



# Quarterly Energy Dynamics report Q1 2021

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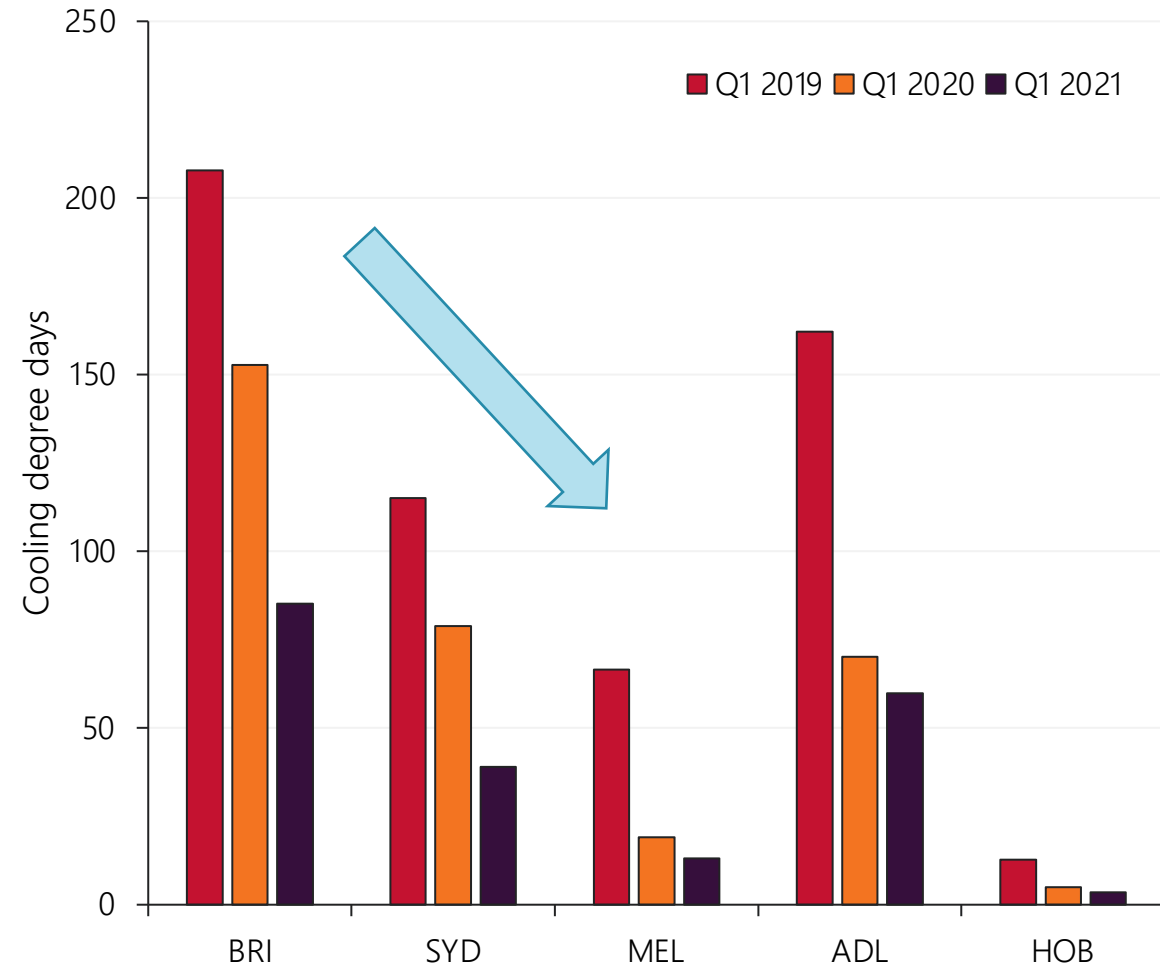


