



AEMO Seminar Series

Quarterly Energy Dynamics report:

Q2 2026 (Apr-Jun)

Melbourne
Energy
Institute



THE UNIVERSITY OF
MELBOURNE



Presenter

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Moderator

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Agenda

1. National Electricity Market (NEM):

- Demand
- Price
- Generation

2. Q&A

3. NEM

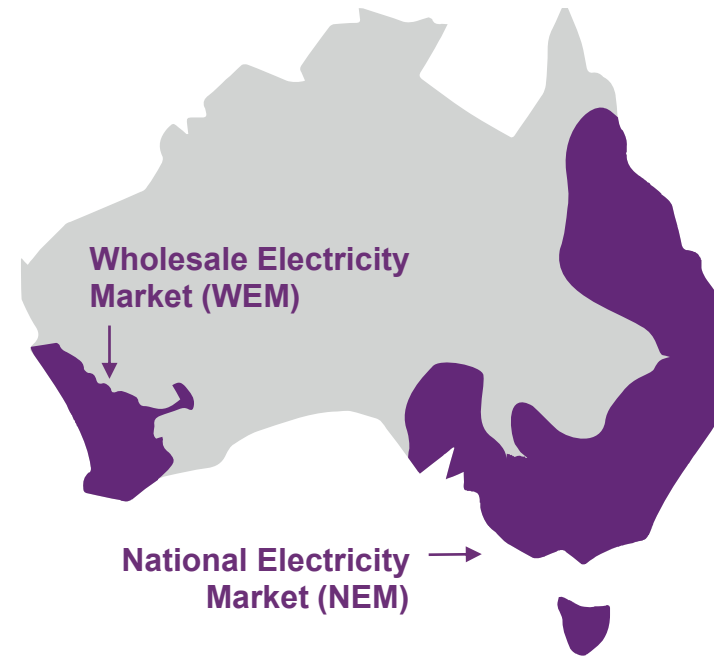
- Storage outcomes
- Interconnector flows
- Ancillary services
- Connections update

4. East coast gas

- Price
- Demand



Electricity



Gas



Declared
Wholesale
Gas Market
(DWGM)

Short Term
Trading
Market
(STTM)
and
Gas Supply
Hub (GSH)

Summary outcomes

- Mild weather and consumer energy resources reshaped demand patterns
- Renewables lifted supply share – 42.1% in NEM
- Grid-scale battery storage increasingly shifted energy and influenced price outcomes
- NEM quarterly average wholesale prices down 47% year-on-year
- East coast gas quarterly average wholesale prices down 27% year-on-year

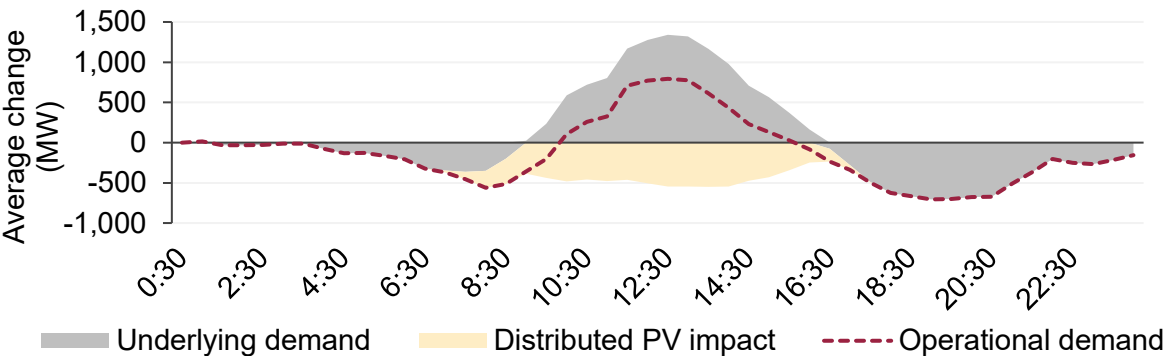
NEM Dynamics



Operational demand shifted away from the evening peak, increasing during daytime

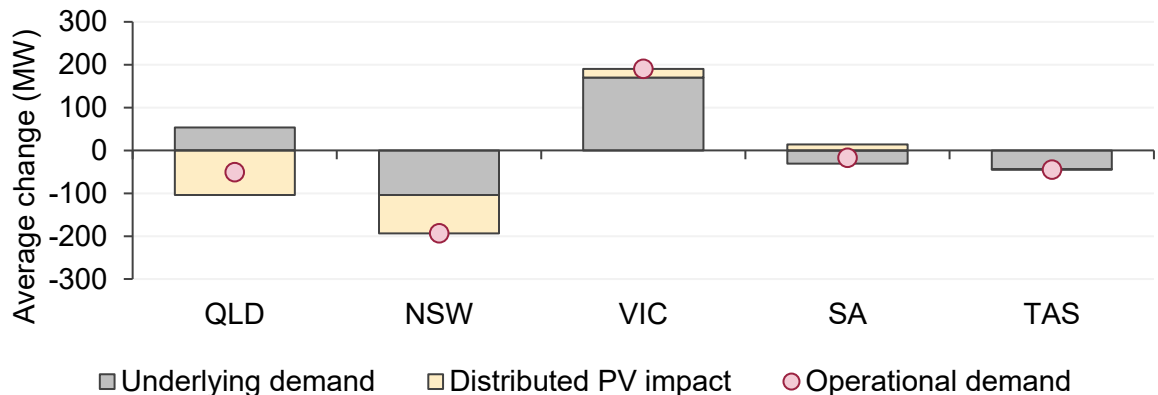
Increased daytime operational demand as home batteries shifted demand from evening peaks

Changes in NEM average operational demand by time of day – Q2 2026 vs Q2 2025



Operational demand decreased in all regions except Victoria

Changes in average demand components by region – Q2 2026 vs Q2 2025



Warmer than average conditions with **lower heating requirements**



Ongoing electrification **shifted some heating demand from gas to electricity**



Higher year-on-year **industrial load** in Queensland and Victoria



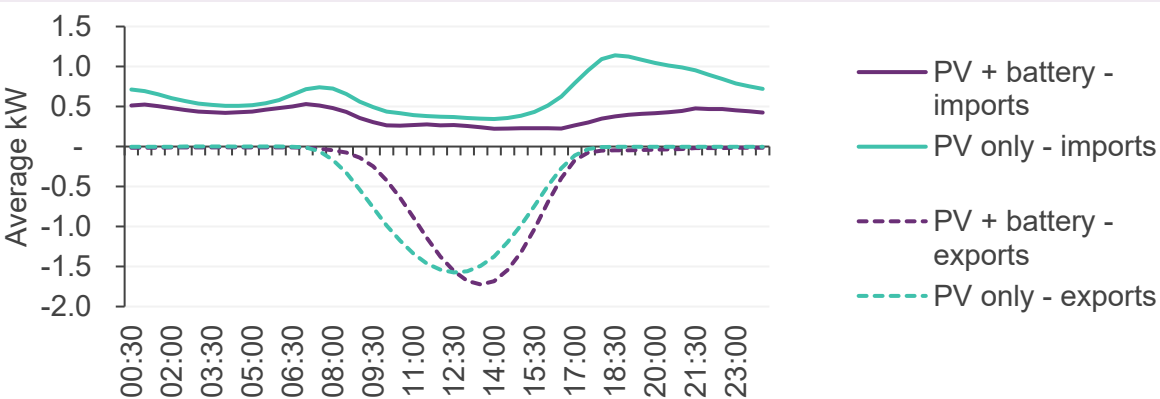
Increased **data centre demand** in New South Wales (+117 MW or +35%) and Victoria (+100 MW or +96%)



Growth in **home batteries** shifted demand from evening peak to daytime charging.

Households with PV and battery shift exports later and reduce imports during peaks

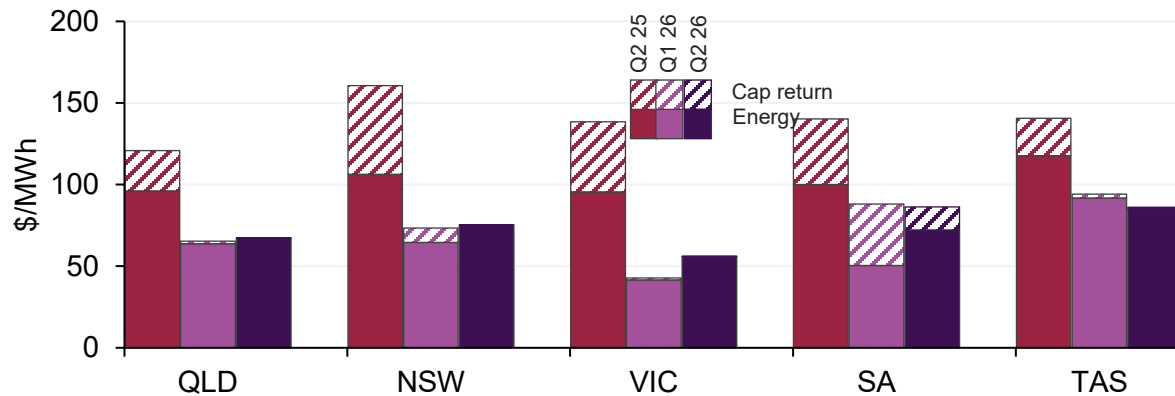
Average household PV and battery import and export kW (Q2 26) – NEM



