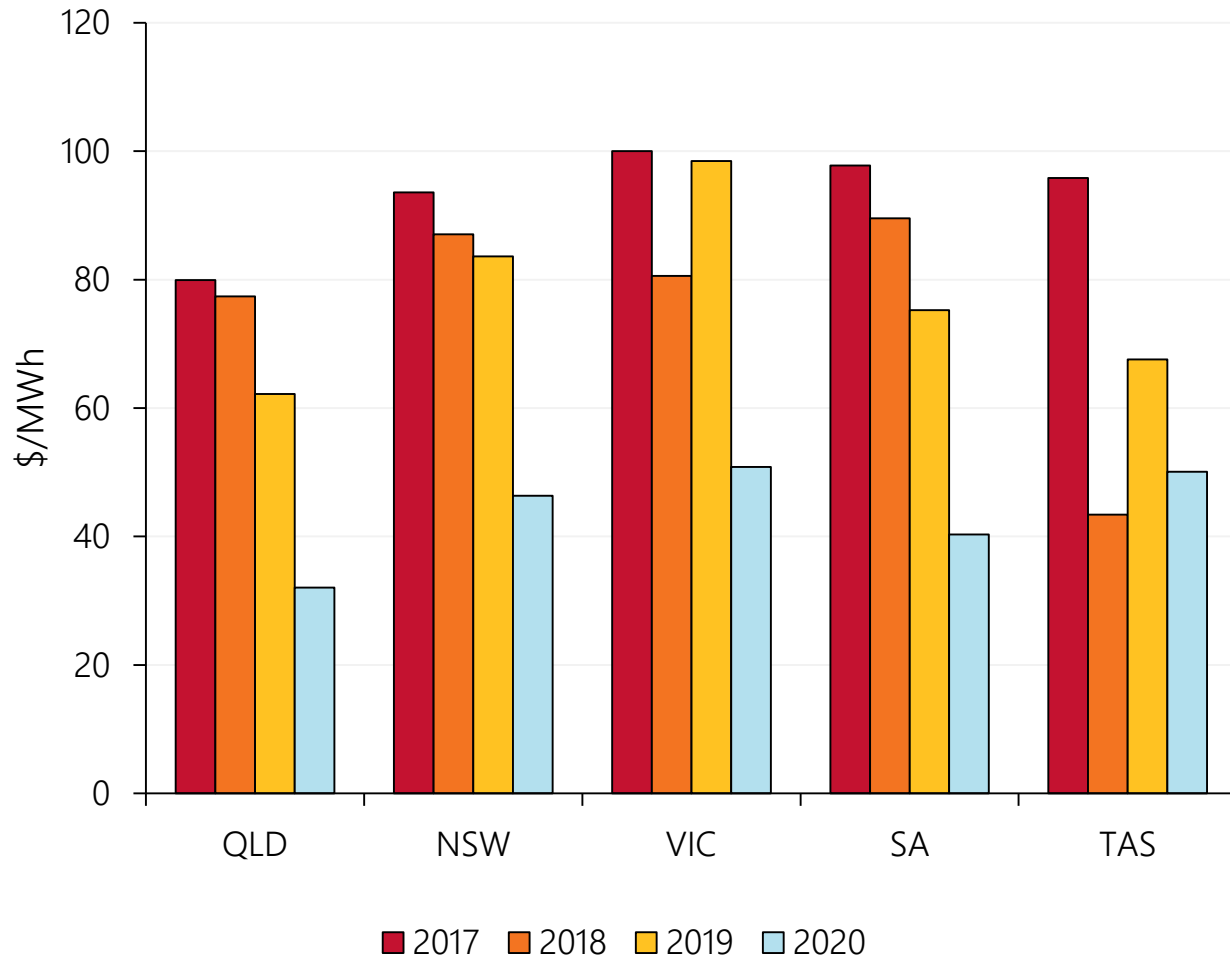


Rapid decline in minimum demand



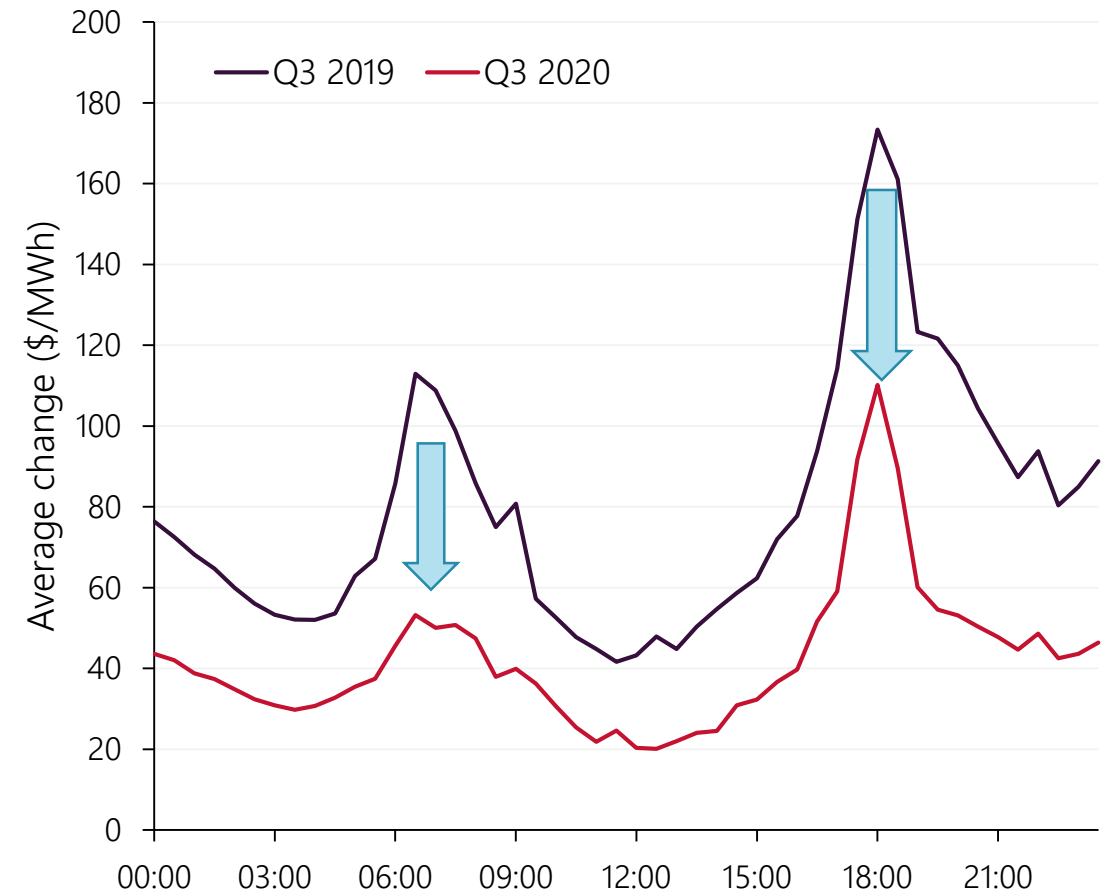
Lowest Q3 electricity prices since 2014

Mainland NEM spot prices decline ~50%



Largest spot price reductions during the evening peak

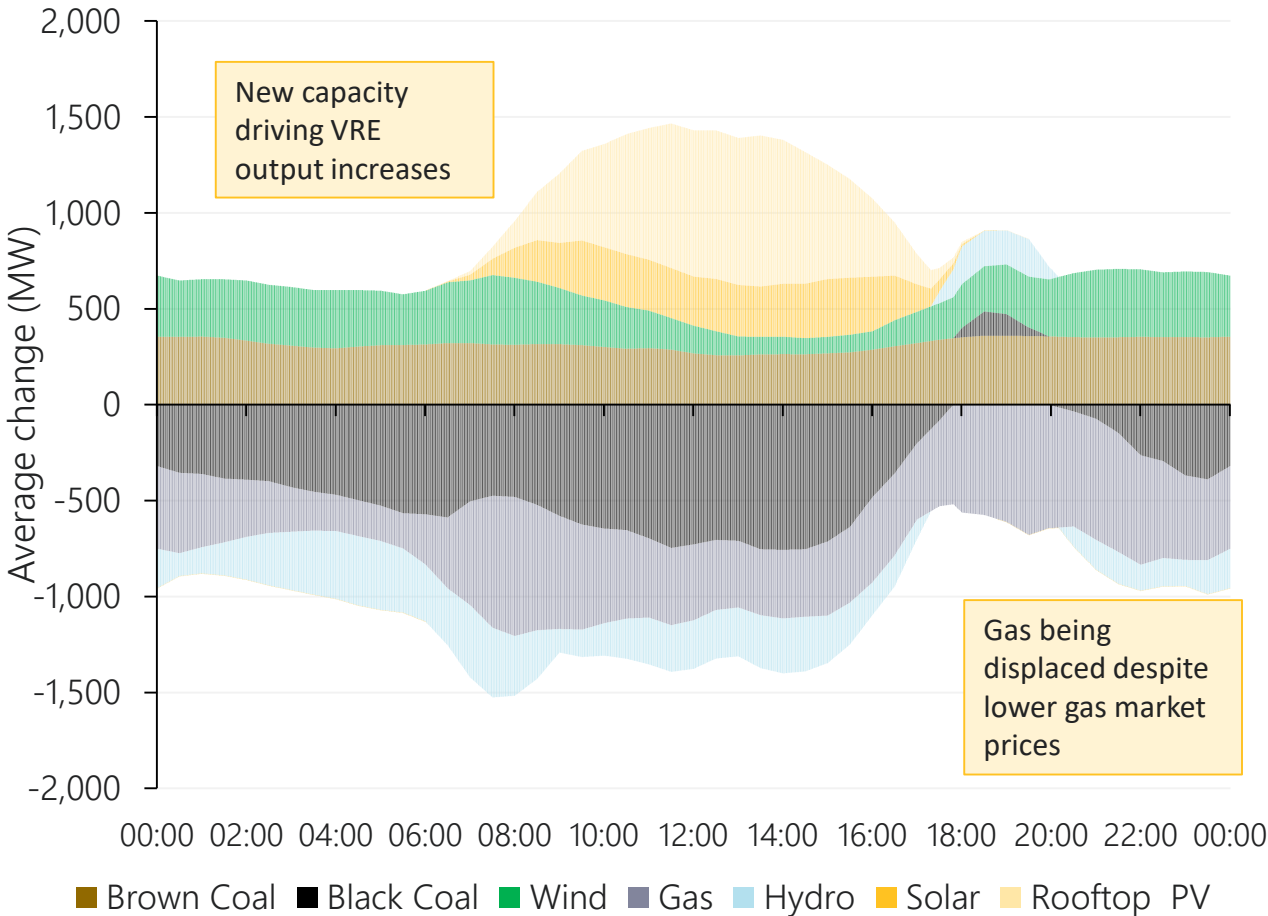
Change in mainland NEM average spot prices by time of day