@MEIunimelb #MEIxAEMOSeminar



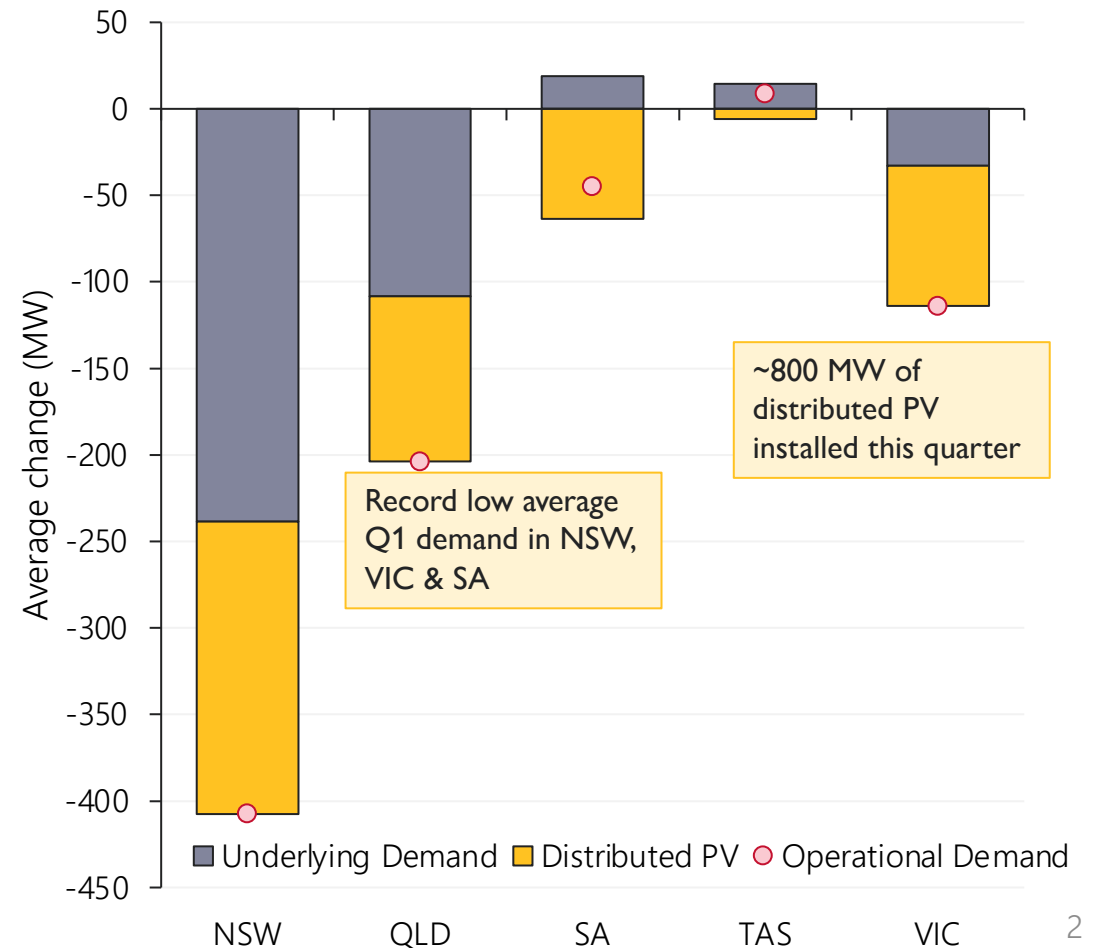
# Mild weather cuts energy demand

## Mild Q1 cuts cooling requirements



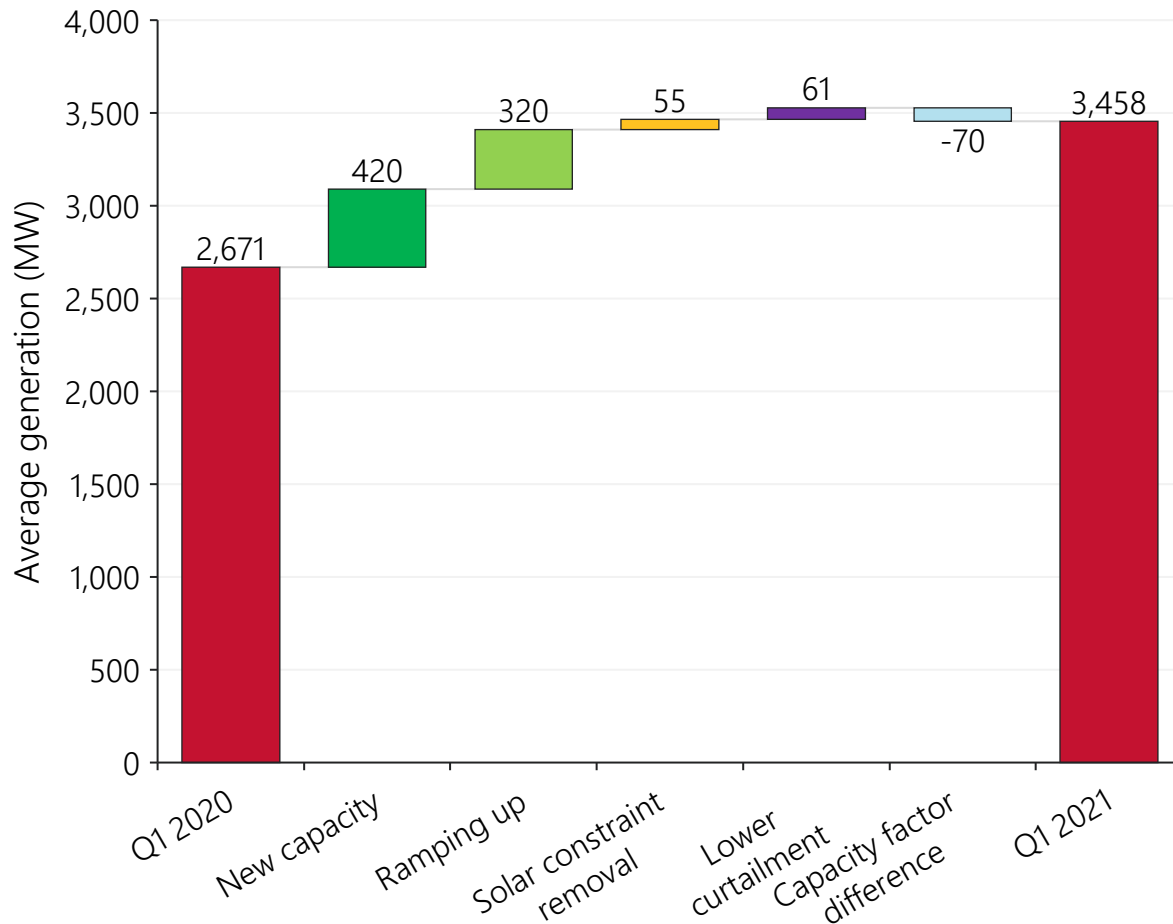
## NEM demand drops 761 MW (3%)