Average NEM spot prices fell 47% year-on-year, with a much flatter time of day profile

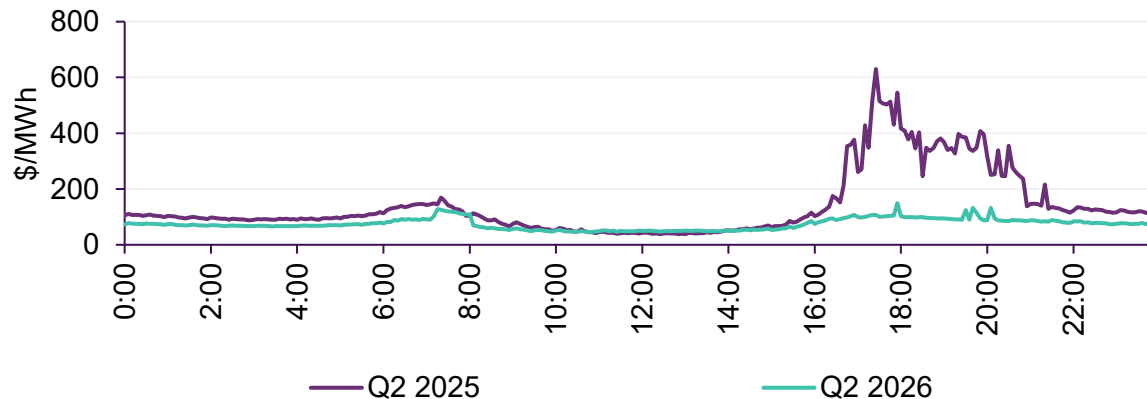
Year-on-year declines in both energy and cap return prices across all regions

Average wholesale electricity spot price by region – energy and cap return components



Flatter intraday price profile with lower evening peak prices

NEM average spot price by time of day – Q2 2026 vs Q2 2025



Shift towards higher daytime operational demand and lower evening peak demand

- Increased home battery charging, together with growing industrial and data centre loads, lifted daytime operational demand, more than offsetting growth in distributed PV output
- In the evening, home battery discharging and warmer weather's impact on heating requirements reduced operational demand.

Increased grid-scale battery activity influencing price-setting outcomes

- Increased battery discharge, combined with lower operational demand during the evening peak contributed to lower peak prices and less price volatility across most regions
- Battery charging growth overlaid stronger daytime operational demand, leading to fewer negative price intervals

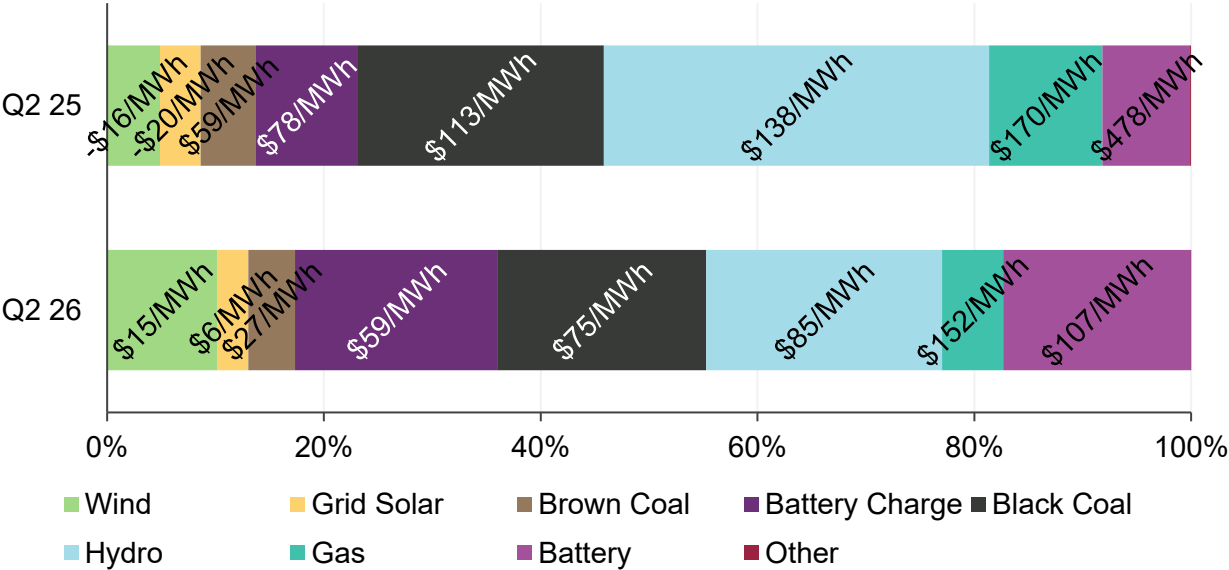
Higher renewable generation

- Both wind and grid solar generation reaching new Q2 highs
- Higher VRE output placed sustained downward pressure on wholesale prices across the NEM, particularly overnight, where stronger wind generation displaced coal-fired generation

Price-setting outcomes shift across the NEM, with increased grid-scale battery participation

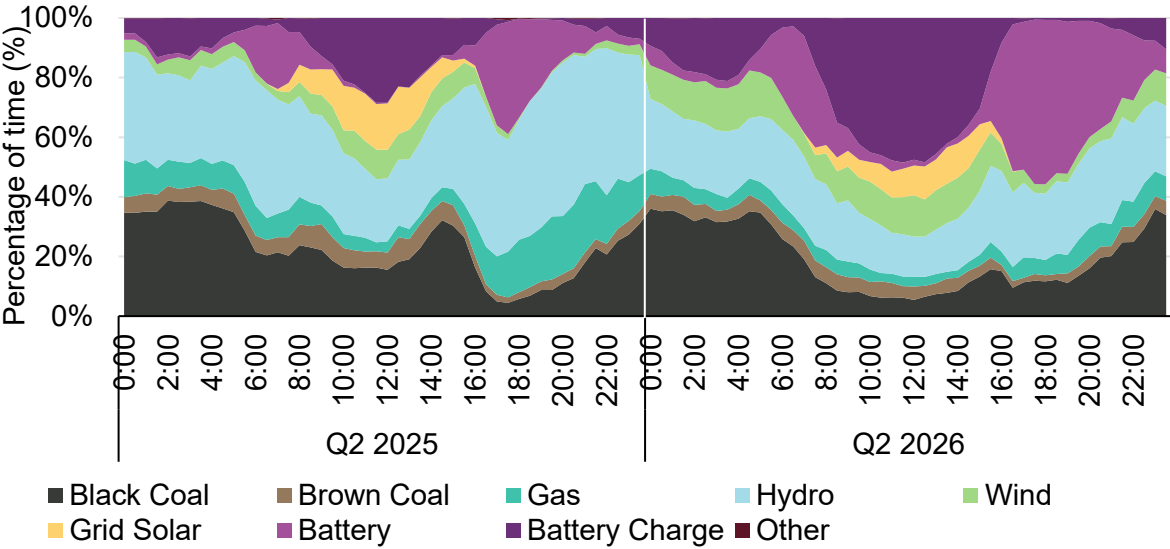
Increased battery price setting reshaped market outcomes in Q2 2026

NEM price-setting frequency and average price set by fuel type – Q2 2026 vs Q2 2025

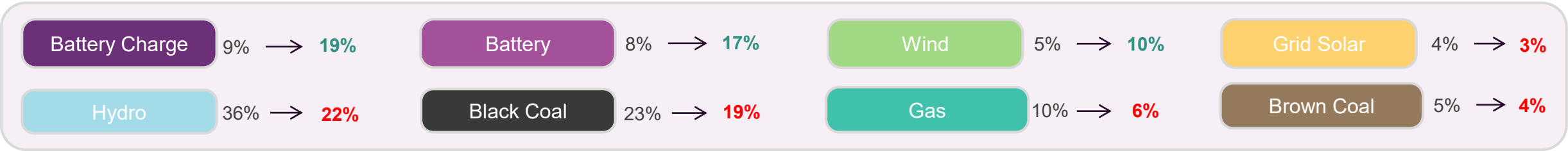


Battery charge and discharge drove time of day price-setting shifts in Q2 2026

NEM price-setting frequency by fuel type and time of day – Q2 2026 and Q2 2025



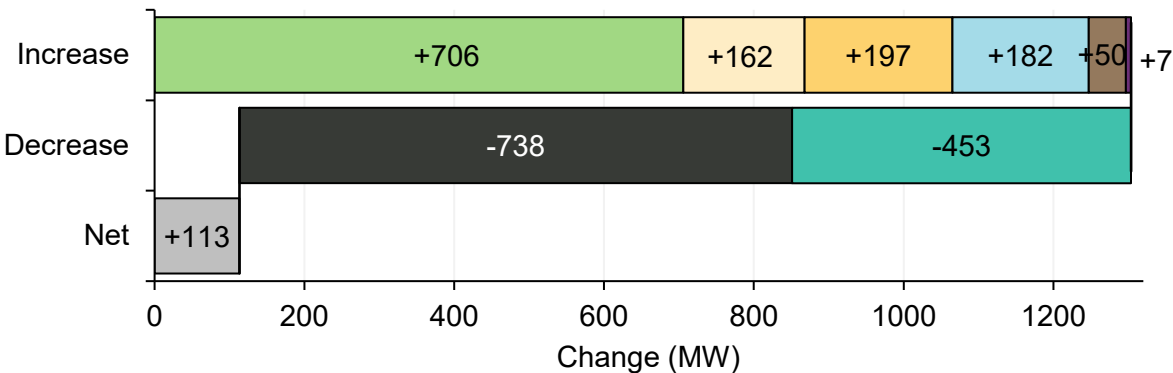
Change in NEM price-setting frequency



Renewable share reached a Q2 high while increased wind and battery storage displaced thermal generation