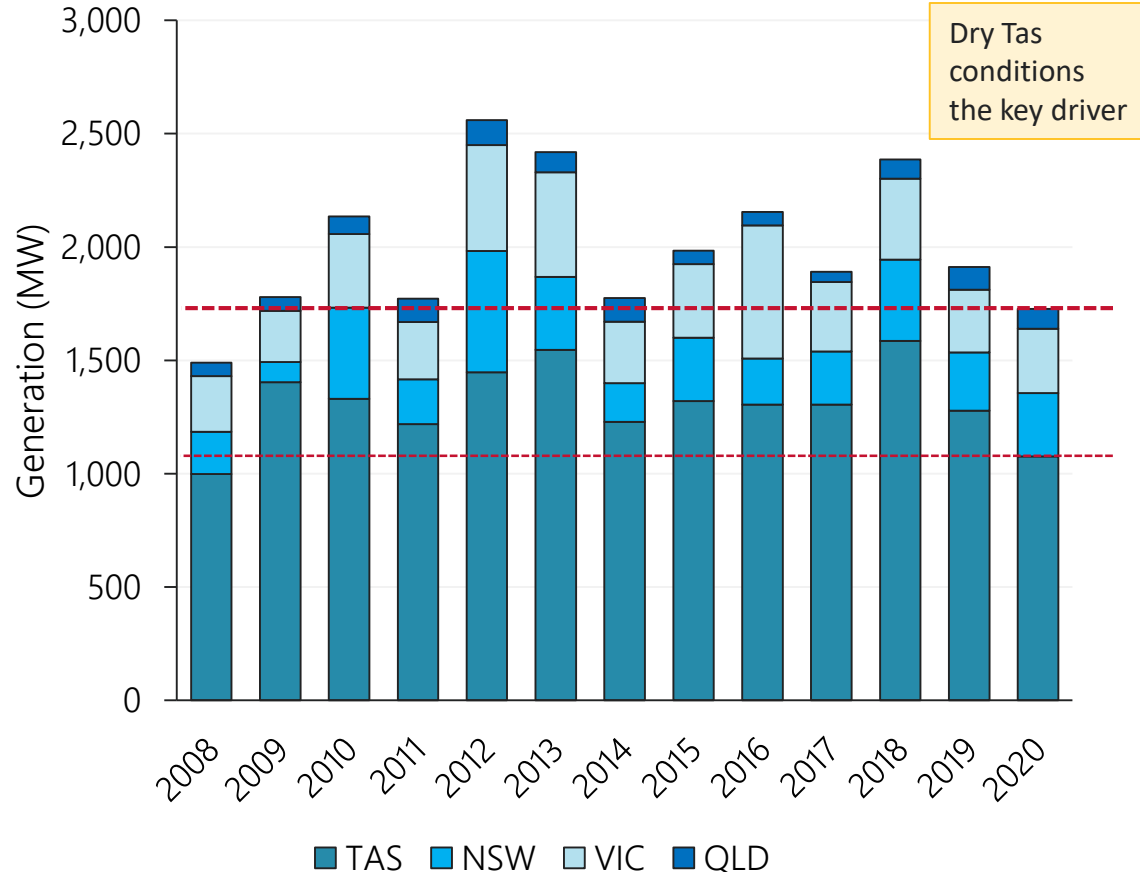
Return of coal stations displaces gas

Gas squeezed out despite lower prices

Change in supply – Q3 2020 versus Q3 2019 by time of day

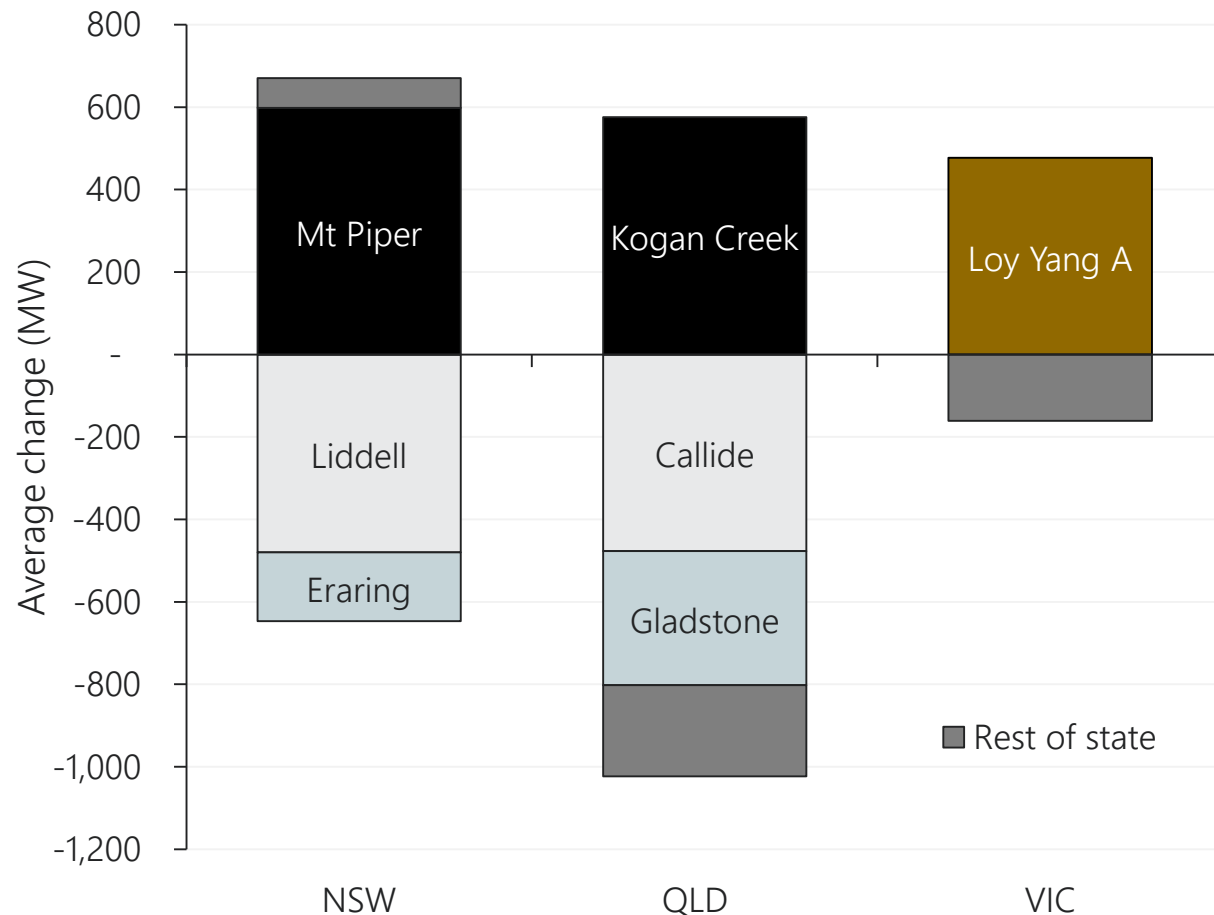


Dry July: lowest Q3 hydro output since 2008