Change in operational demand by state – Q1 2021 vs Q1 2020

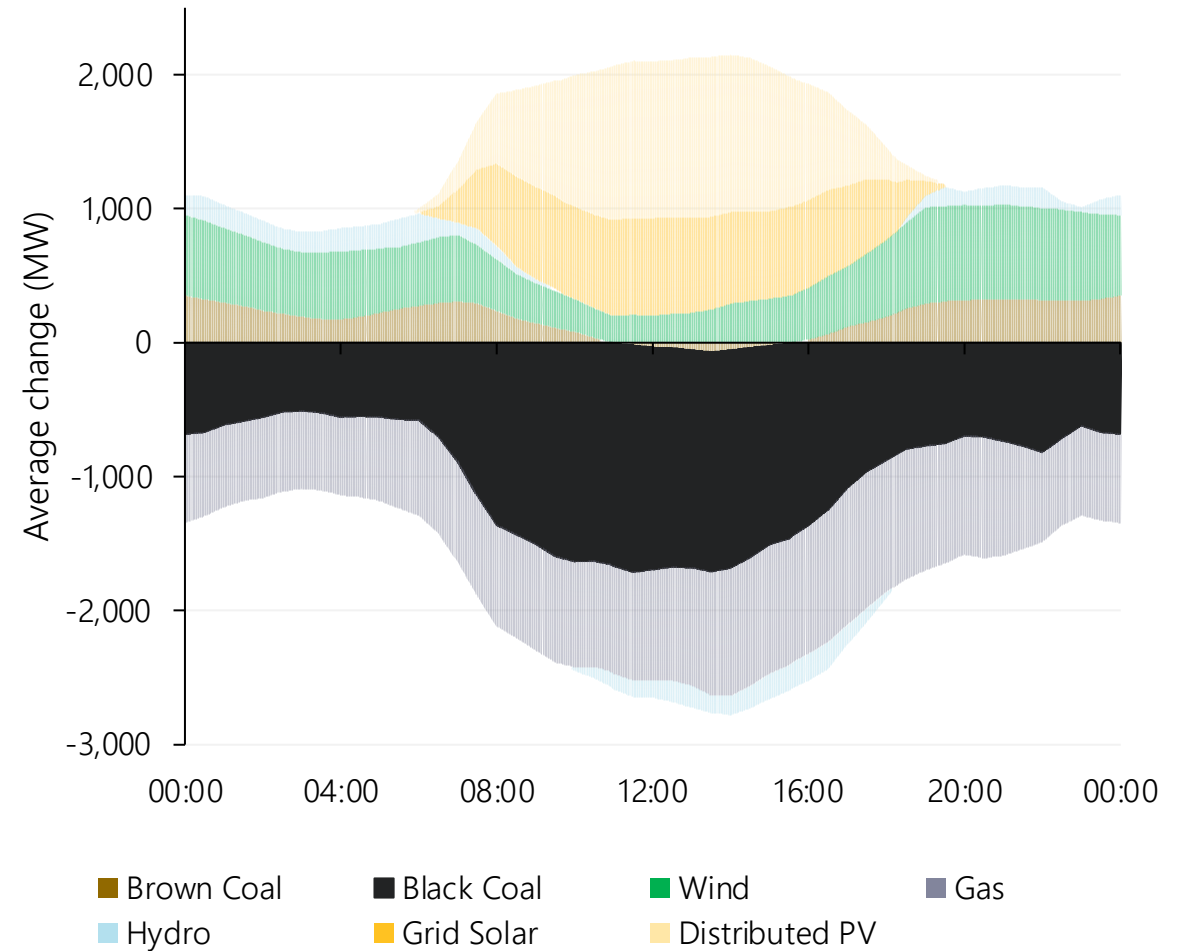


# Wind and solar displaced thermal generation

New capacity and reduced curtailment led to near record high VRE output

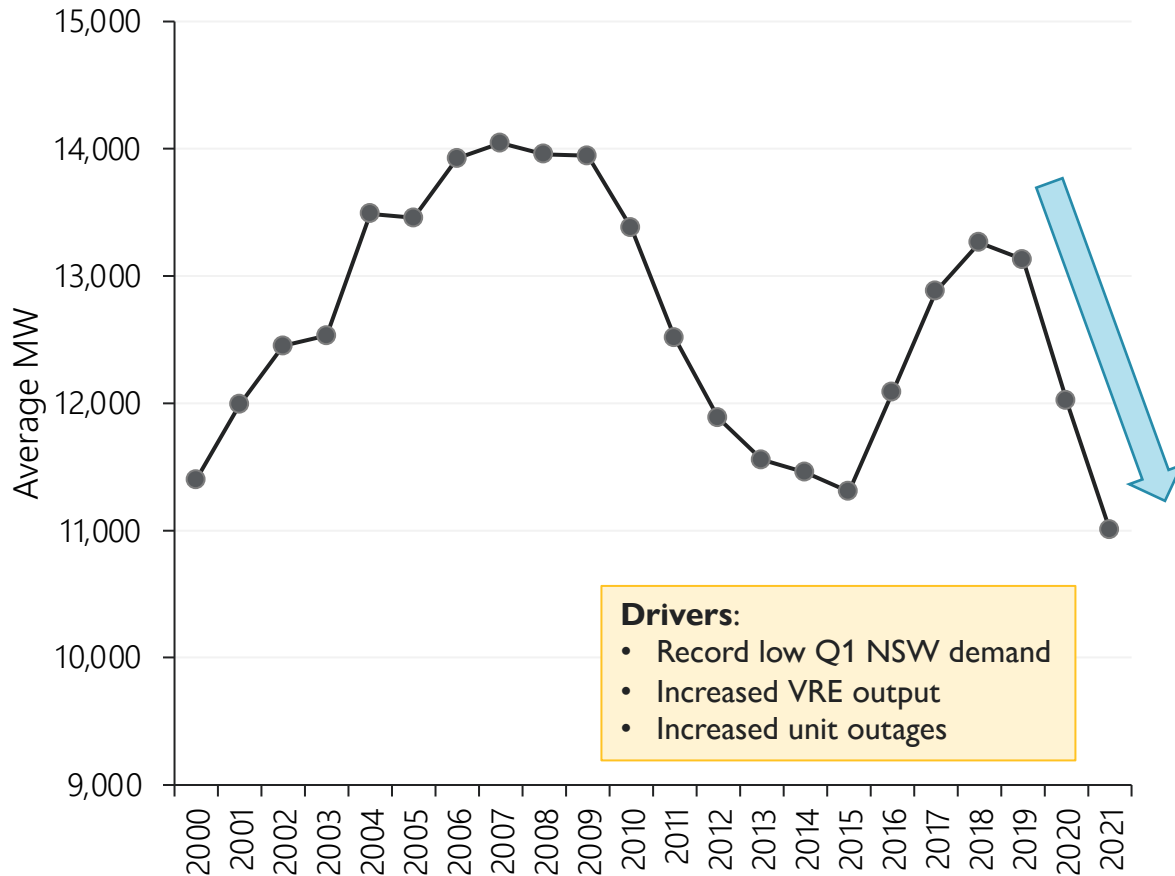


..displacing coal and gas generation



# Large decline in coal and gas

## Record low Q1 black coal-fired output

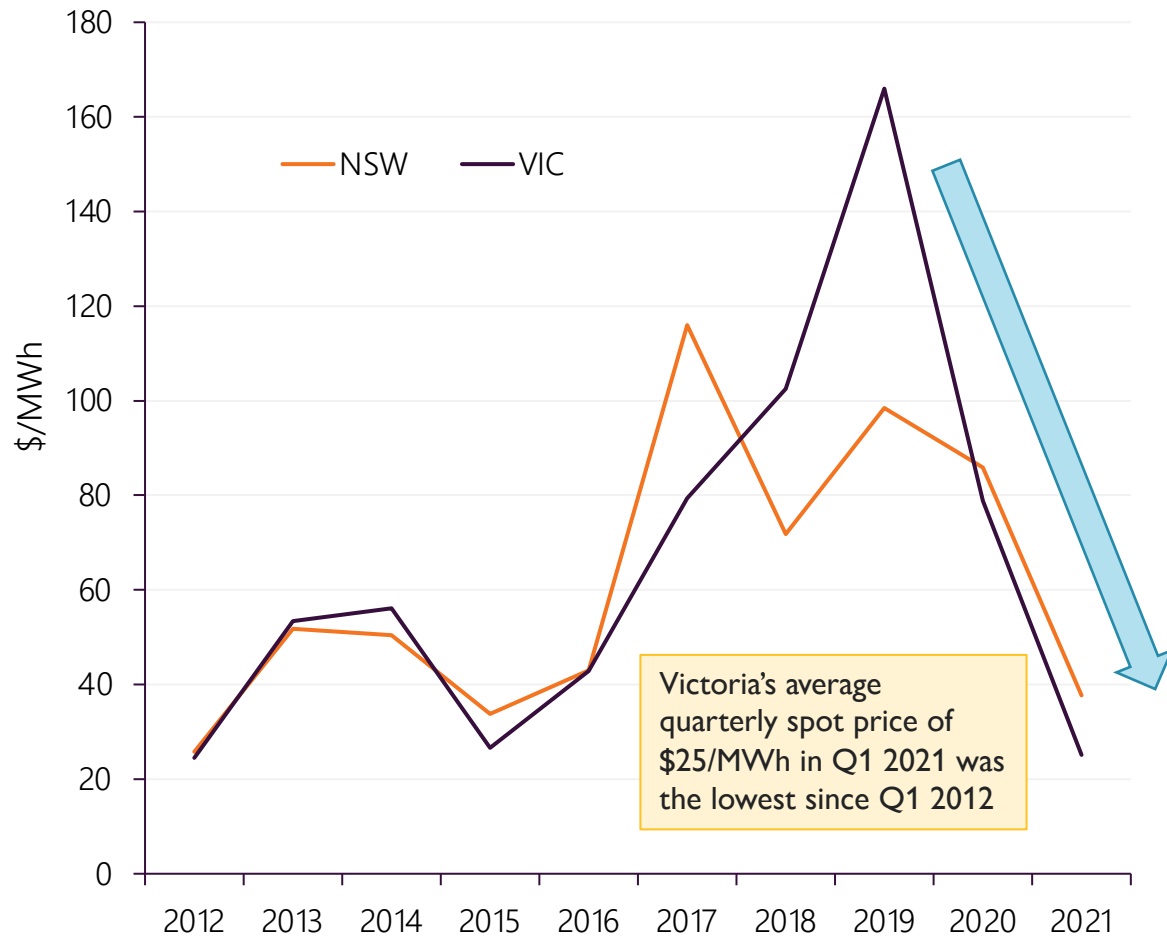


## Lowest Q1 NEM GPG since 2005



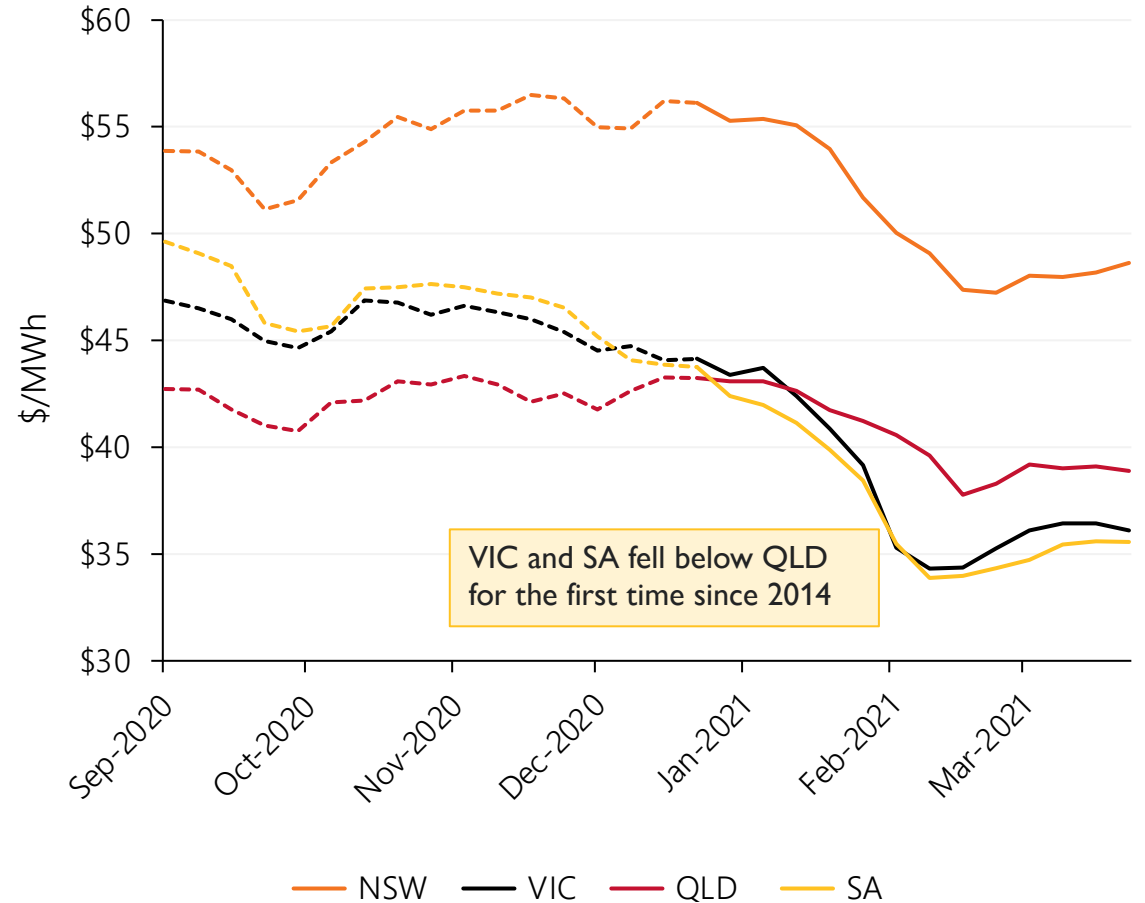
# NEM electricity prices continue to fall

Lowest NEM Q1 spot prices since 2012...