Shift in supply mix driven by higher renewable output

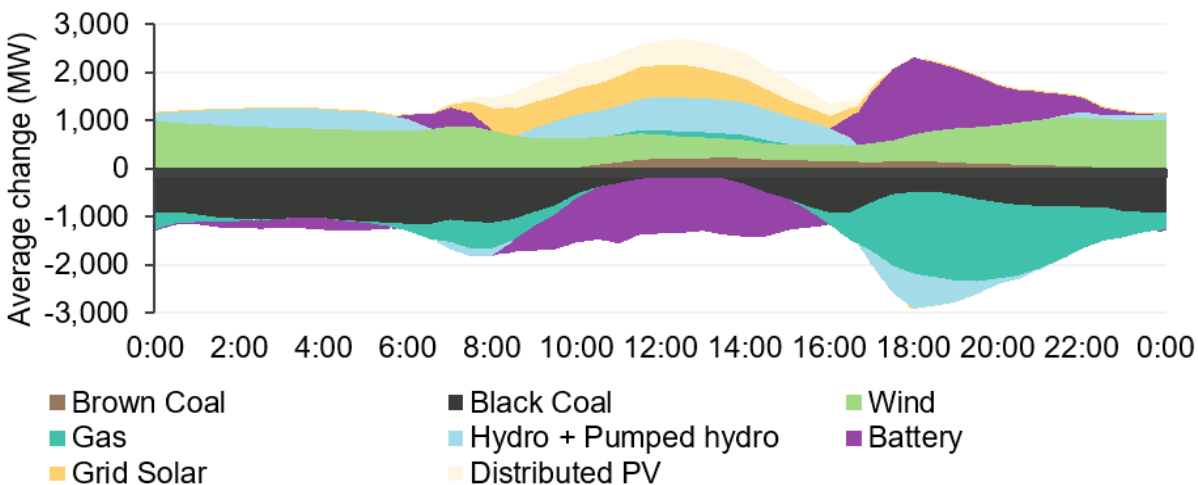
Change in NEM supply by fuel type – Q2 2026 vs Q2 2025



Wind Distributed PV Grid Solar Black Coal Gas
Hydro Brown Coal Other Net

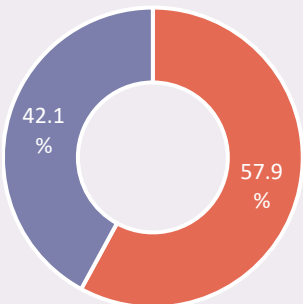
Renewables and batteries continued to displace thermal generation during peak periods

Change in NEM generation and storage by time of day – Q2 2026 vs Q2 2025



NEM supply mix contribution by fuel type

Renewable energy	42.1%	▲ 5.0 pp
Wind	17.1%	+2.8 pp
Grid-solar	7.6%	+0.8 pp
Distributed PV	10.3%	+0.6 pp
Hydro	7.0%	+0.7 pp

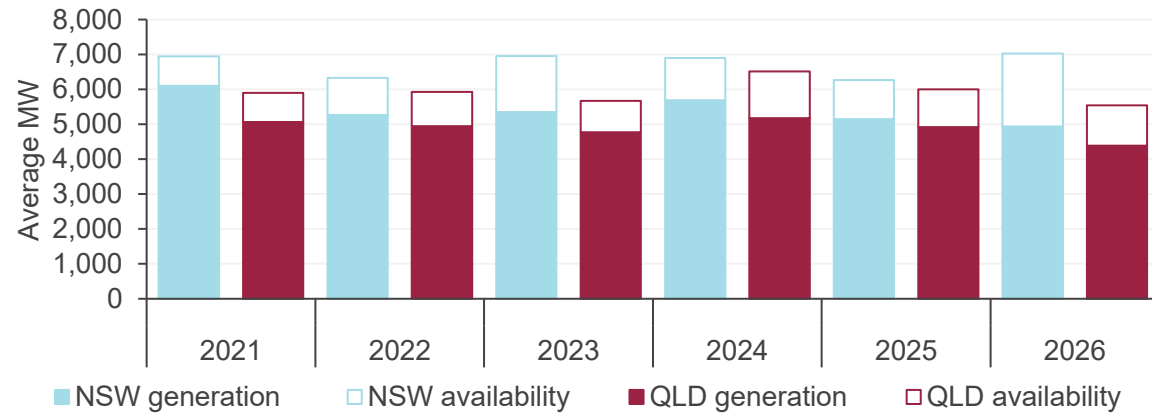


Fossil fuel	57.9%	▼ 5.0 pp
Black coal	38.0%	-3.2 pp
Brown coal	15.6%	+0.1 pp
Gas	4.3%	-1.9 pp

Coal-fired generation declined to a Q2 low, contributing to lower emissions

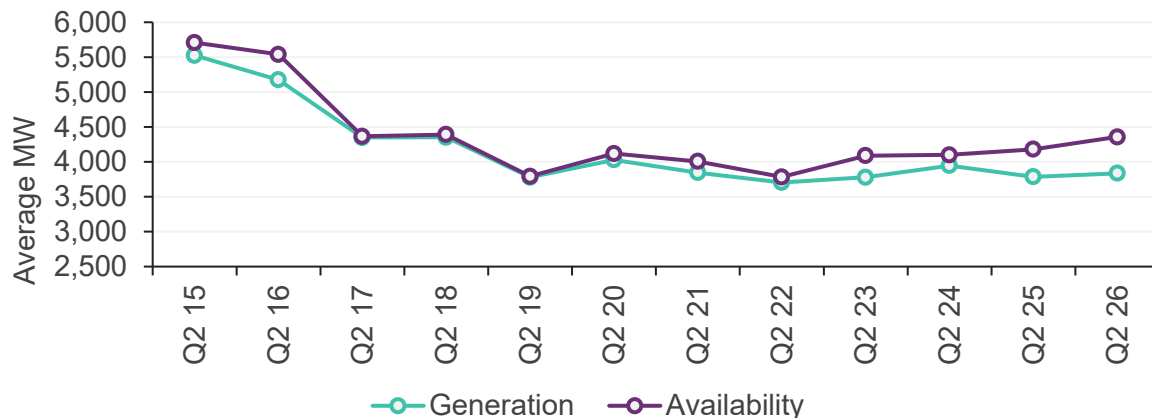
❑ NEM black coal-fired output reduced to a Q2 low

Quarterly average black coal-fired generation and availability by region – Q2s



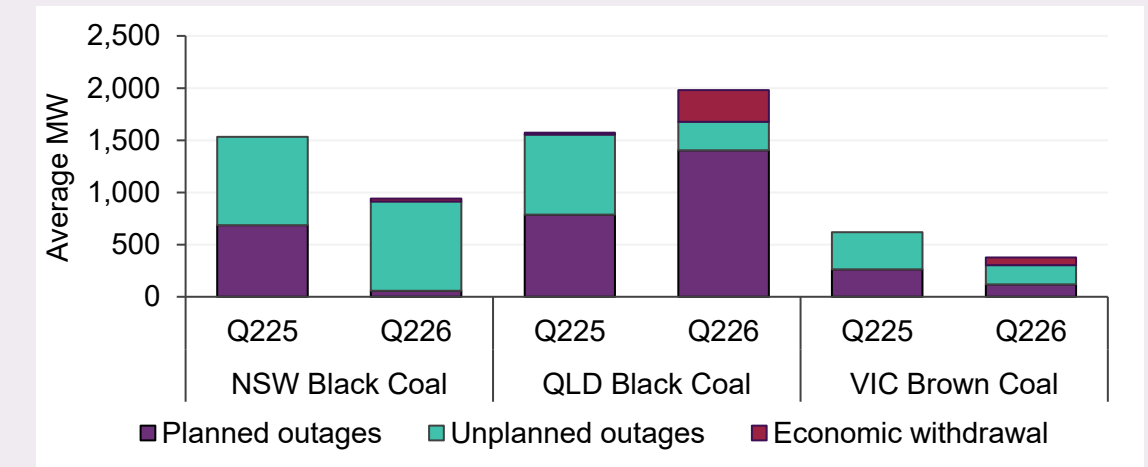
❑ Brown coal-fired availability and generation increased

Quarterly average brown coal-fired generation and availability in Victoria (including decommissioned units) – Q2s