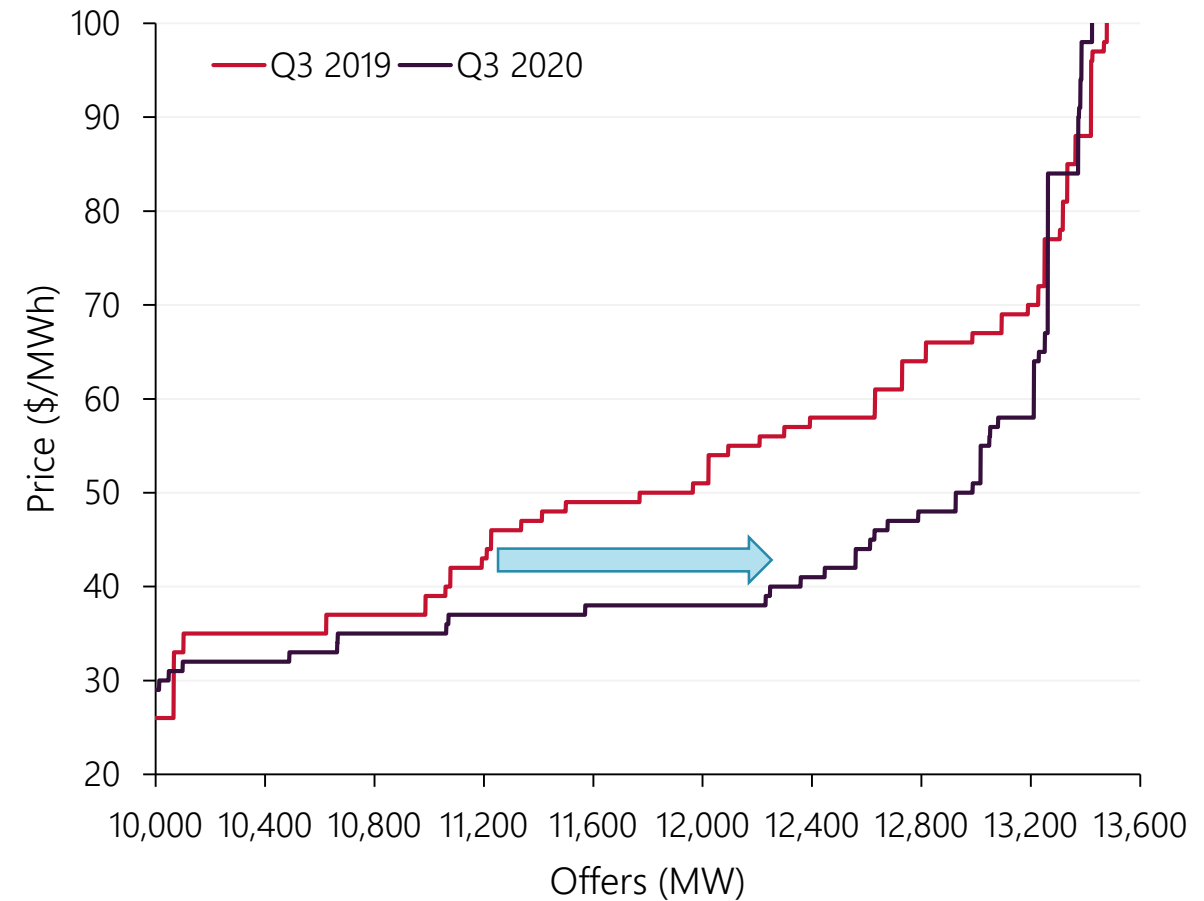
Mixed results for coal-fired generation

Change in output compared to Q3 2019



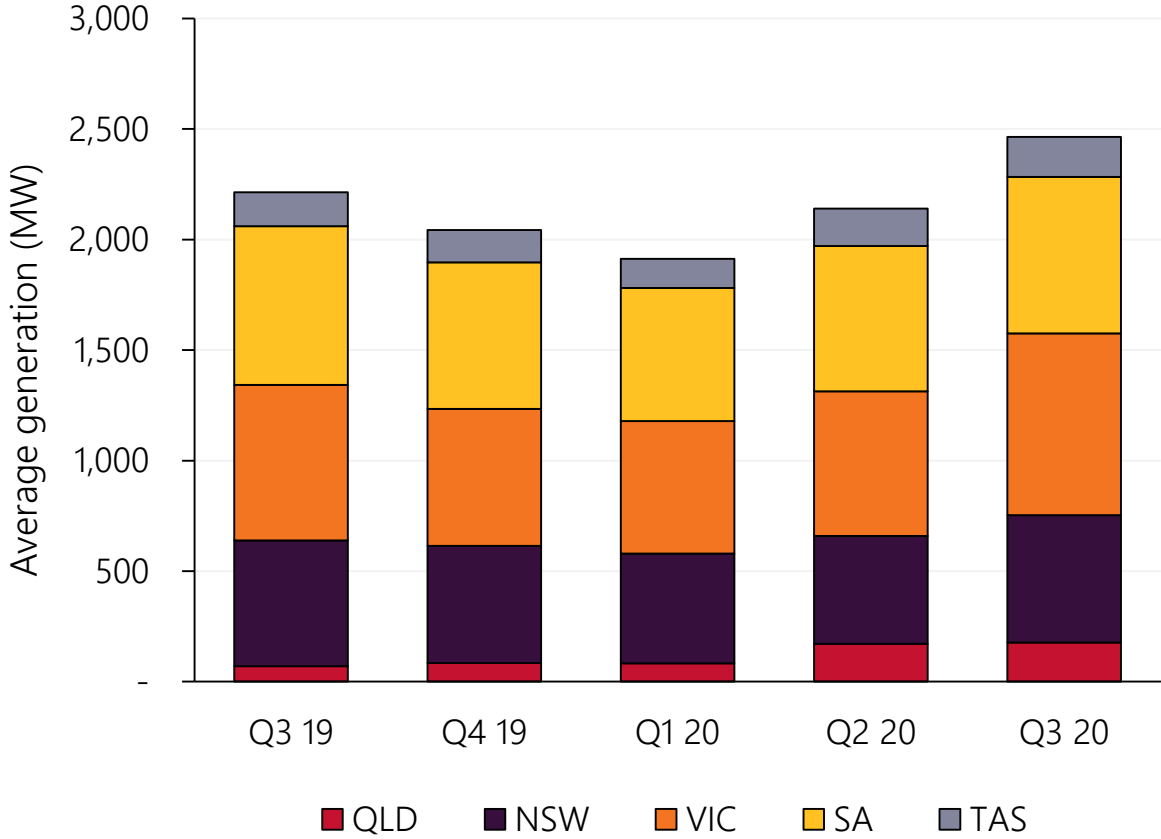
Black coal bidding at lower prices

NEM black coal-fired generation bid supply curve

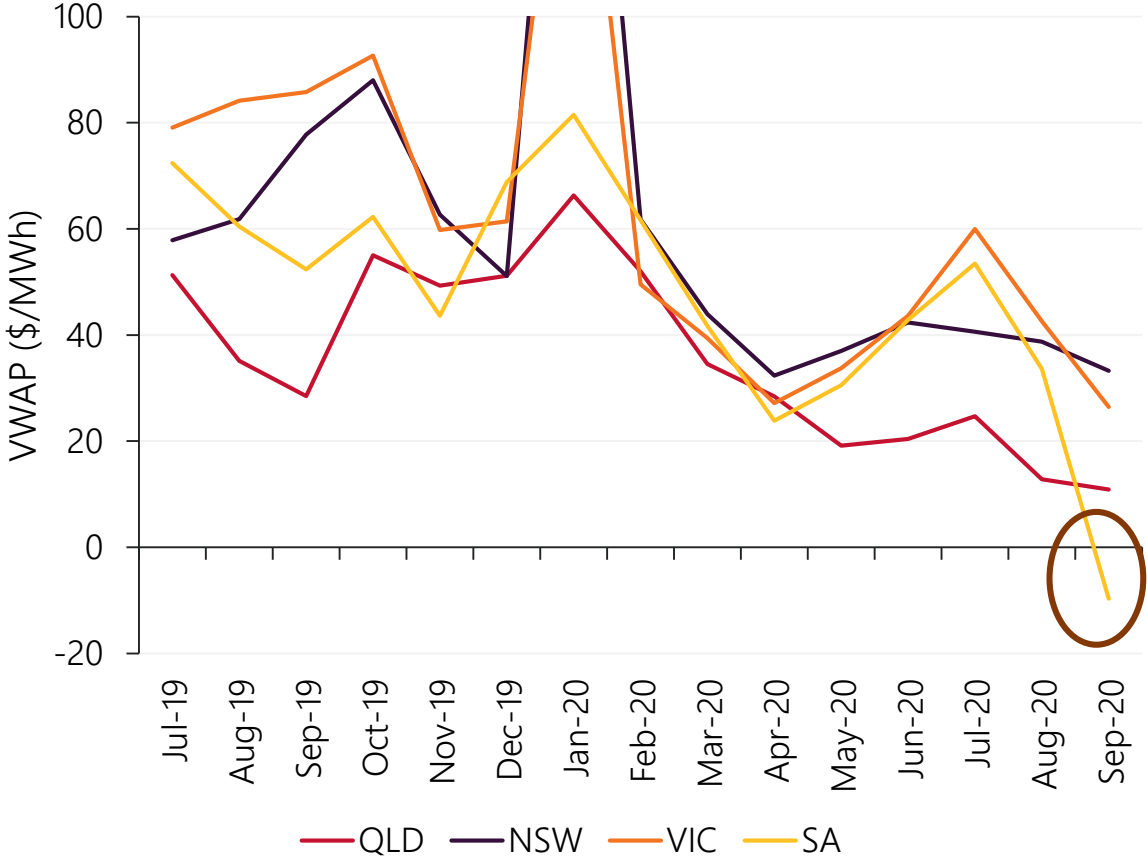