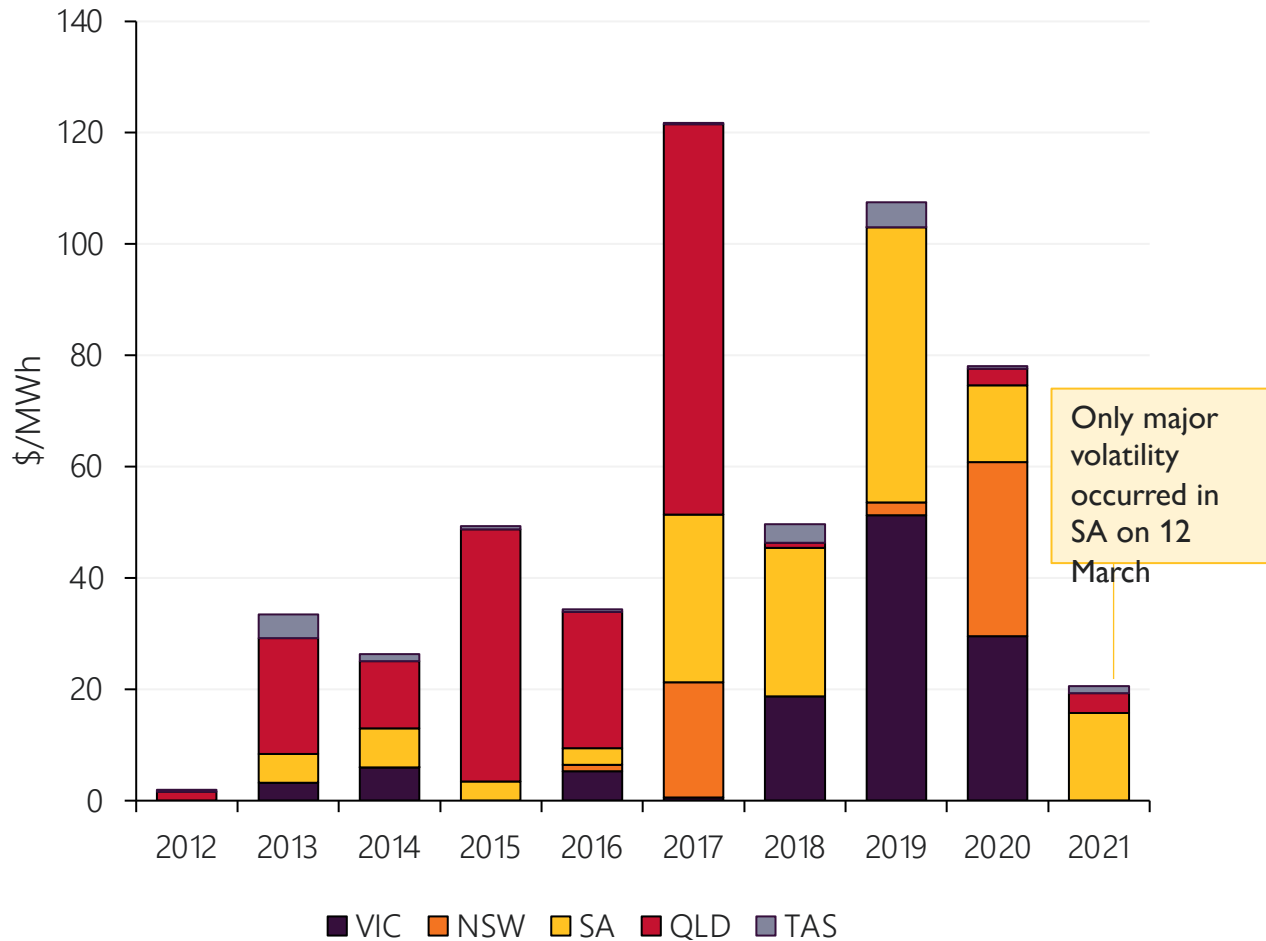
...influencing futures price expectations

ASX – Cal22 swap prices



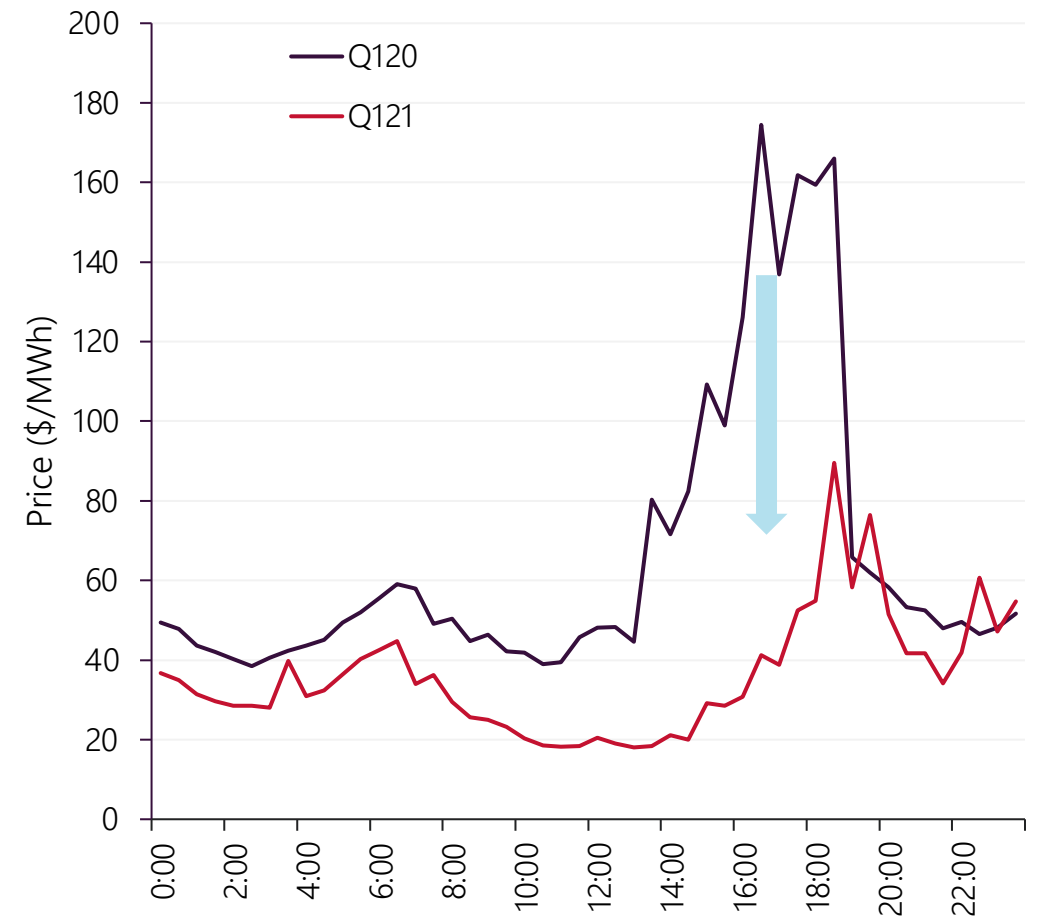
# Largest price reduction during the evening peak

Very low spot price volatility was a key driver



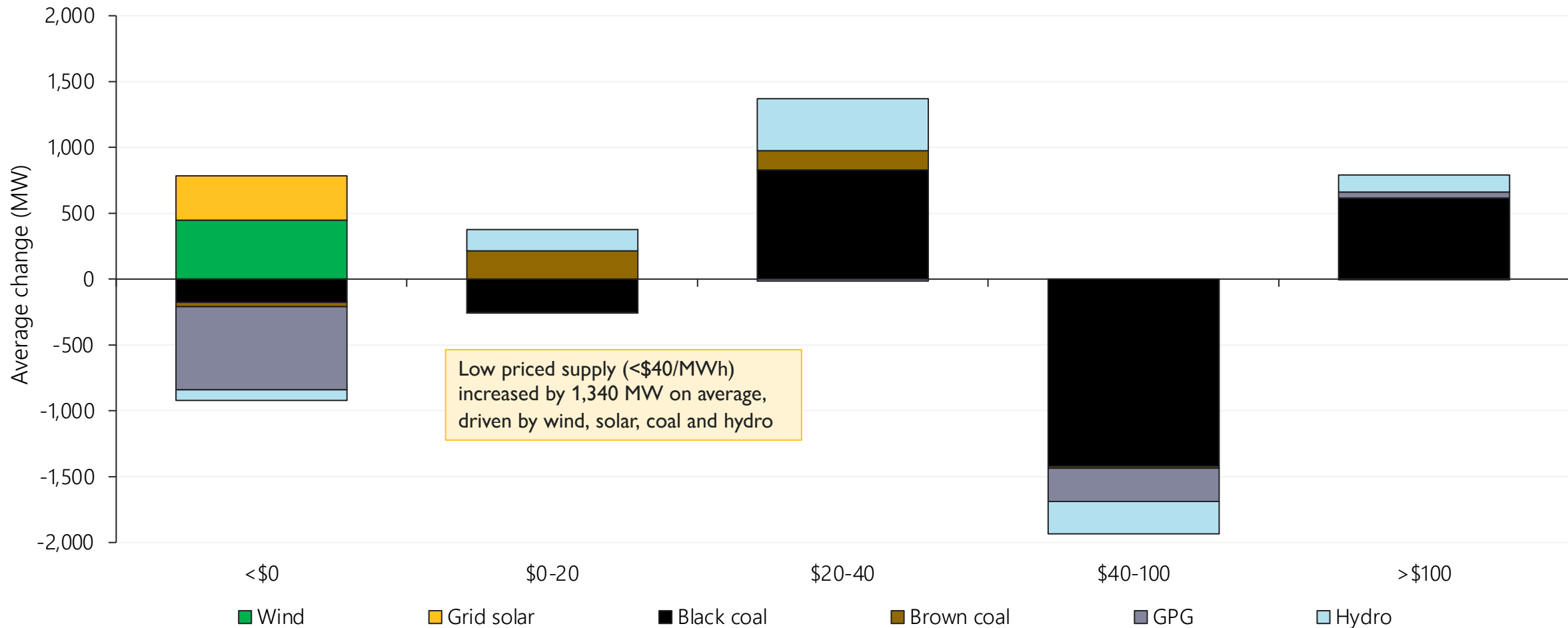
Largest price reductions in evening peaks