❑ Coal-fired capacity on outage declined, driven by New South Wales

Average coal-fired capacity fully offline – Q2 2026 vs Q2 2025

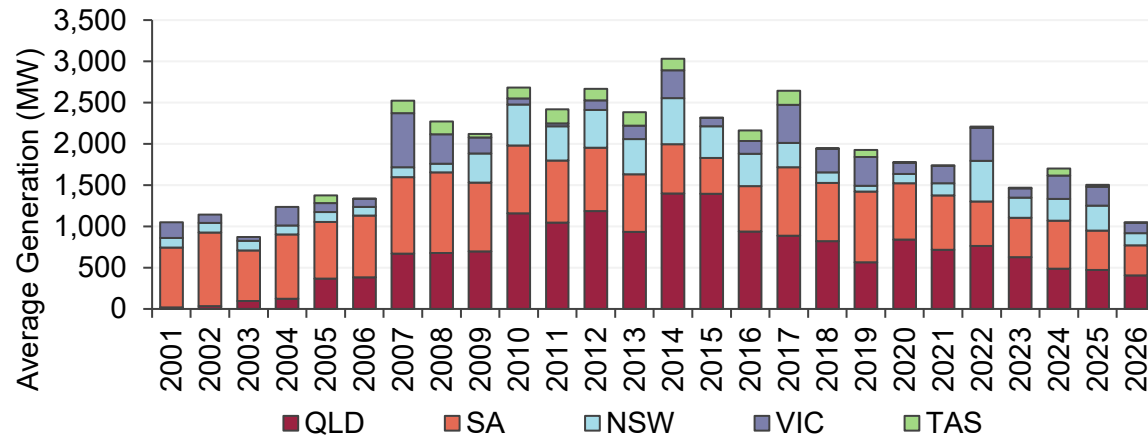


- ❑ On average, 428 MW less capacity was offline in Q2 2026 compared with the same period in 2025, comprising 184 MW less black coal outages and 244 MW less brown coal outages
- ❑ Outages varied across regions
 - ❑ In NSW, planned outages declined significantly, while unplanned outages were slightly higher
 - ❑ In QLD, planned outages increased significantly, while unplanned outages were lower
 - ❑ In VIC, planned and unplanned outages both declined
- ❑ Economic withdrawals increased in all regions.

Gas-fired generation fell to its lowest Q2 average since 2003 while hydro increased

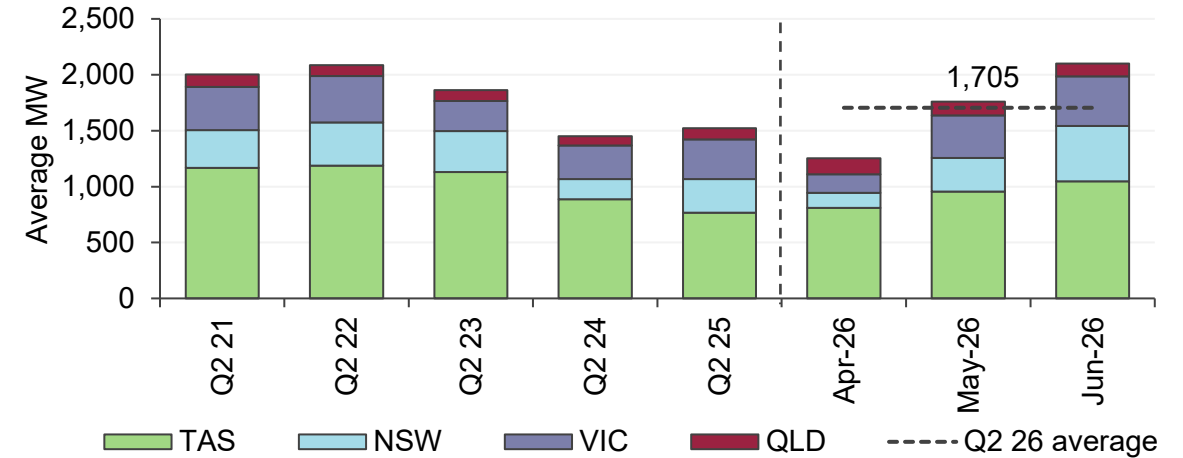
Lowest Q2 gas-fired output across the NEM since 2003

Average gas-fired generation by region – Q2s



Hydro generation increased year-on-year

Average hydro generation by region – Q2s



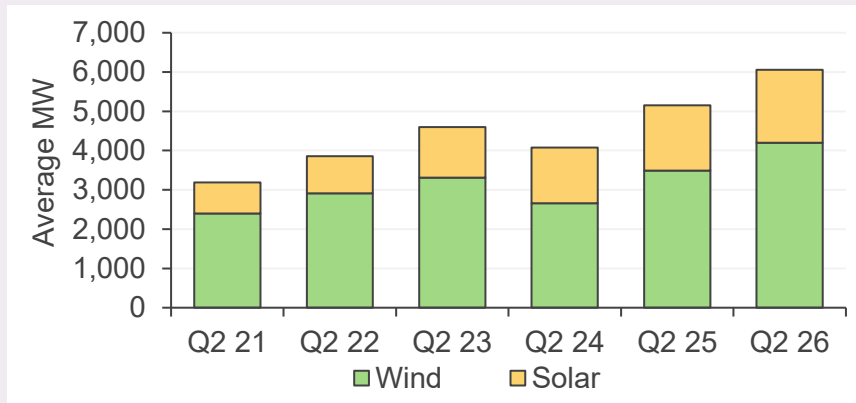
Region	Average Generation	Change YoY
NEM	1050 MW (lowest Q2 since Q2 2003)	▼ 453 MW (-30%)
Queensland	408 MW (lowest Q2 since Q2 2006)	▼ 63 MW (-13%)
New South Wales	146 MW	▼ 155 MW (-51%)
Victoria	127 MW	▼ 104 MW (-45%)
South Australia	363 MW (lowest Q2)	▼ 115 MW (-24%)
Tasmania	5 MW	▼ 5 MW (-74%)

Region	Average Generation	Change YoY
NEM	1,705 MW	▲ 182 MW (+12%)
Queensland	126 MW	▲ 26 MW (+25%)
New South Wales	309 MW	▲ 10 MW (+3.2%)
Victoria	332 MW	▼ 23 MW (-6.5%)
Tasmania	938 MW	▲ 170 MW (+22%)

Grid-scale solar and wind generation reached record Q2 highs

■ Growth in VRE output

Average quarterly VRE generation by fuel type – Q2s



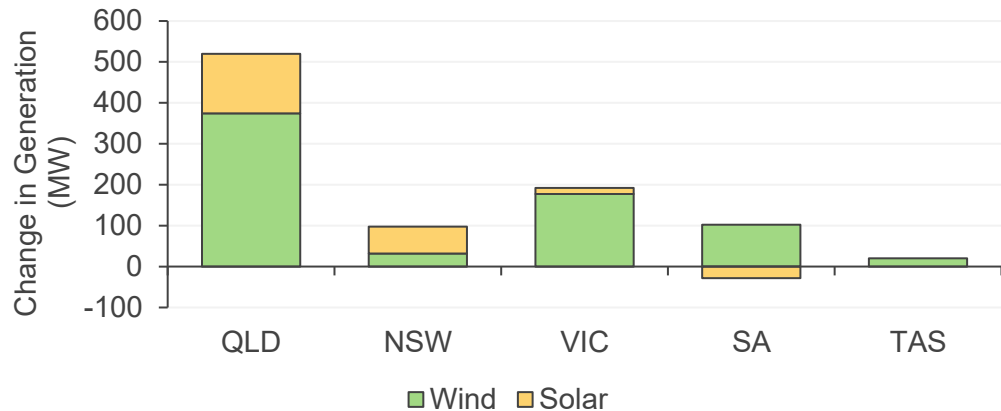
Grid-scale solar output reached a Q2 high of **1,860 MW**