Record quarterly VRE generation

Quarterly wind output reached record levels

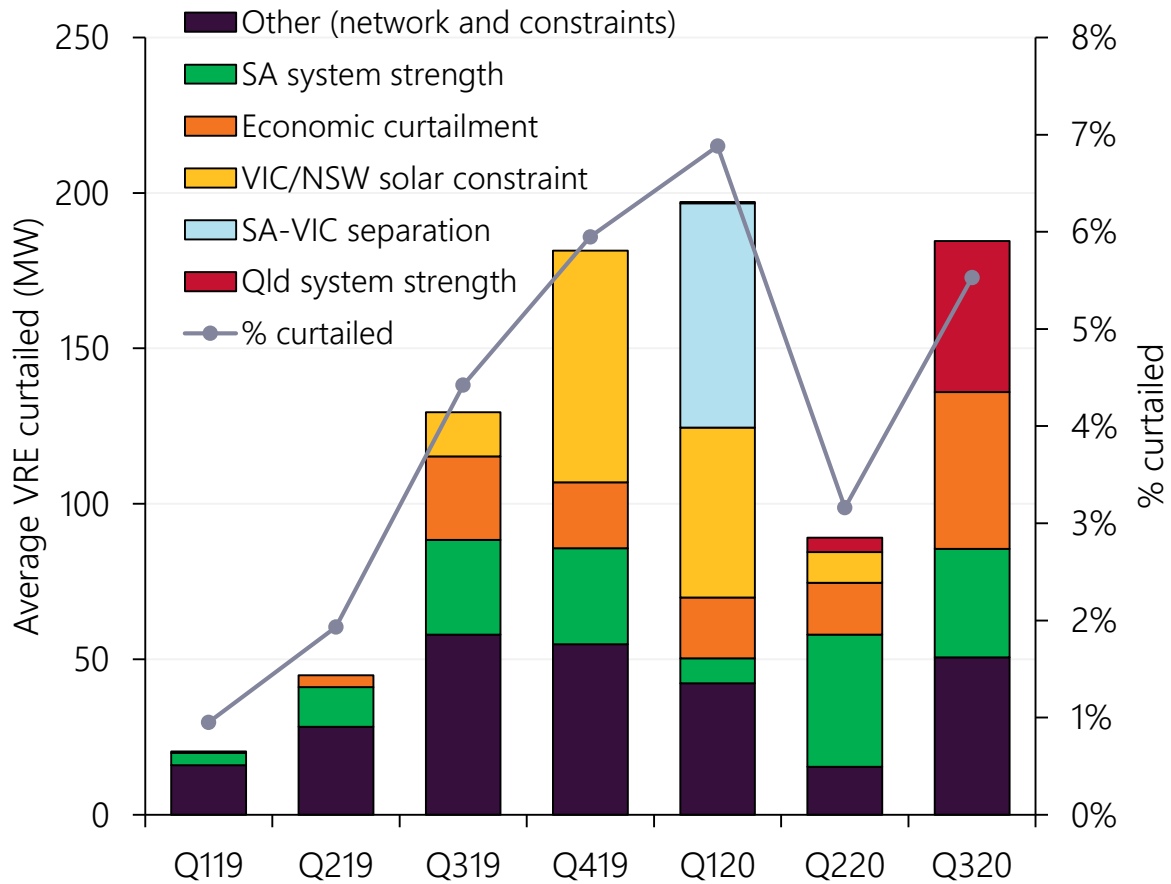


SA solar generators paid to generate in September

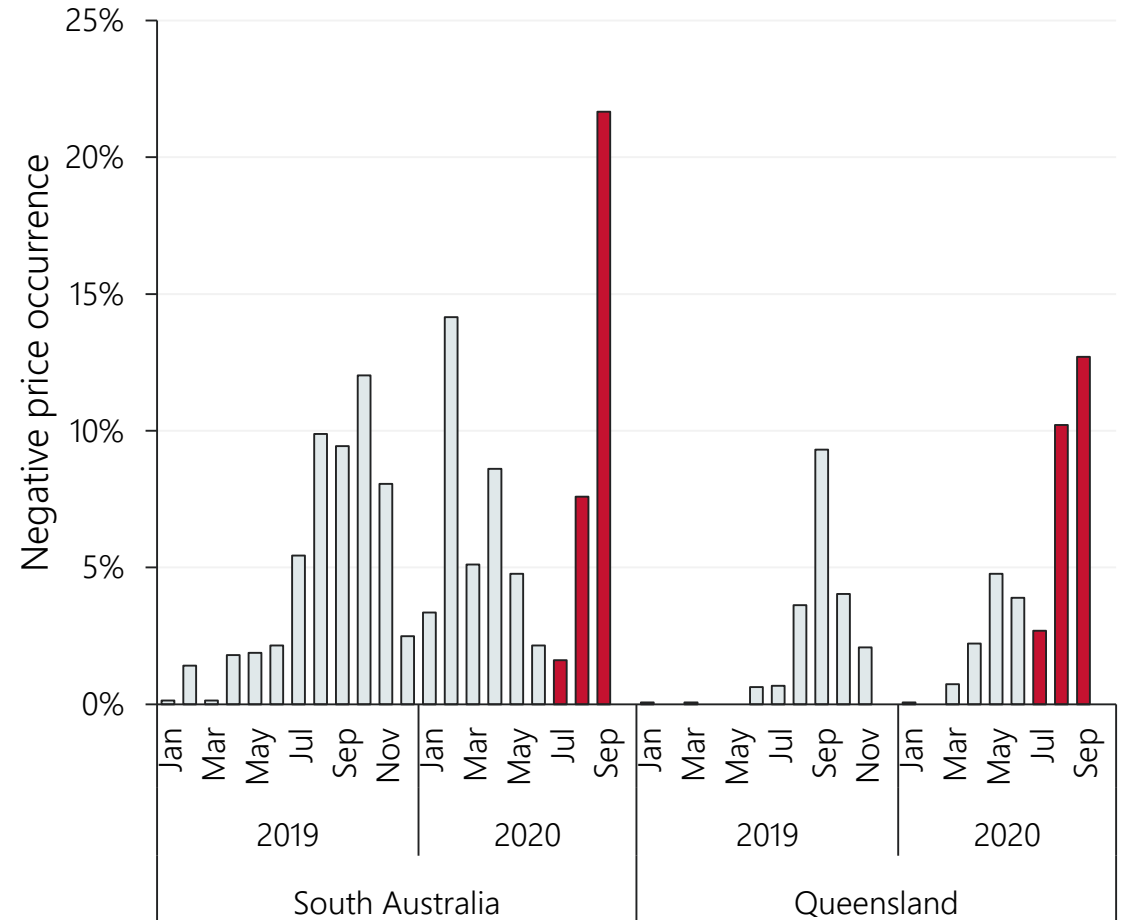


Wind and solar curtailment on the rise

VRE curtailment on the rise again