*NEM average spot prices by time of day*



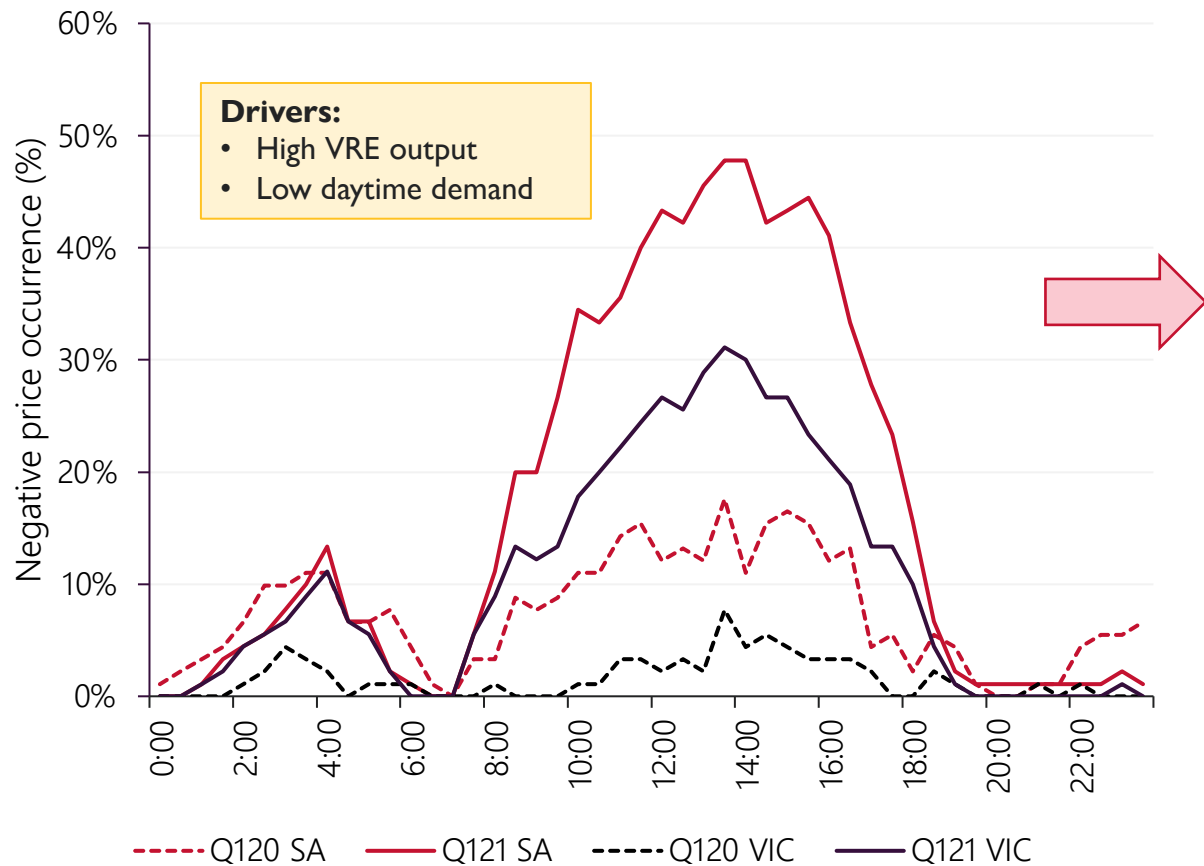
# Significant increase in low priced supply

Average change in NEM offers by price band and fuel type – Q1 2021 versus Q1 2020

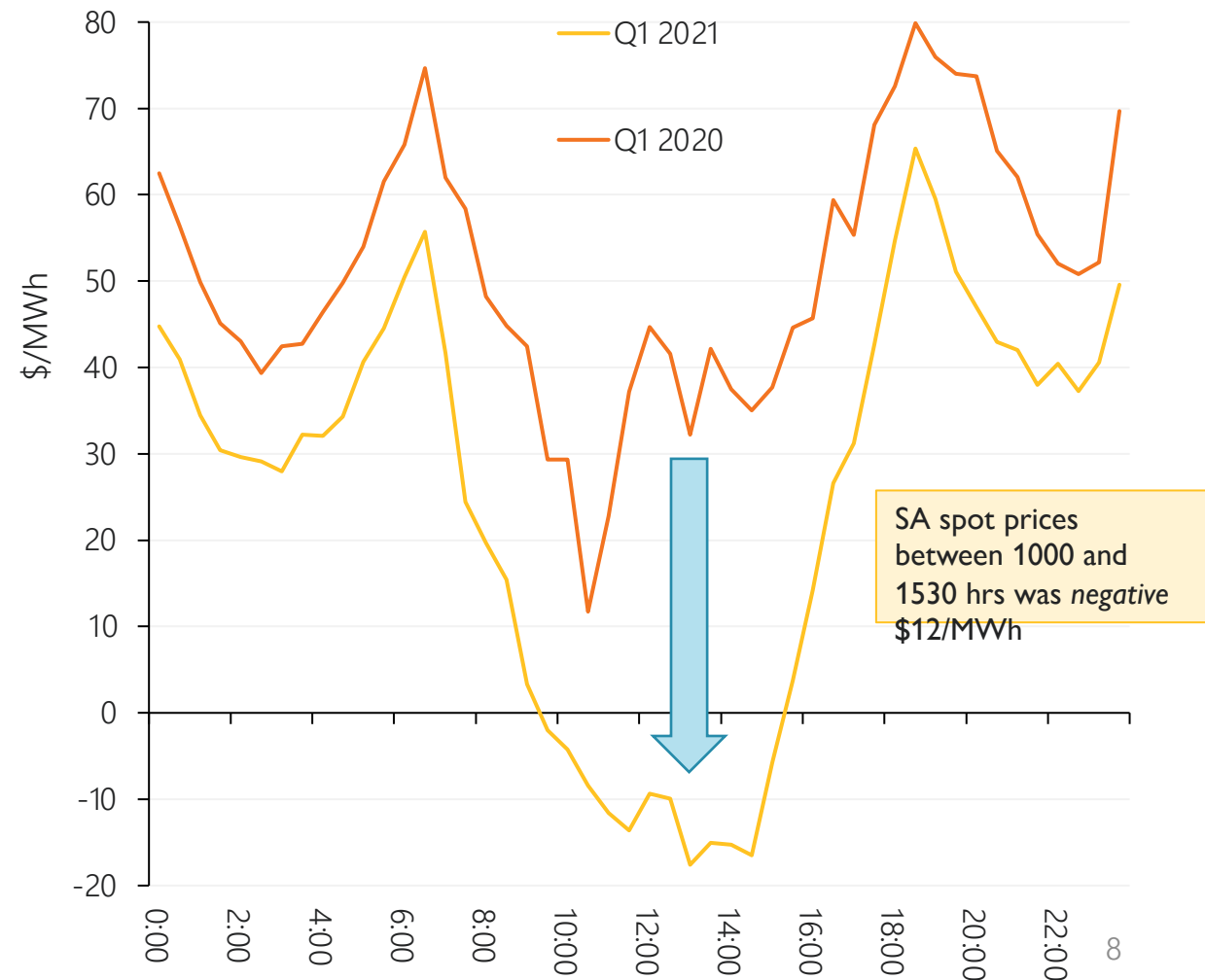


# SA & VIC negative prices at near-record levels

SA & VIC negative prices at near record levels;  
largely confined to daytime...