Wind output averaged **4,198 MW**, reaching a new Q2 high

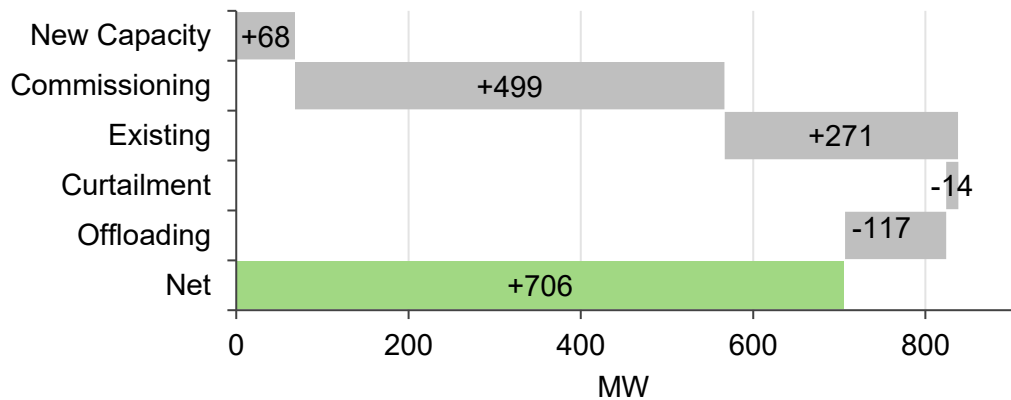
■ Queensland led renewable increases

Average MW change in output Q2 2026 vs Q2 2025



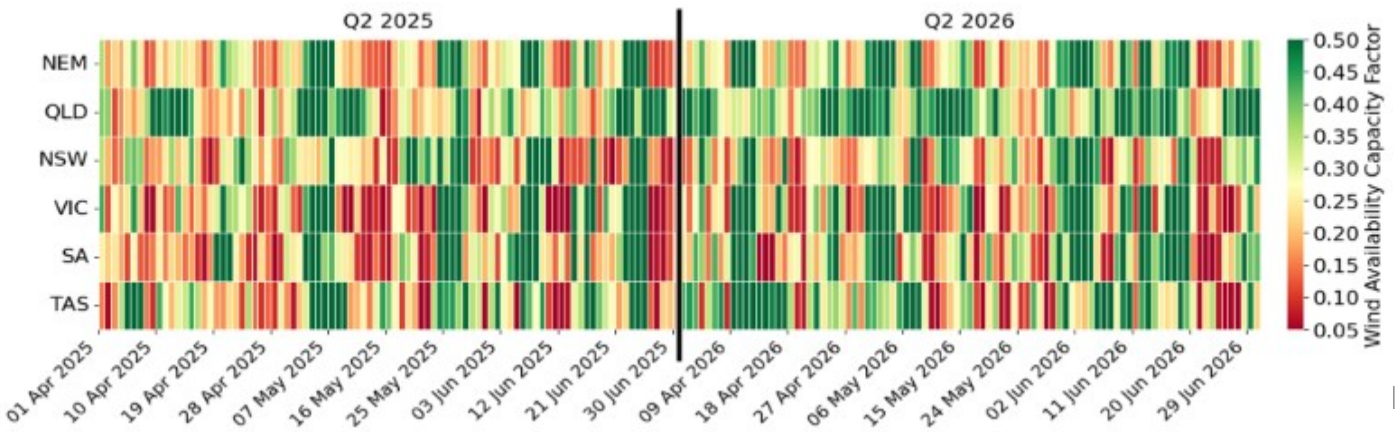
■ Increased availability from new and commissioning wind facilities

Changes in availability and generation – Q2 2026 vs Q2 2025



■ Less lows in wind availability across Q2 2026

Daily wind availability capacity factor – Q2 2025 and Q2 2026

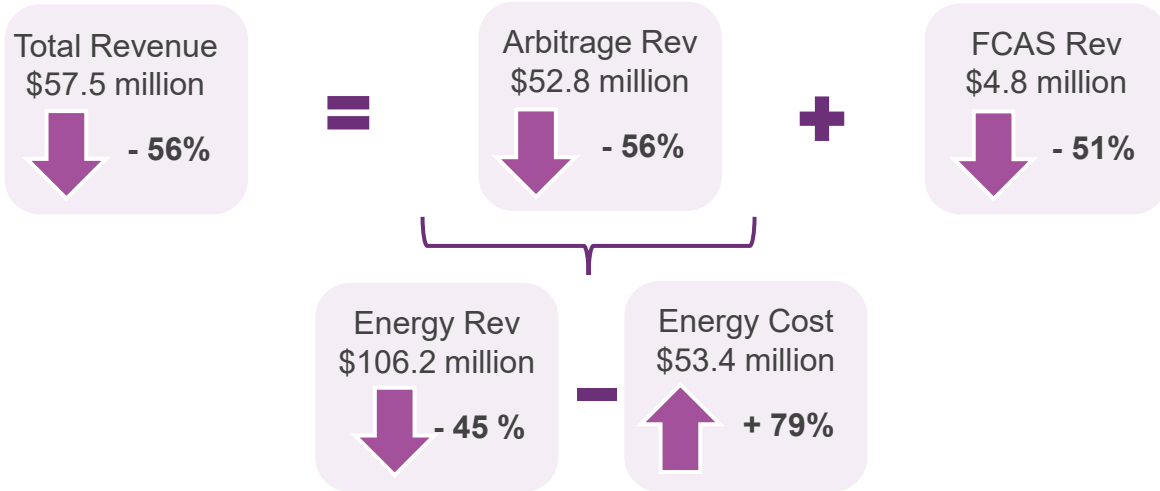


Q & A

Battery revenue decreased due to lower price spreads across the NEM

Decreases in FCAS and battery arbitrage revenue

Quarterly net revenue from NEM battery systems by revenue stream

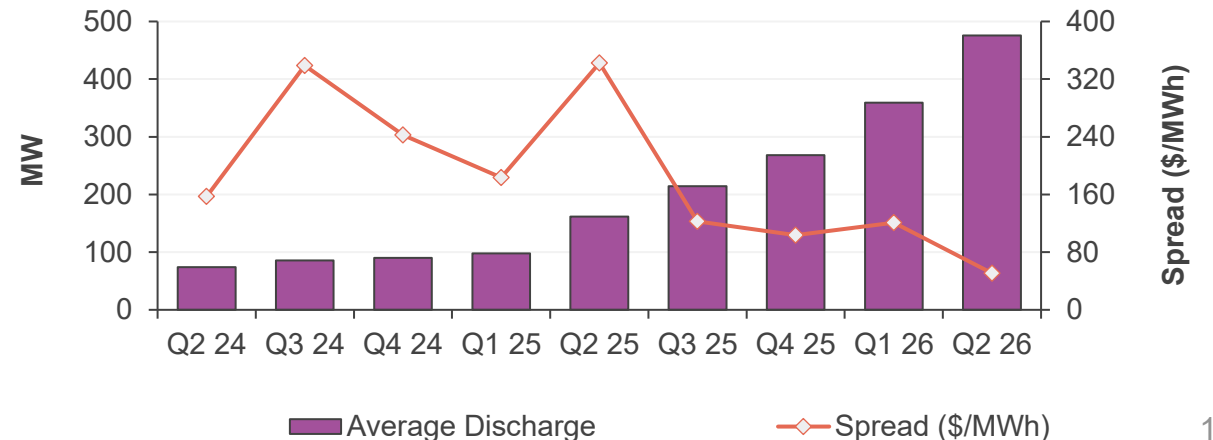
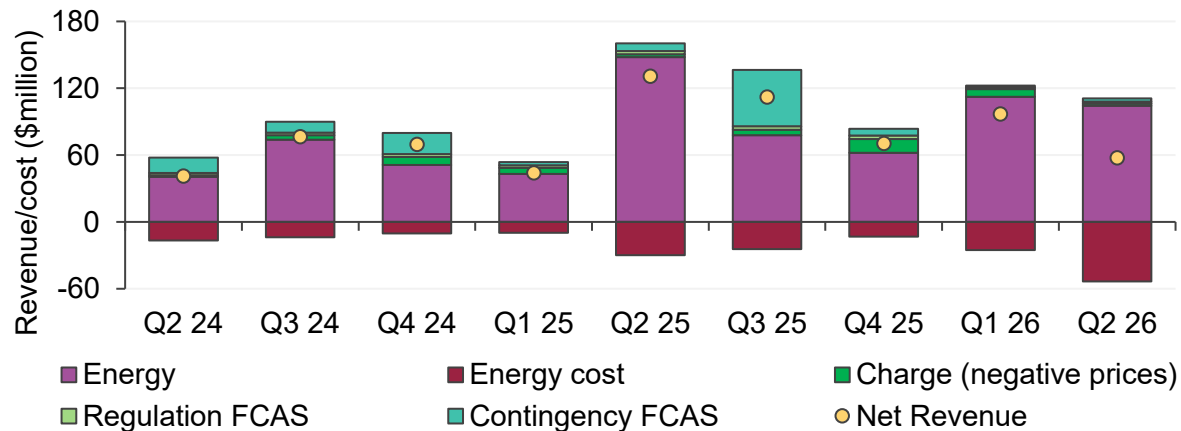
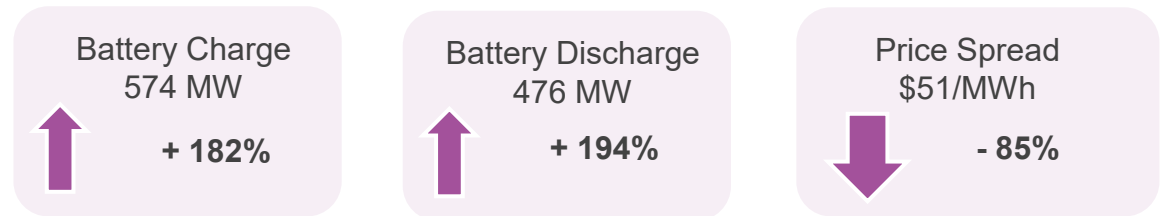


4,640 MW / 12,353 MWh

of battery energy storage systems entered the NEM between the end of Q2 2025 and Q2 2026