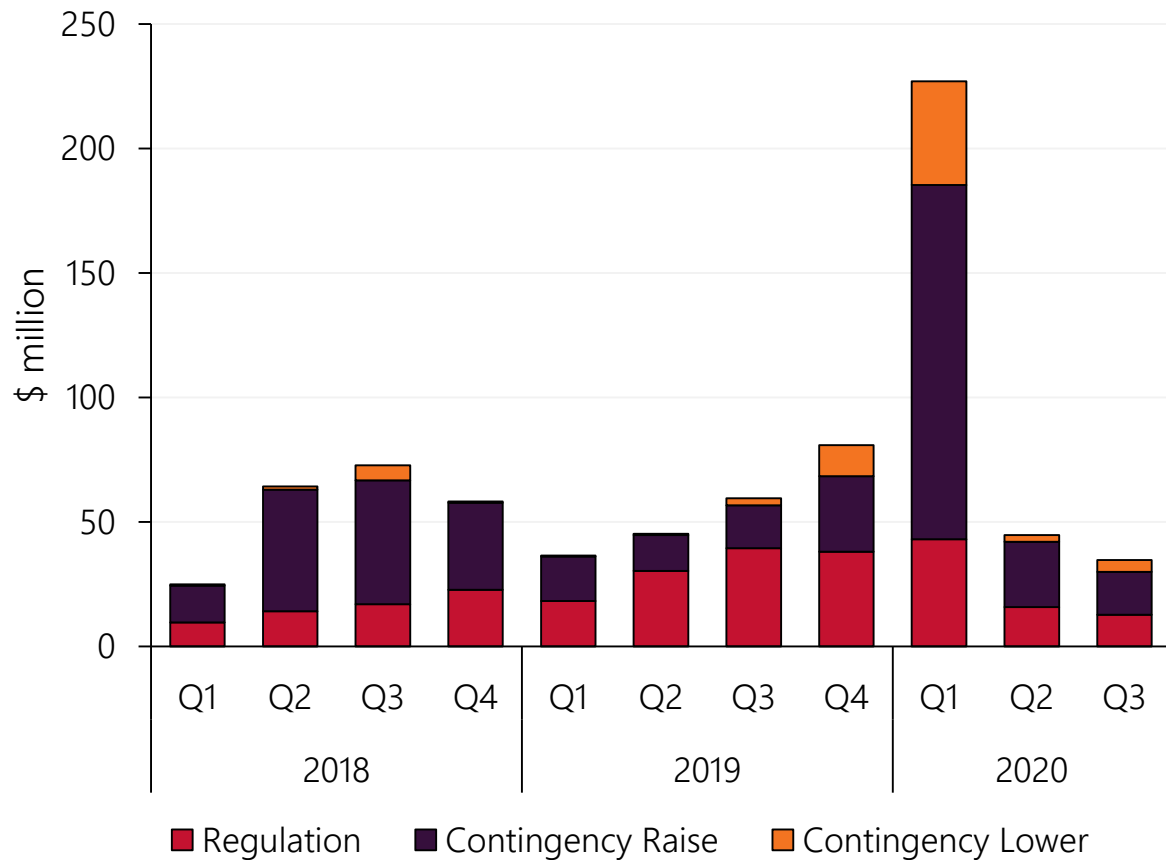


Record negative price occurrences in SA & QLD

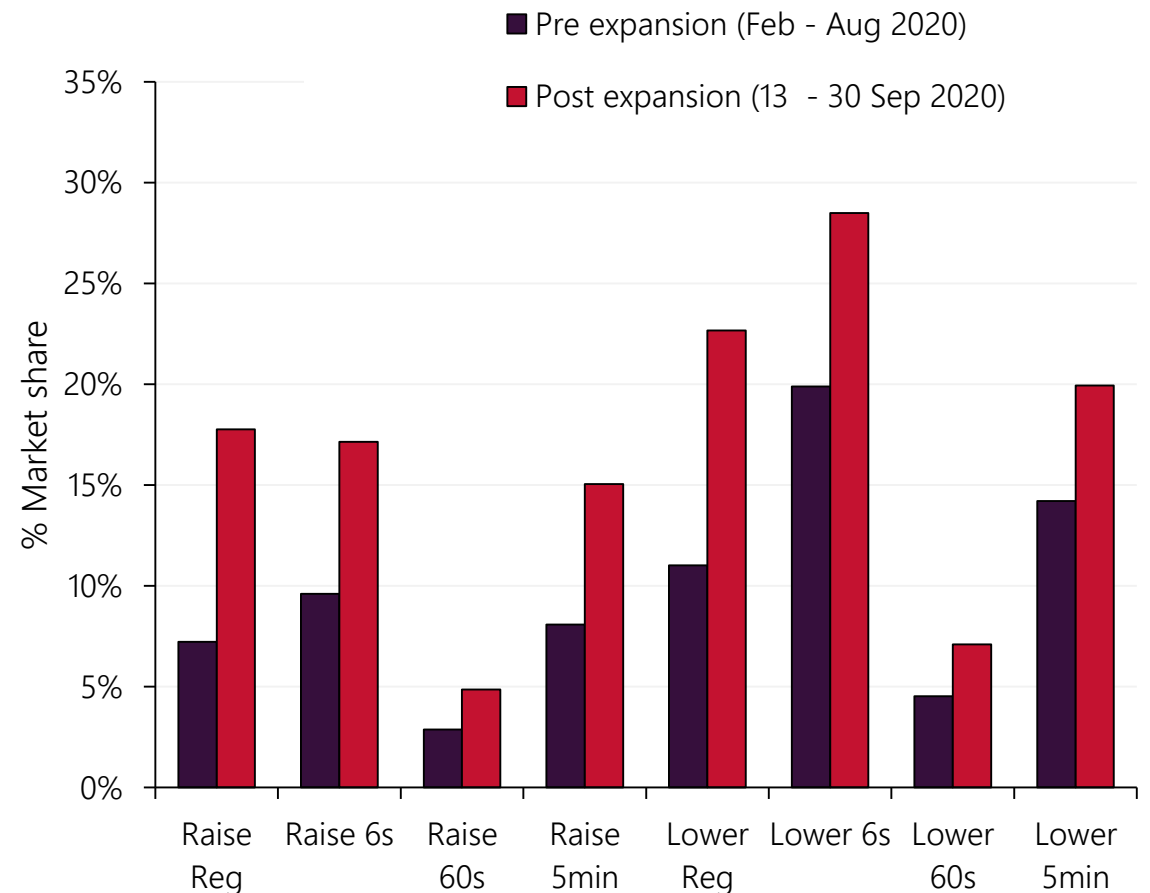


FCAS costs decline; Hornsdale battery adds new supply

Lowest FCAS costs since Q1 2018

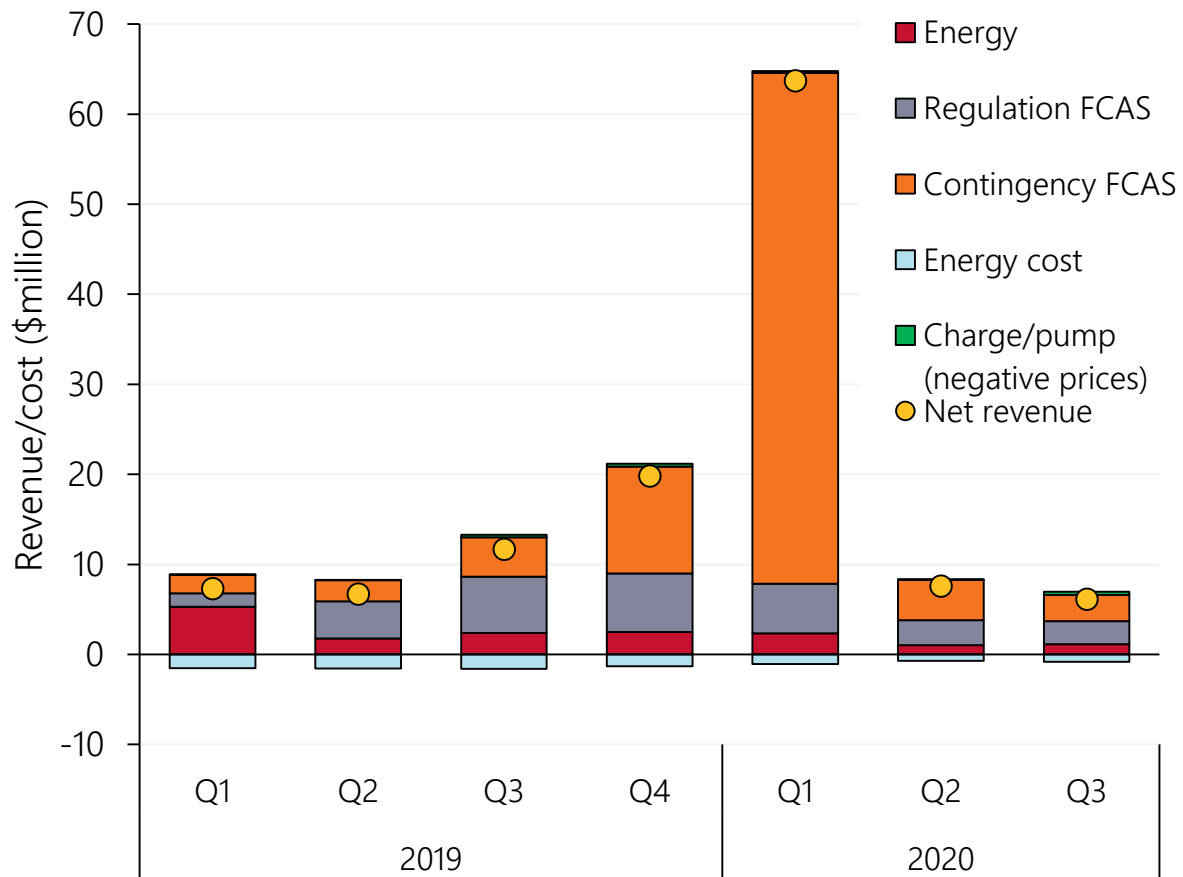