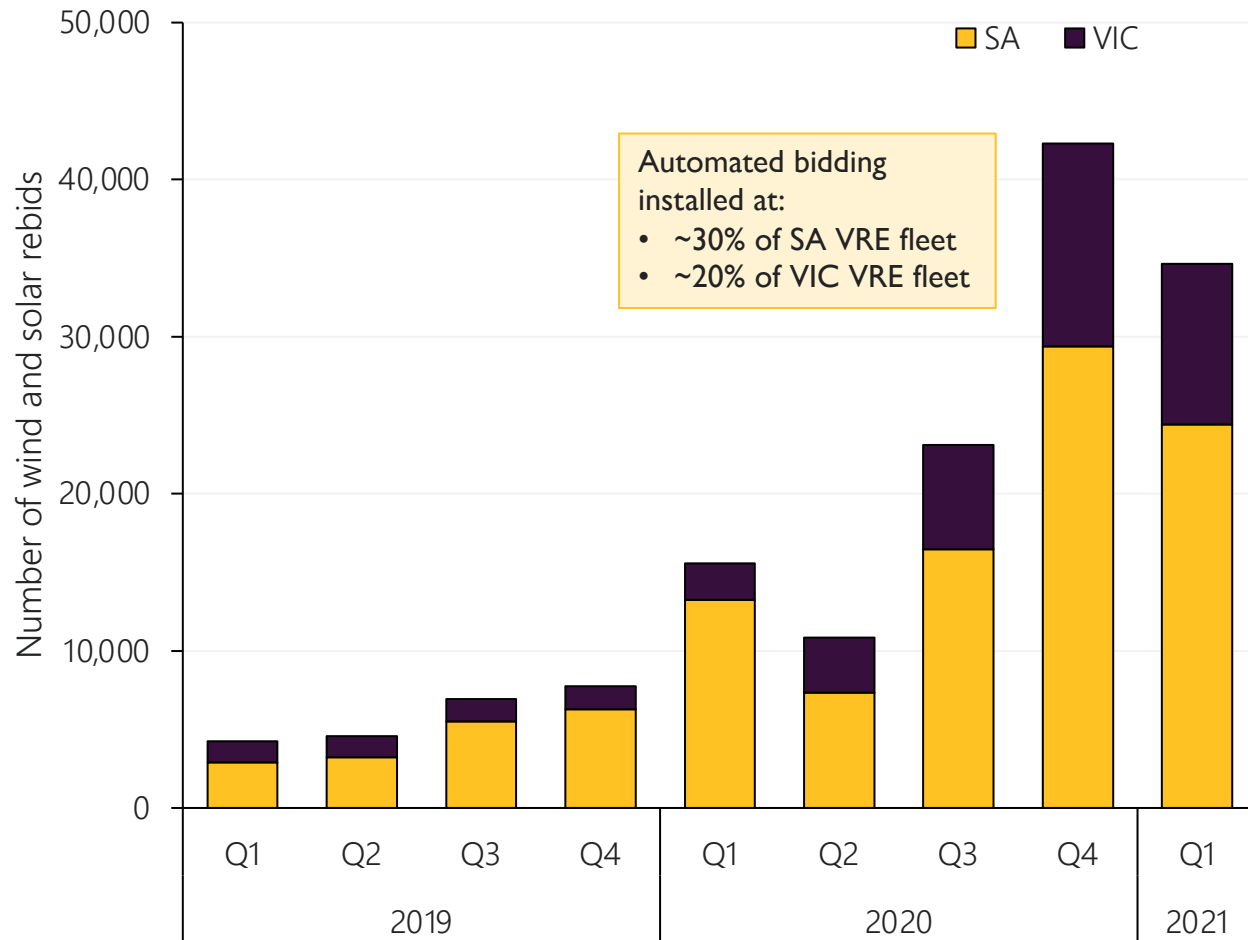
...leads to negative daytime prices in SA





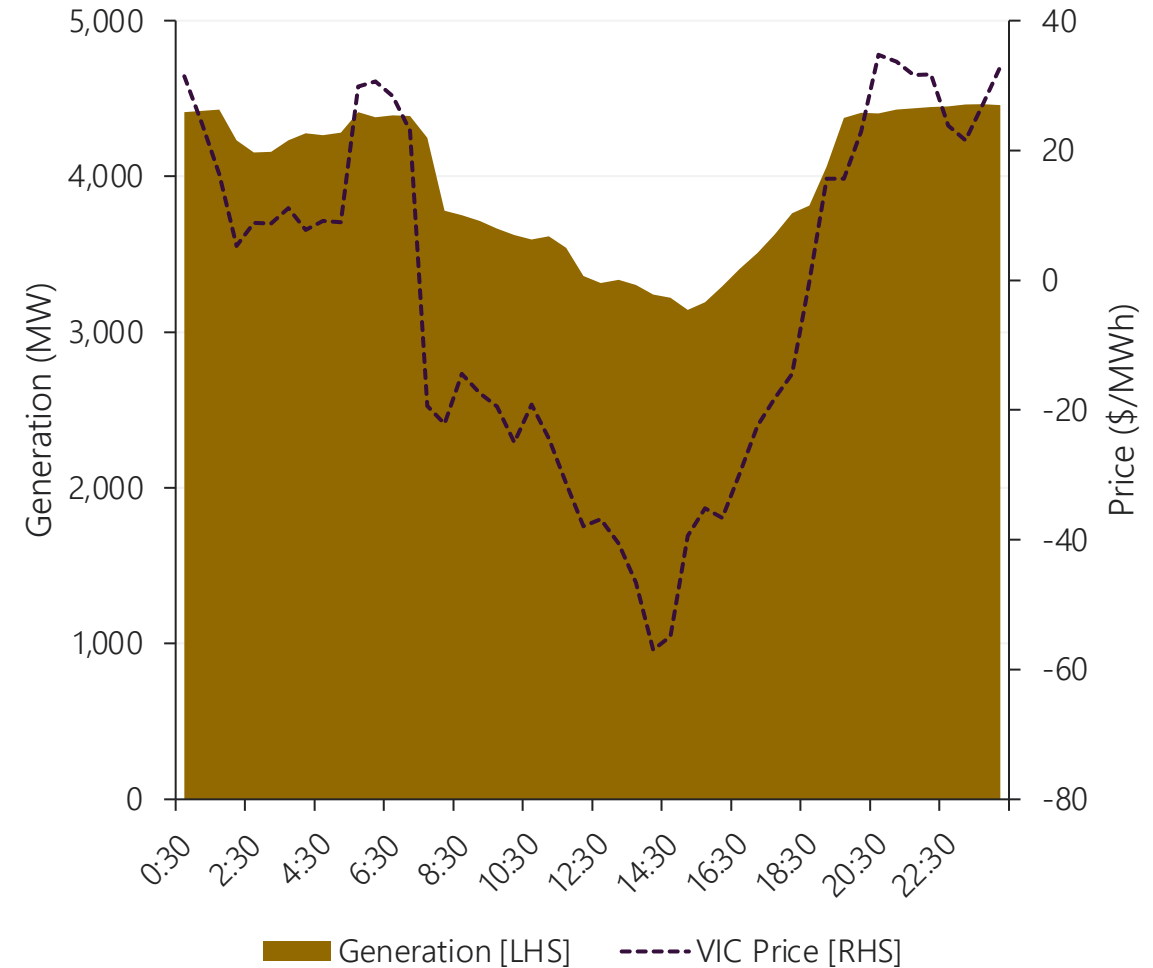
# Generators' response to negative prices