Decrease in NEM-wide battery price spread with lower price volatility

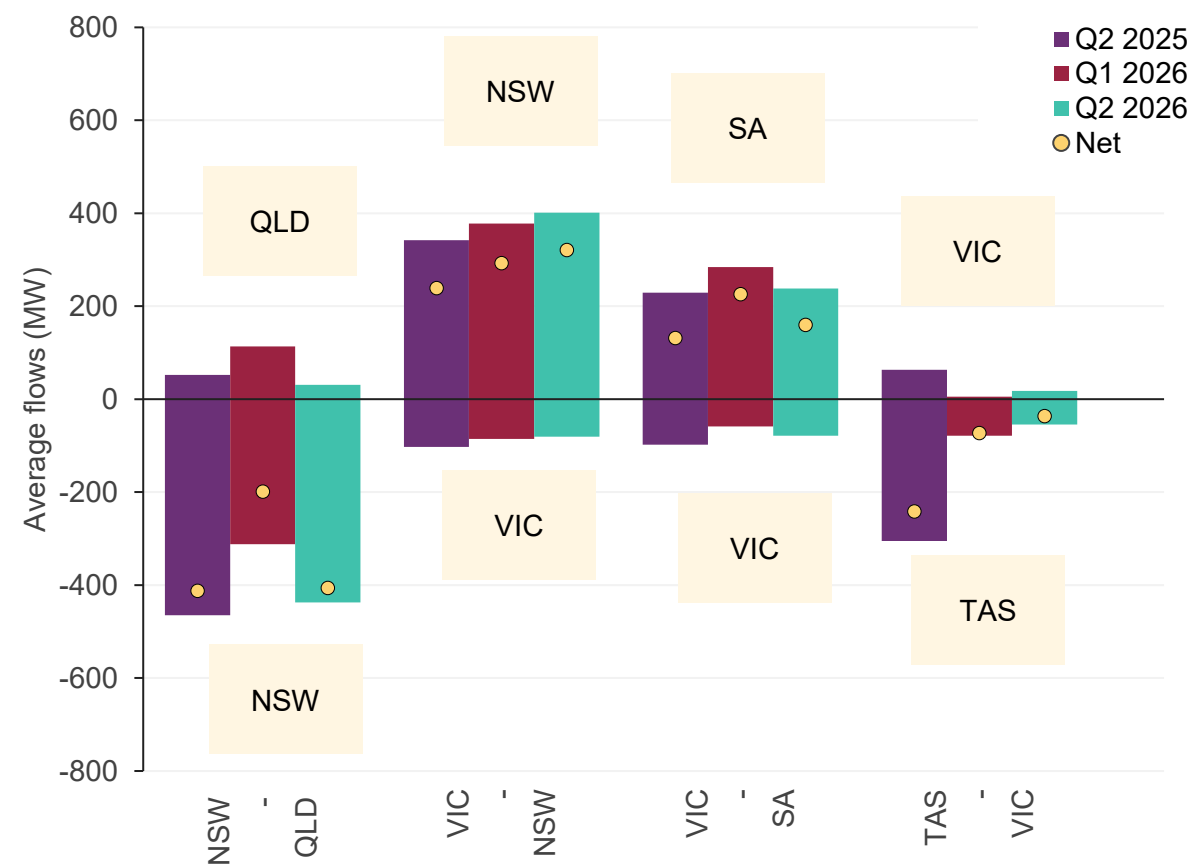
Average quarterly battery discharge (MW) and price spread (\$/MWh)



Inter-regional transfers declined, driven primarily by reduced Basslink flows

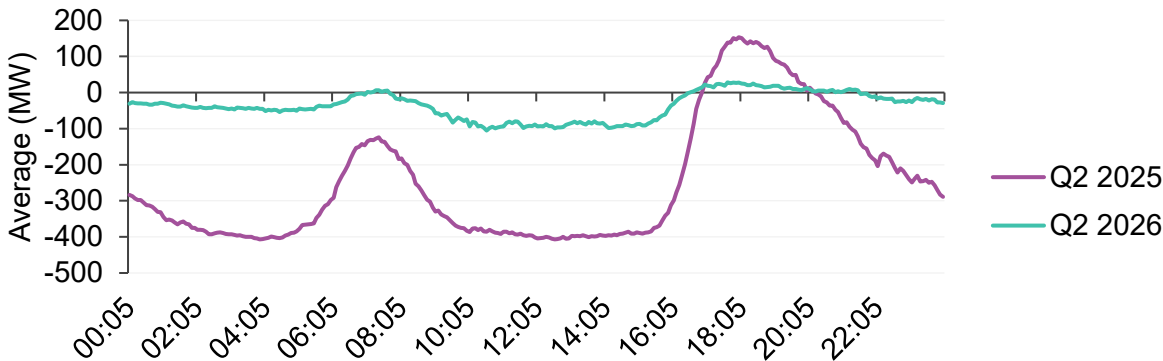
Inter-regional transfers declined in Q2 2026

Quarterly inter-regional transfers



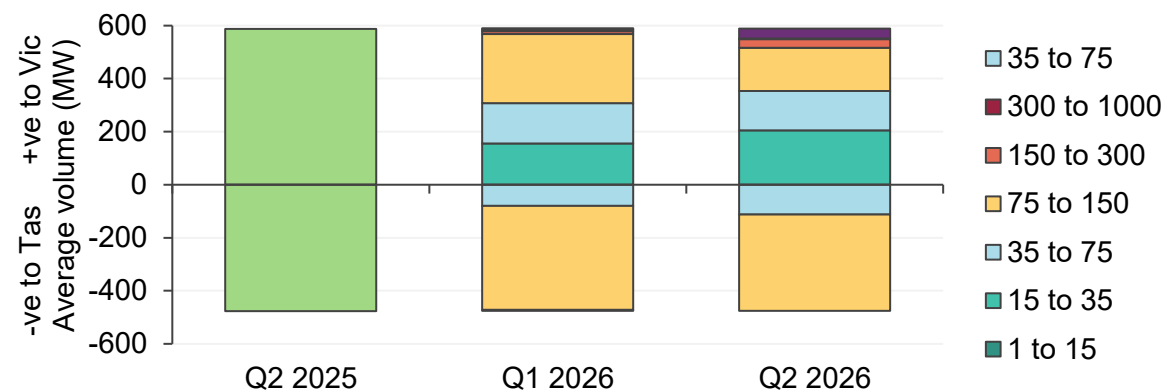
Basslink transfers to Tasmania reduced across all hours

Average Basslink flow by time of day



Majority of Basslink capacity to Tasmania offered at prices \$75-\$150/MWh

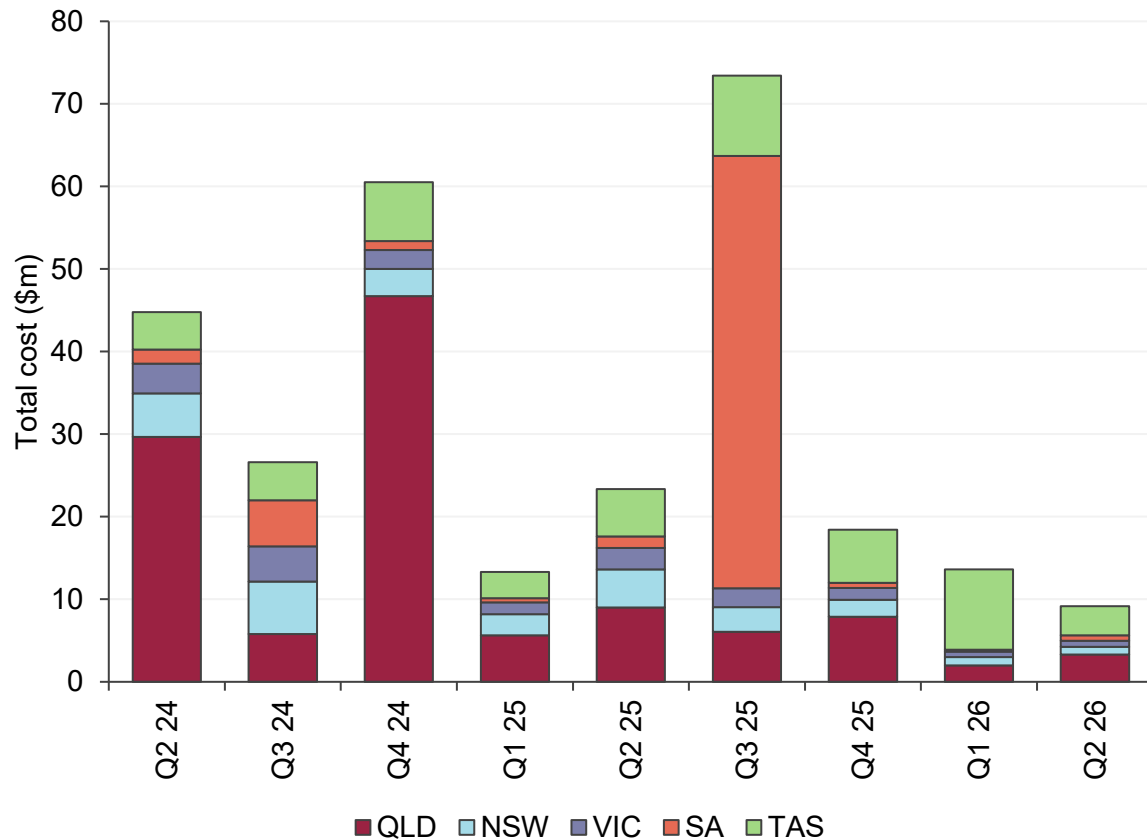
Basslink MNSP offers, average transfers capacity (MW) offered by price range (\$/MWh)