Hornsdale battery captures 17% of NEM wide FCAS market share following expansion

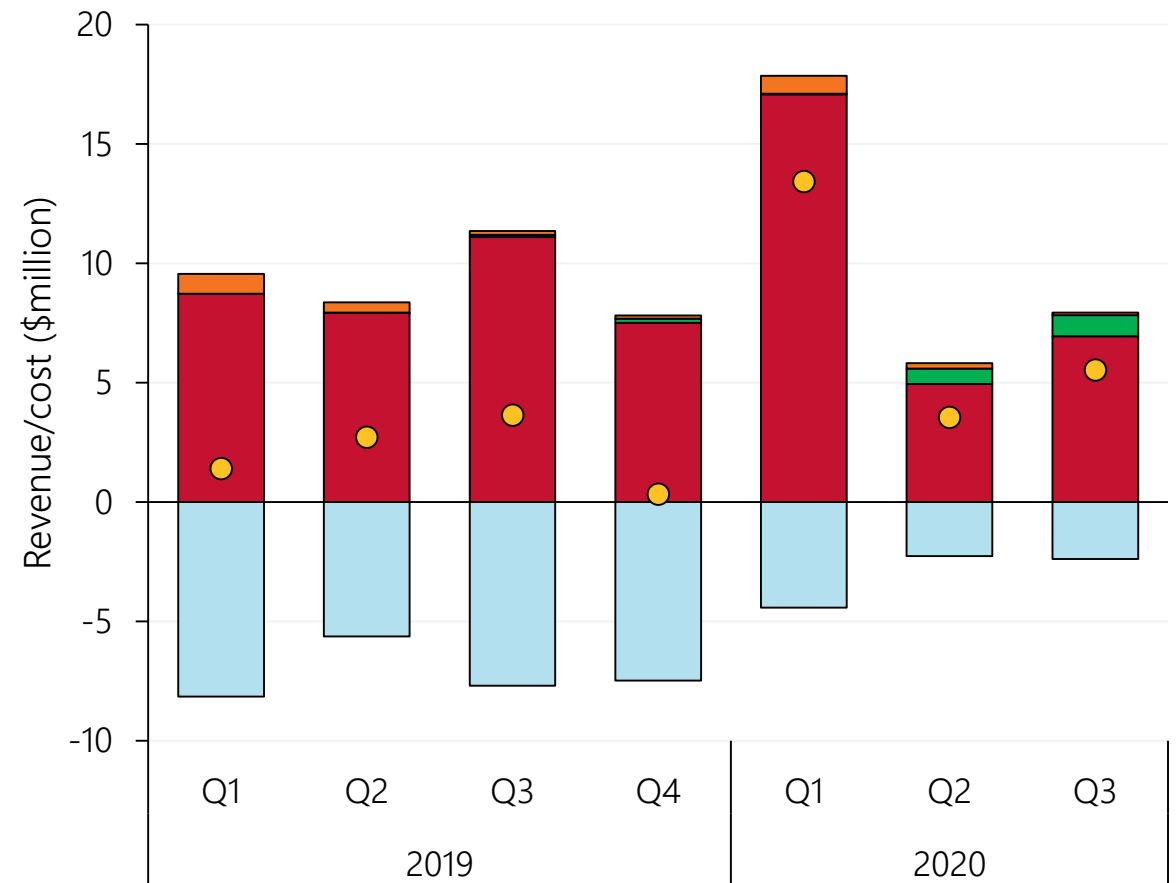


Batteries net revenues down; pumped hydro up

Lowest battery market revenue since Q4 2018

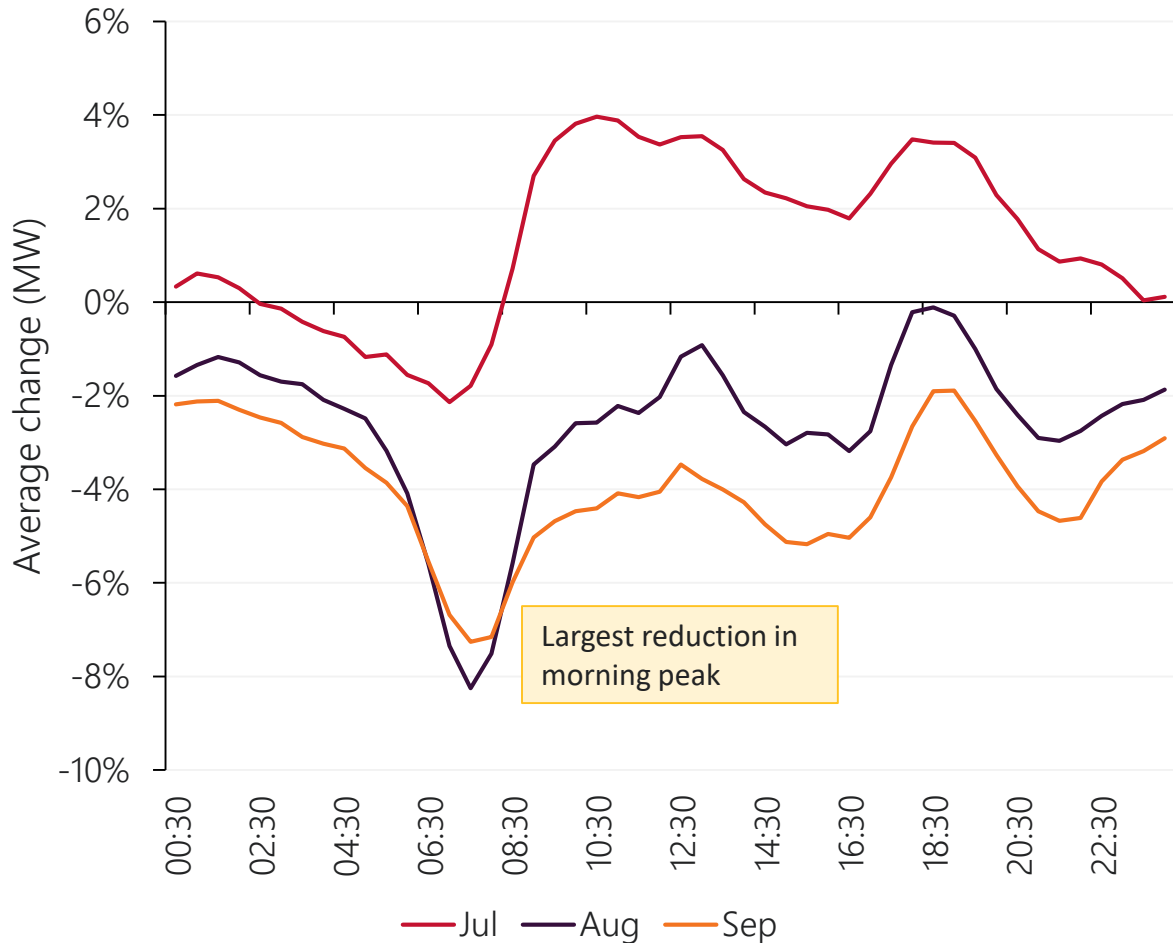


Pumped hydro net revenue higher in 2020 than 2019