## Wind and solar re-bidding soars



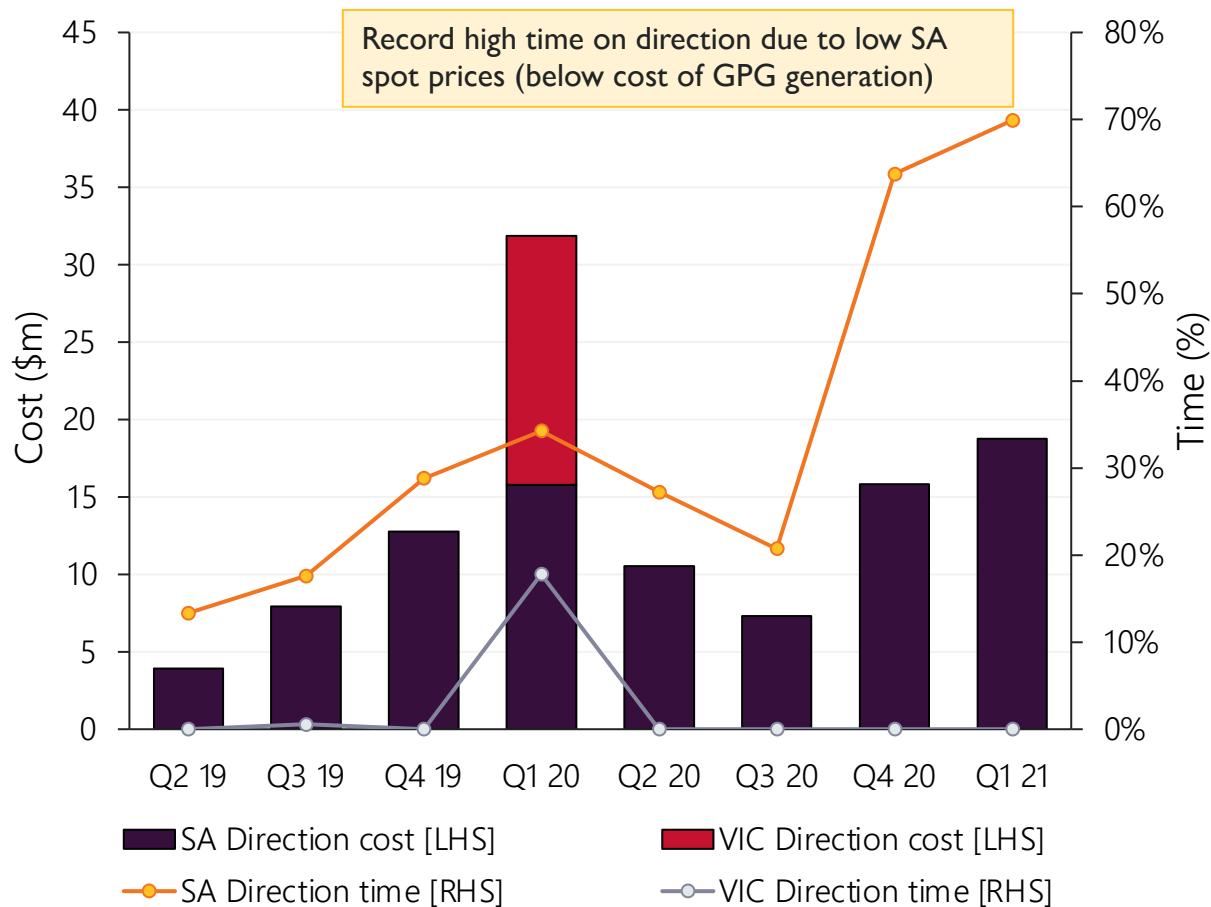
## Brown coal responding to negative prices