FCAS costs declined while batteries captured the largest share of FCAS and FPP net settlements

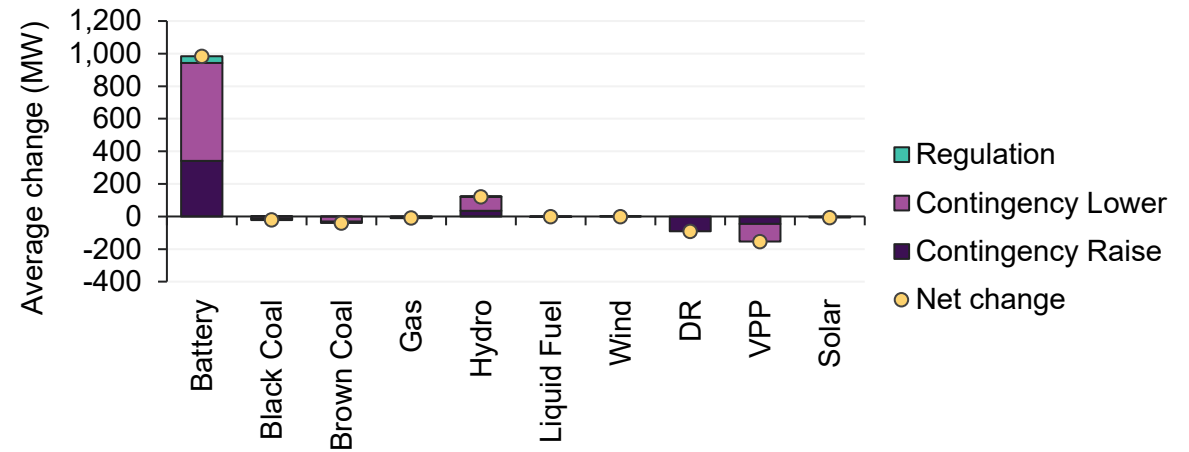
FCAS costs reduced across all regions

Quarterly FCAS costs by region



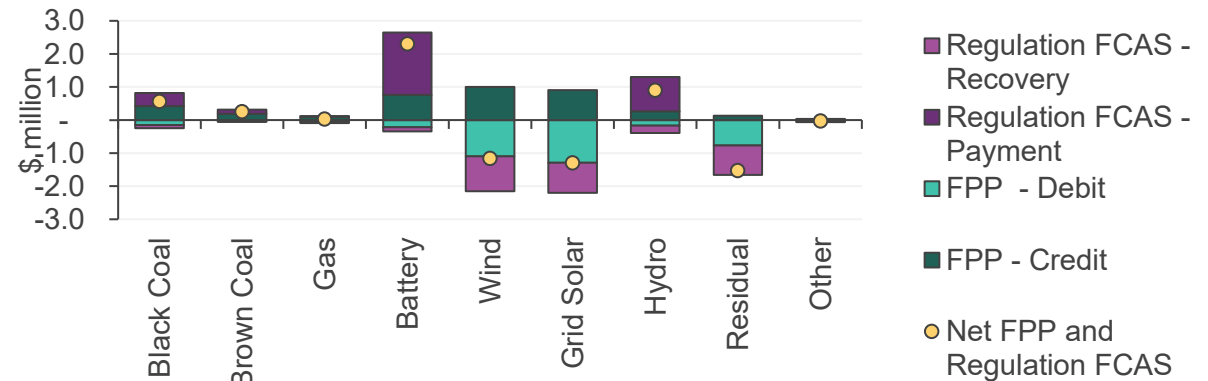
Battery enablement increased across all regions

Change in FCAS enablement by technology – Q2 2026 vs Q2 2025



Batteries received highest share of FPP and FCAS net settlements

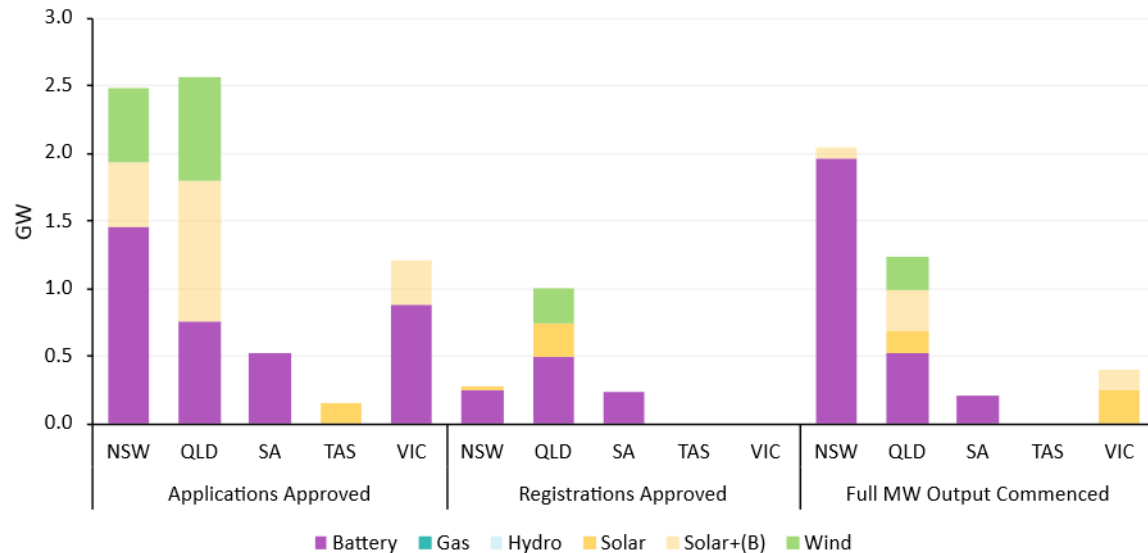
Sum of Frequency Performance Payments (FPP) and regulation FCAS recovery and payments by fuel type – Q2 2026



Grid-scale batteries continue to dominate NEM connections as pipeline grows

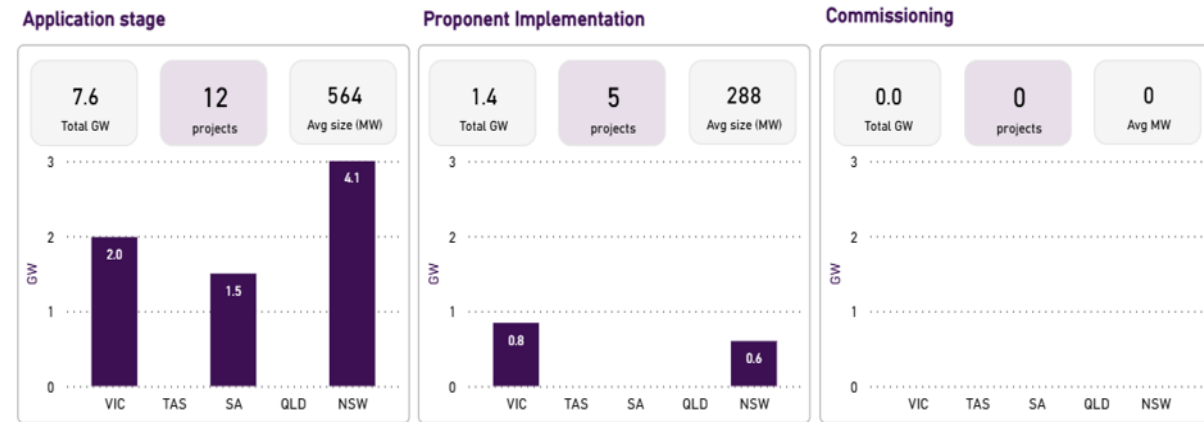
Strong quarter for applications approvals and commissioning

Applications approved, registrations and plant commissioned to full output during Q2 2026



Data centre load connection applications submitted to AEMO

Number and connection capacity of data centre load connections applications submitted



75.4 GW (+42%) of projects in the connection pipeline:

- 39.6 GW grid-scale battery
- 20.4 GW grid-scale solar
- 11.5 GW wind



17 data centres totalling 9.0 GW of maximum connection capacity working through a transmission network connection:

- 52% of the capacity is in New South Wales, 31% in Victoria and 17% in South Australia.
- 12 projects (7.6 GW) in the application stage.
- 5 projects (1.4 GW) in proponent implementation stage.