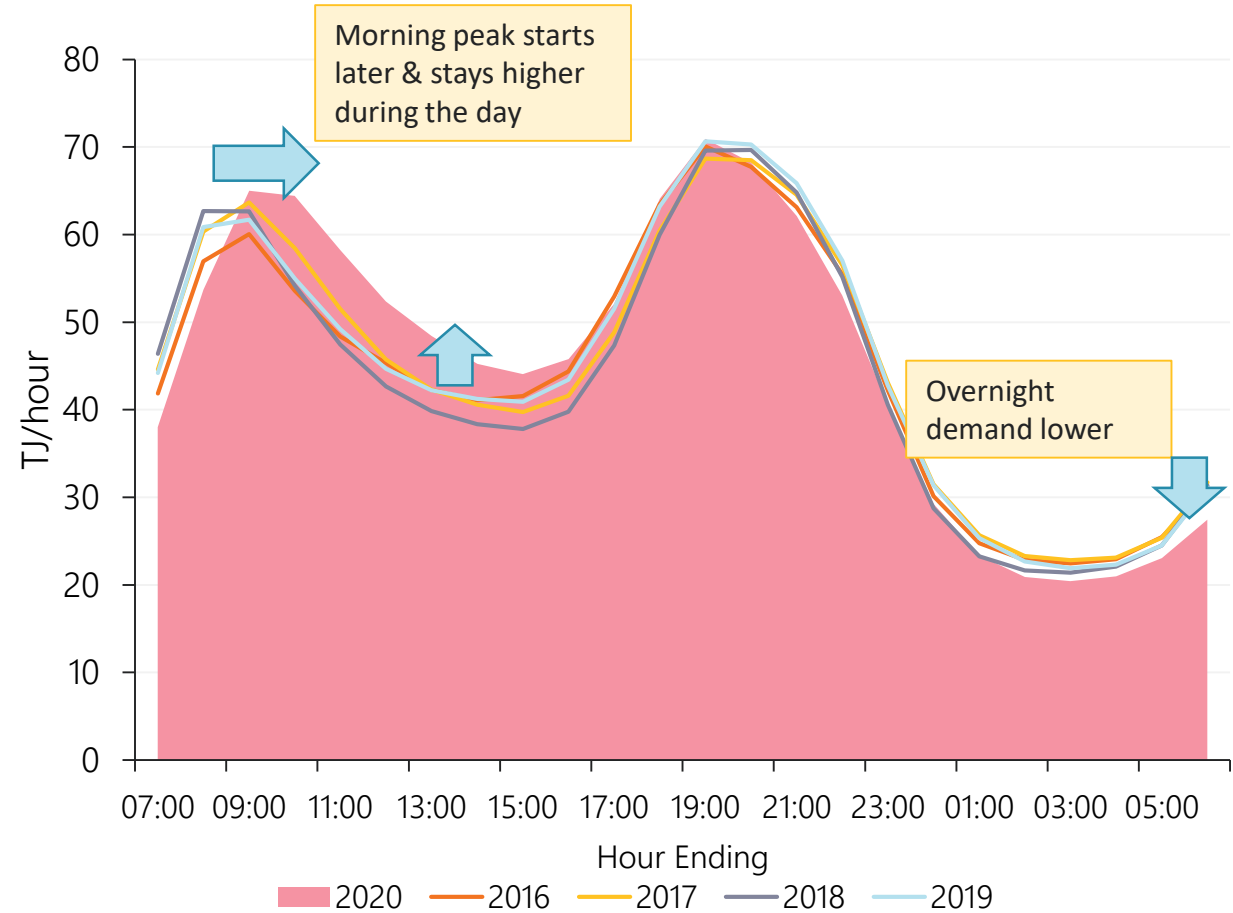
Vic lockdown impacts energy shape

Electricity morning peak reduced



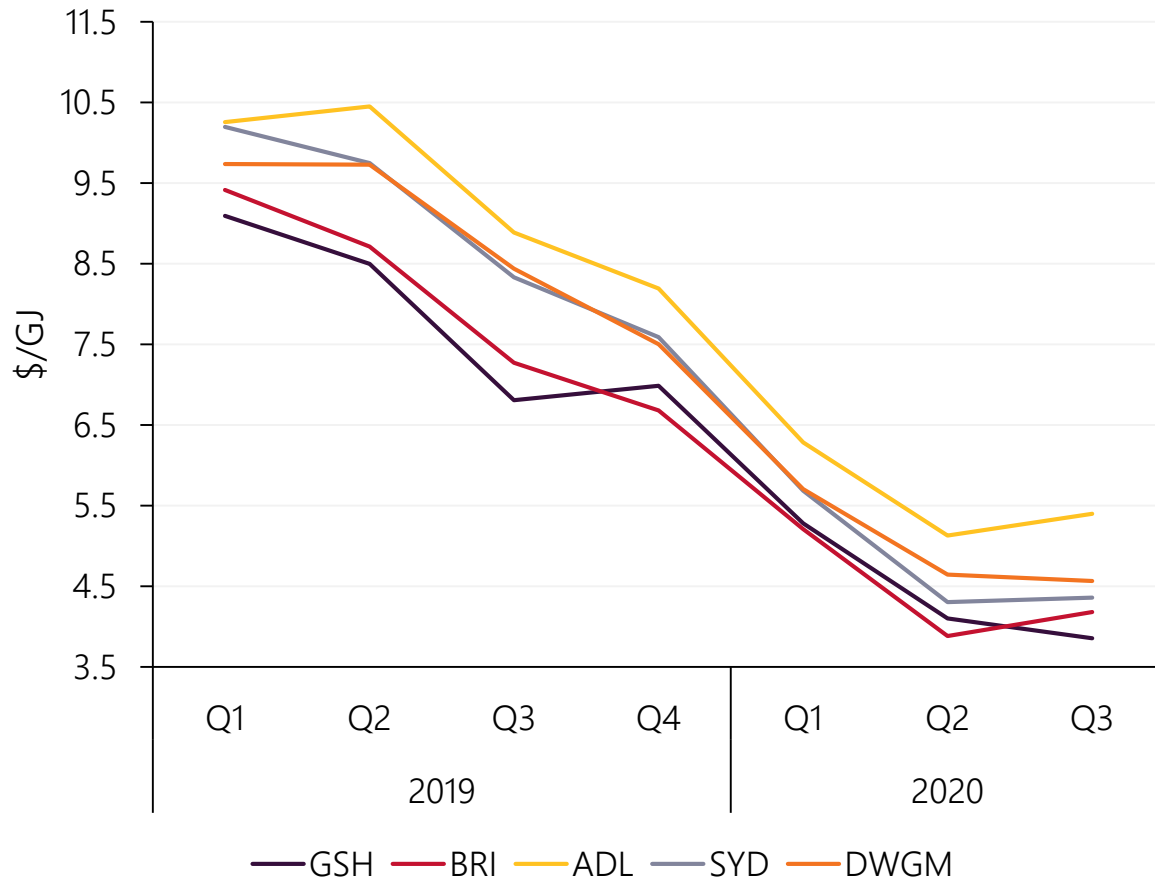
Higher demand during day on cold days

Days where demand exceeds 1,100 TJ

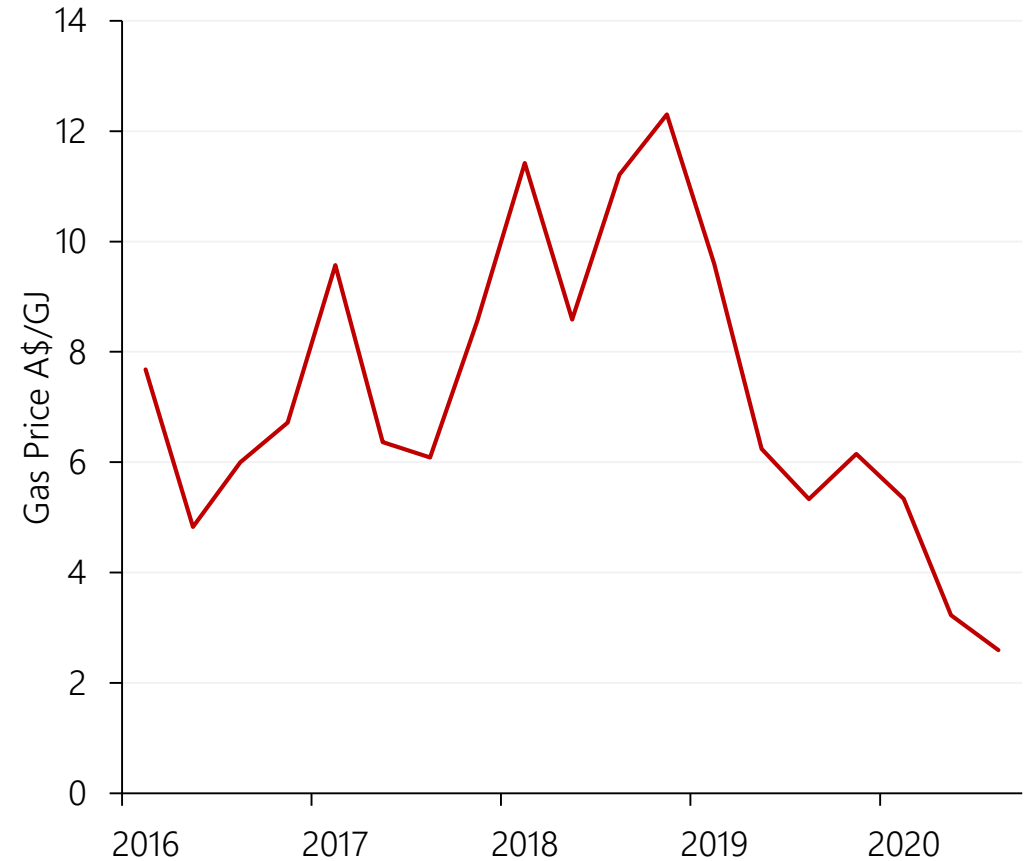