VIC – 16 Jan 2021

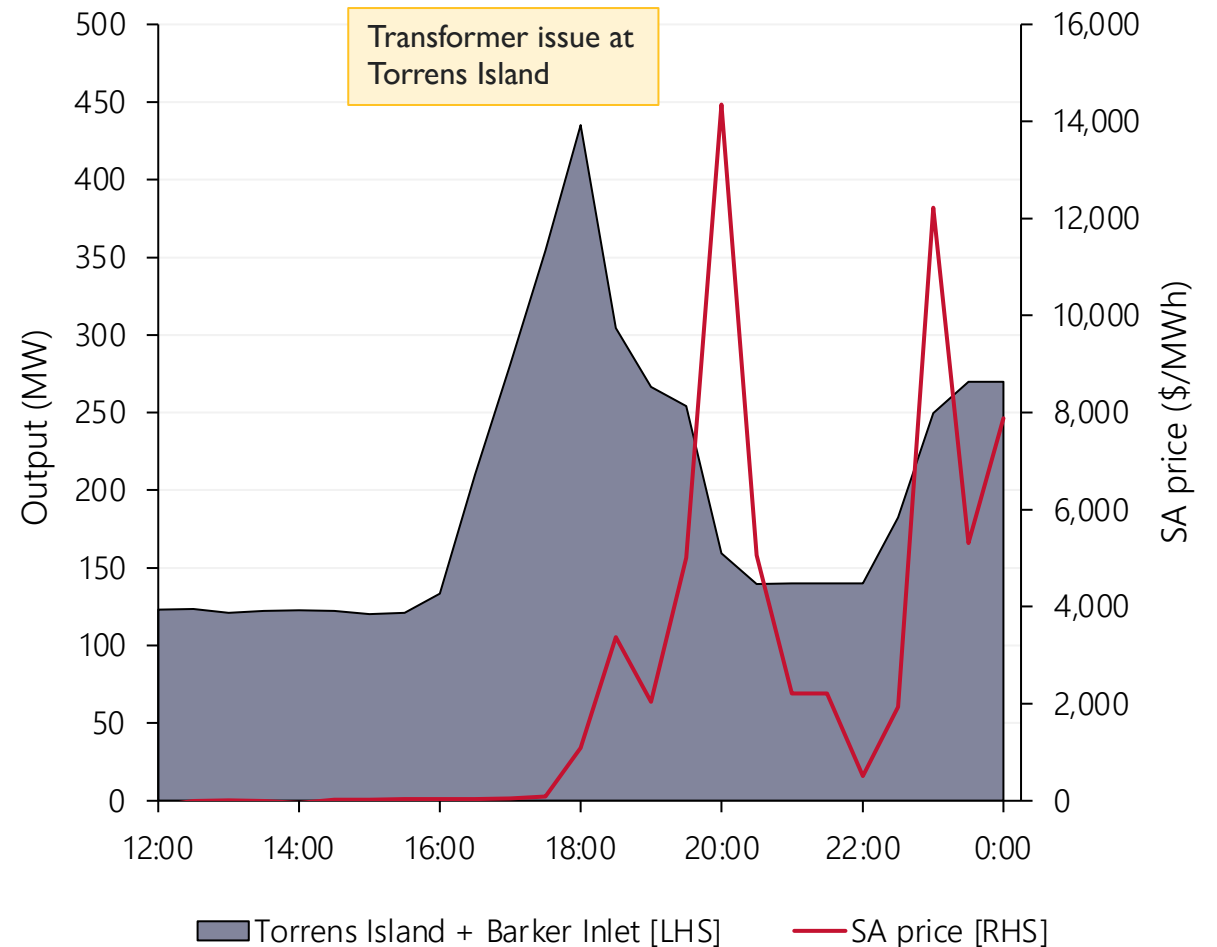


# SA system issues

## SA GPGs directed for 70% of the quarter

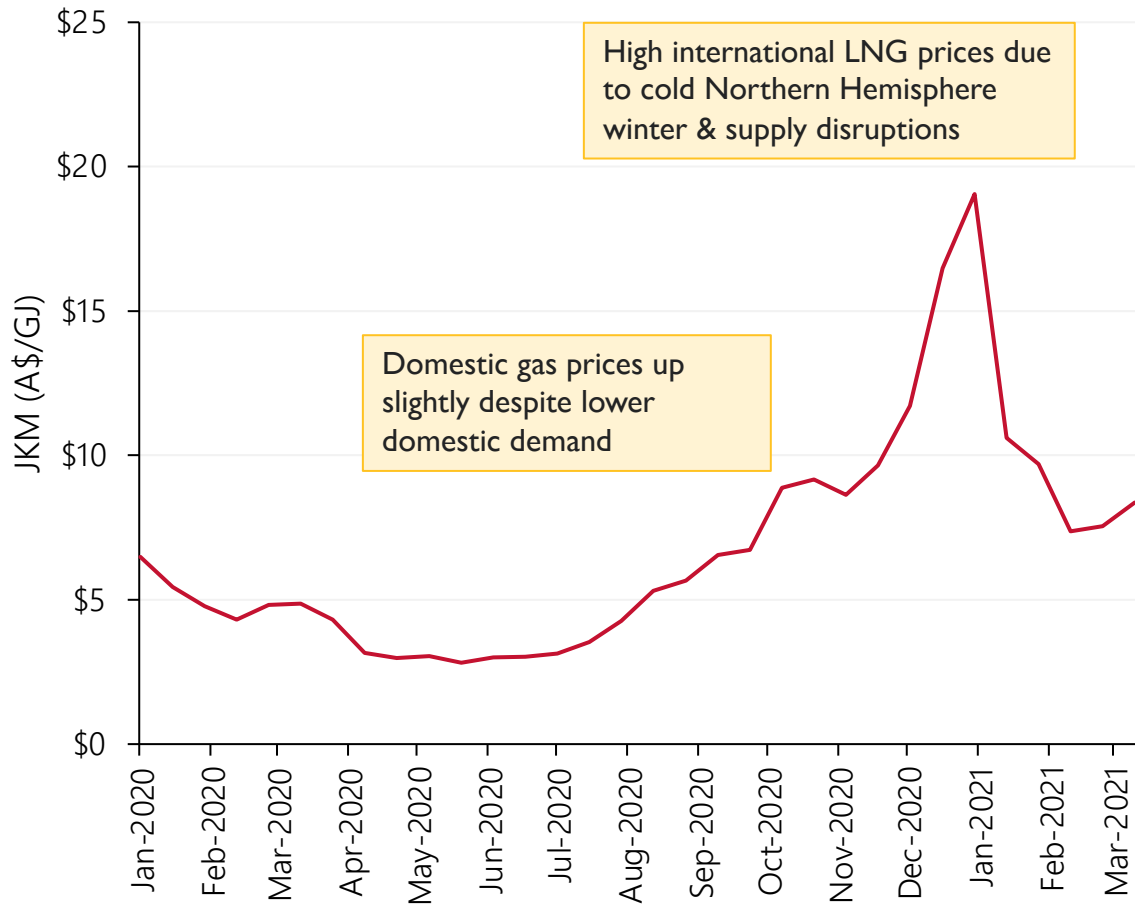


## SA price volatility on 12 March

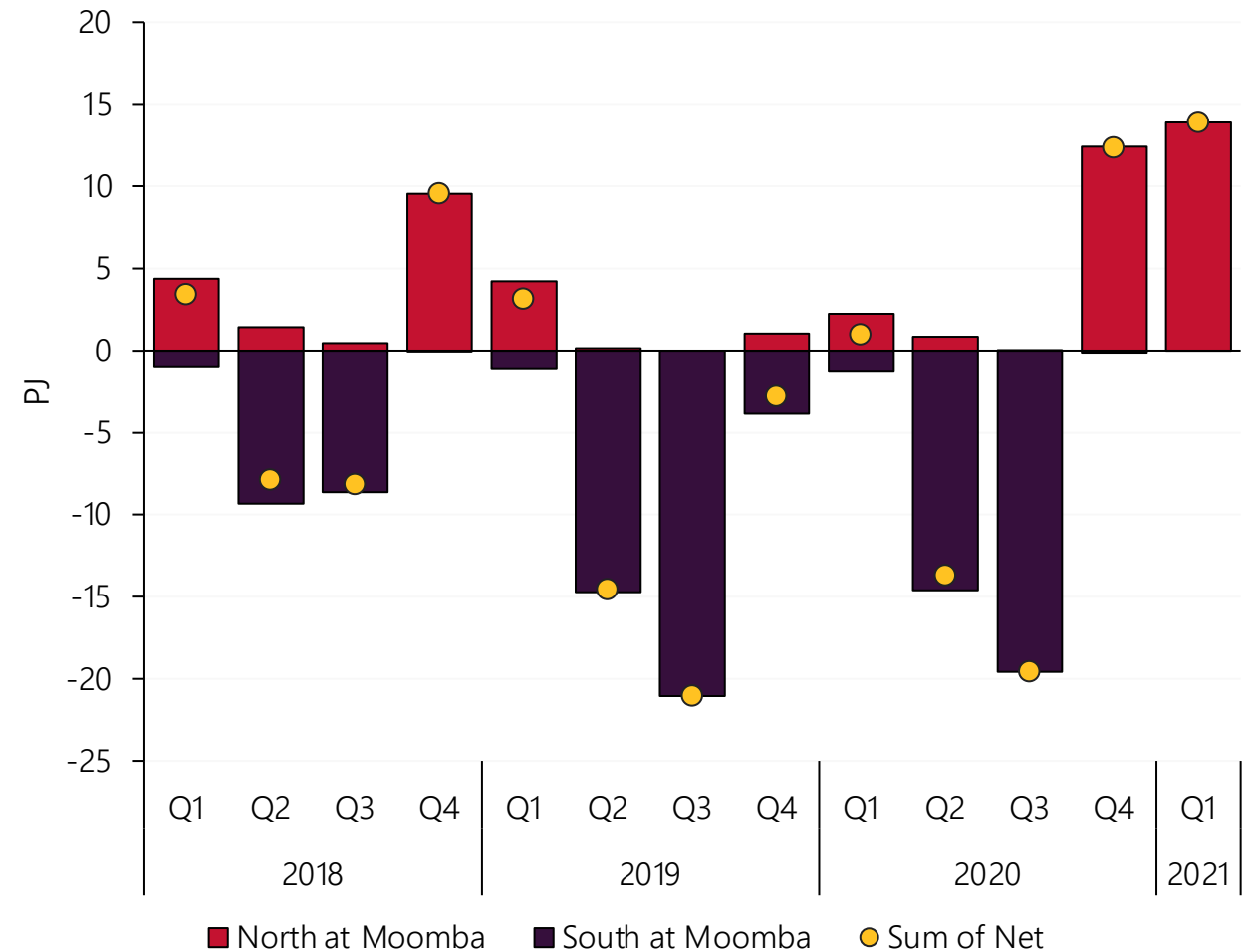


# High international gas prices influence domestic outcomes

## High Asian LNG prices...

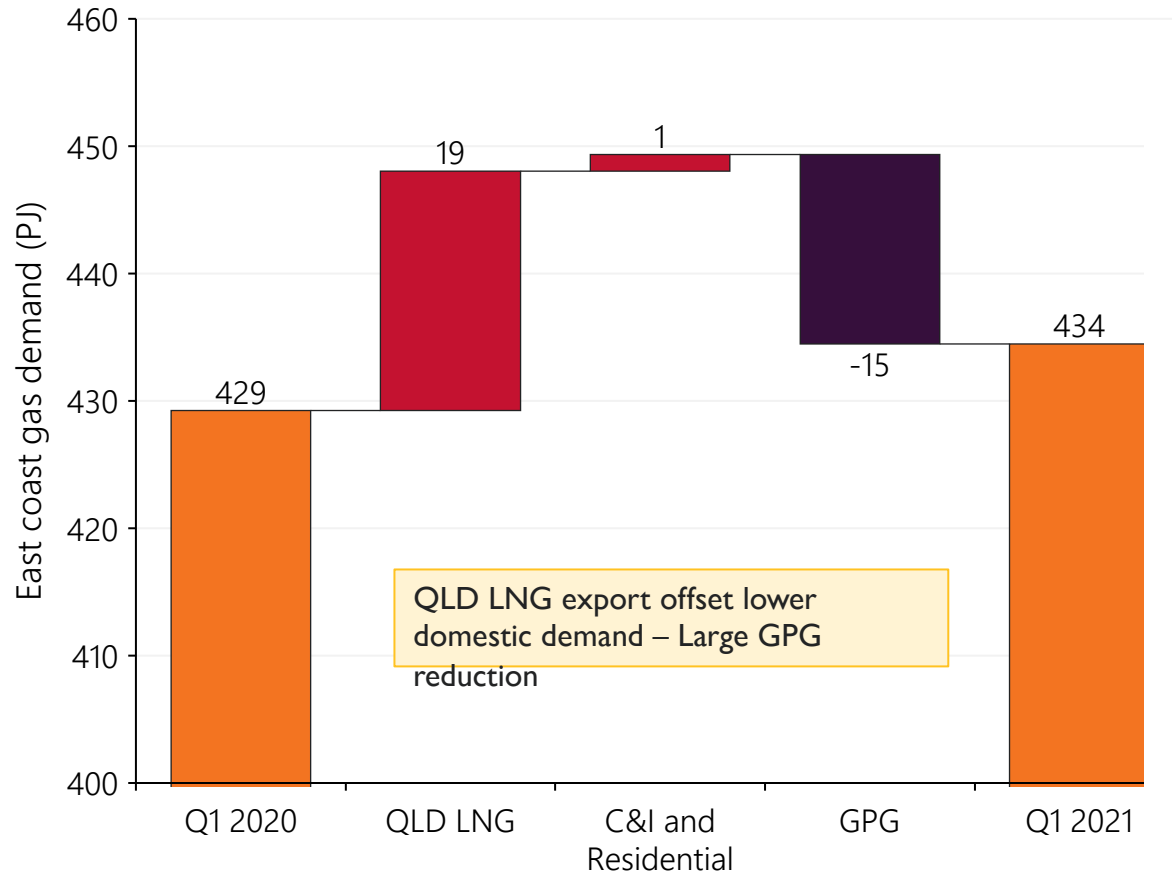


## ...Strong gas flows to QLD for LNG export



# LNG export and lona storage offsets domestic demand decline

Near record LNG export offsets large GPG decline



...while lona storage hits record levels