East coast gas prices and demand

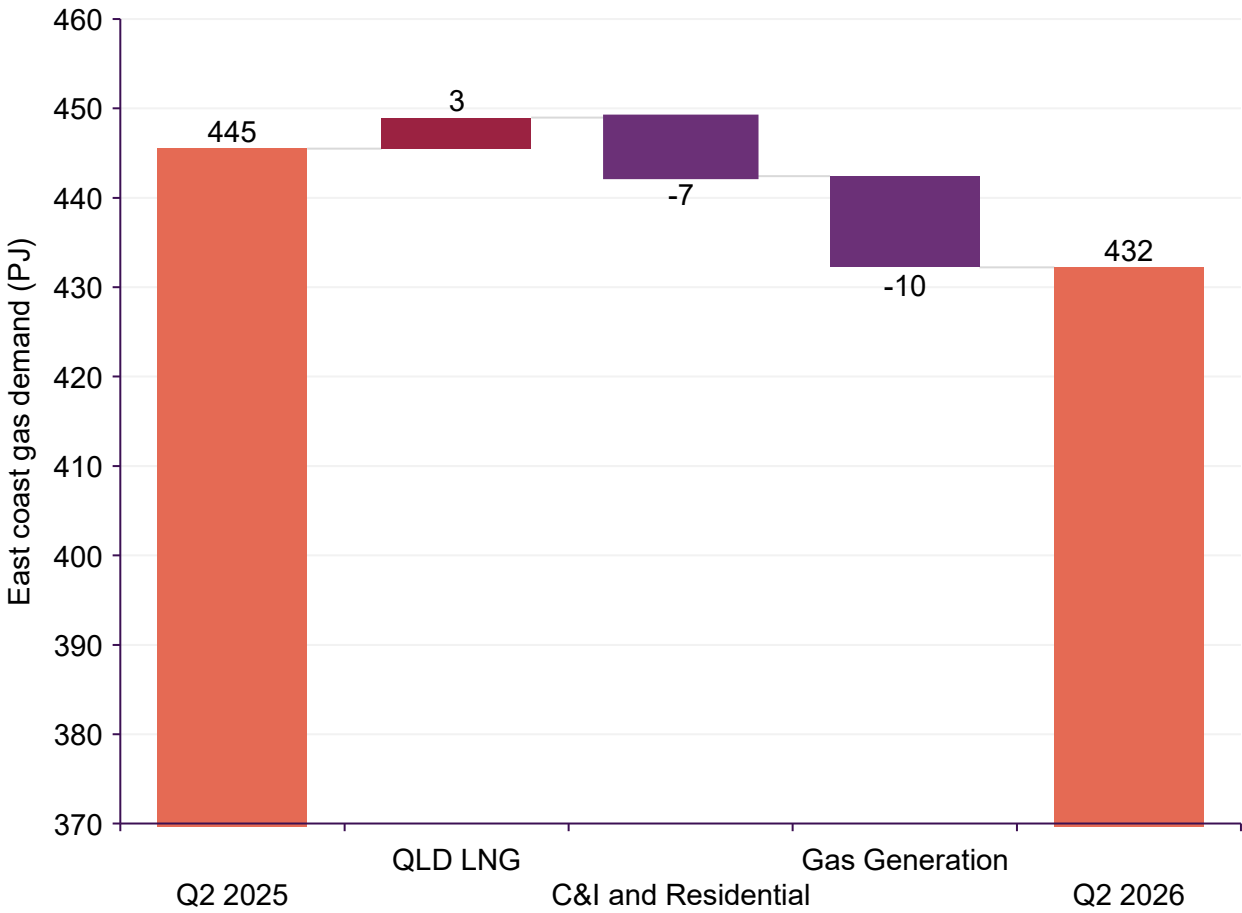
■ Australian east coast gas prices at lowest level in 5 years and trending in opposite direction to international prices

DWGM and Brisbane average price compared to ACCC LNG Netback price



■ Continued decline in gas-fired generation demand, lowest Q2 since 2003, market demand lower mainly due to Victorian demand

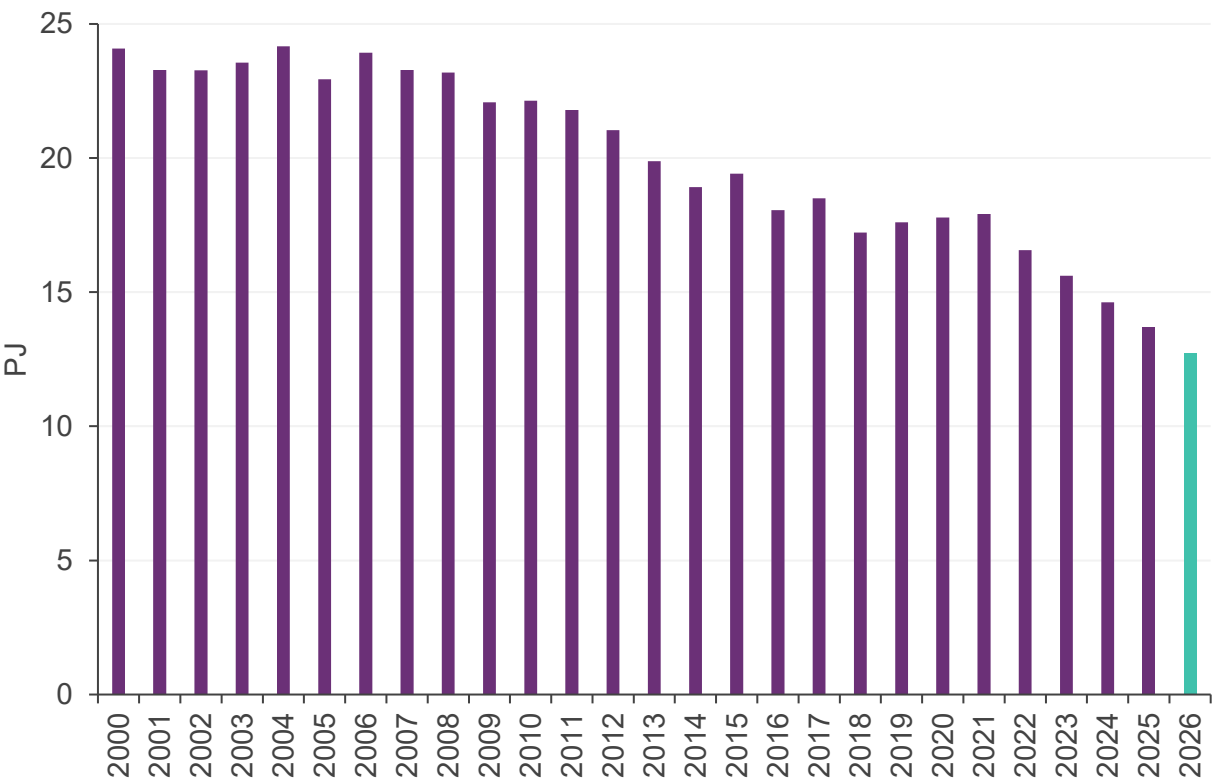
Components of east coast gas demand change – Q2 2025 to Q2 2026



Victorian gas demand continues to fall to record low levels as industrial use declines and electrification continues

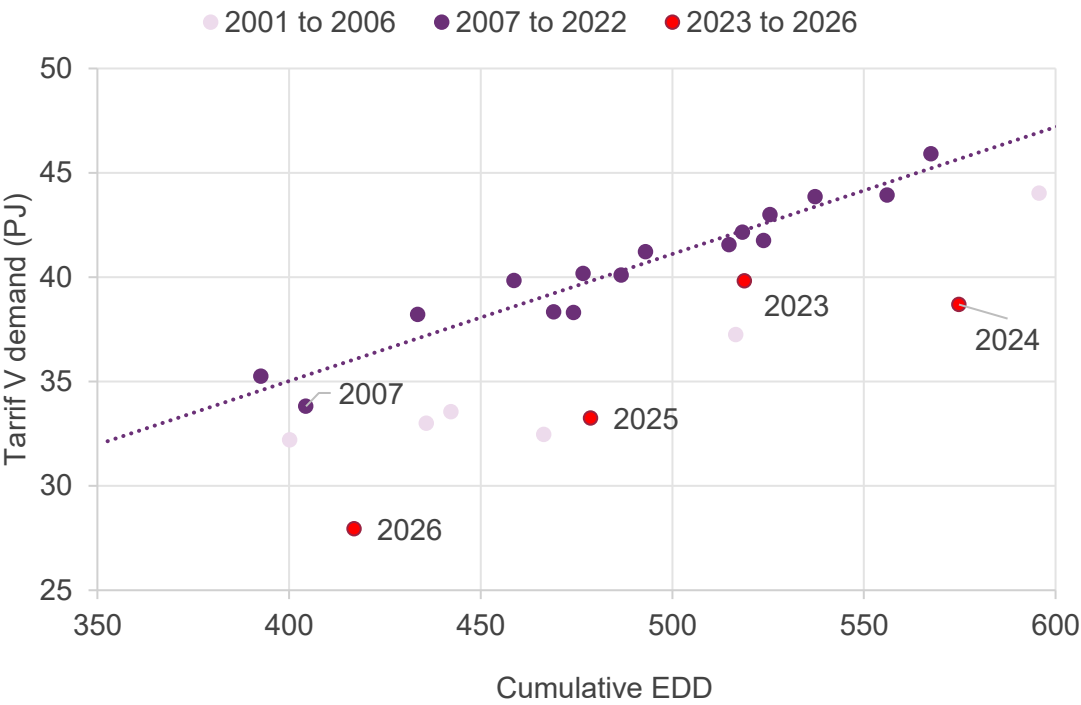
DWGM Tariff D demand continues to decline

Q2 2026 Tariff D demand



Tariff V demand decline not solely weather driven

Q2 Tariff V demand versus cumulative EDD 2001-2026



Thank you



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