Lowest Q3 gas prices since 2015

Gas spot prices also fall up to 50%

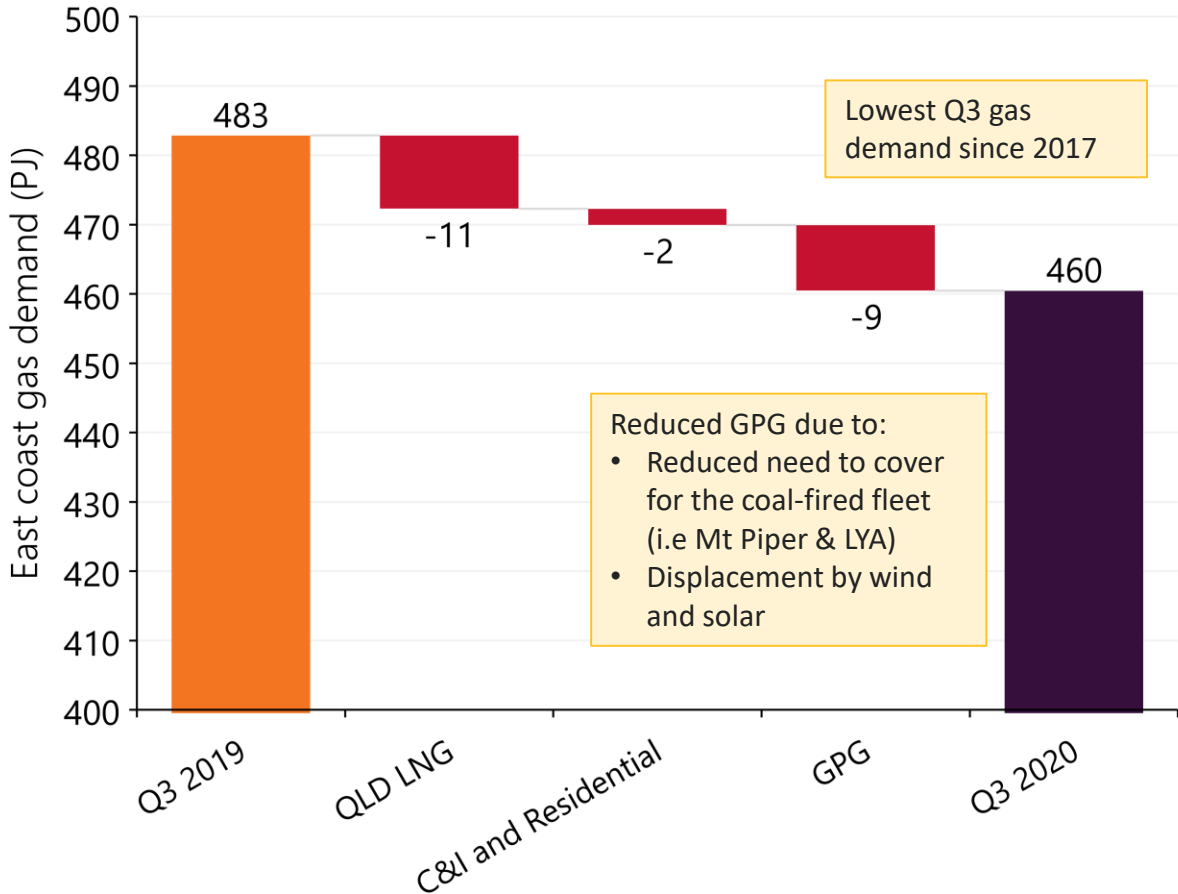


ACCC netback prices at record lows



East coast gas demand falls 5%

LNG and GPG drive gas demand reductions



QLD LNG exports fall to lowest levels in 2 years

