Spring 2020 Market Review

December 2020

Key Messages for Spring[1] 2020

- Despite QLD LNG demand hitting record levels, overall demand was down ~13 PJ compared to Spring 2019
  - QLD LNG +10.2 PJ due to GLNG (+19.6 PJ) and QCLNG (+4.5 PJ), offset by APLNG decrease (-13.9 PJ)
  - GPG demand down 17.2 PJ
  - Non GPG demand was down 5.6 PJ due to milder weather
- Victorian supply decreased -11.6 PJ
  - Longford reduced most as Vic and NSW GPG fell -8 PJ
  - QLD supply increase +2.2 PJ, mostly driven by GLNG (+5.5 PJ) and non QLD LNG production (+4.2 PJ)
  - Despite this, APLNG supply was down -2.9 PJ and QCLNG down -4.6 PJ
- Gas prices were 33% lower than Spring 2019, but up on Winter 2020.
  - Averaged $5.30/GJ compared to $7.86/GJ in Spring 2019
  - Brisbane has become the highest priced market
  - Increase in international gas & oil prices and LNG exports contributing to increasing prices
- Day Ahead Auction usage increased due to new locations used (Iona and Moomba compressor)
- GSH volumes continue to fall -2.4 PJ

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[1] *Spring = Sep to Nov*

Gas Market Prices

	Average Price ($/GJ)		Movement
	Spring 2020	Spring 2019	
DWGM	4.91	8.02	39% ▼
ADL STTM	5.44	8.72	38% ▼
SYD STTM	5.27	8.19	36% ▼
BRI STTM	5.64	7.20	22% ▼
GSH	5.25	7.17	27% ▼

- All markets decreased compared to spring 2019, but have increased since winter 2020
- Brisbane has become the highest priced region, influenced by an increase in supply from southern regions, higher industrial demand, and 3 days of $10/GJ prices in early September

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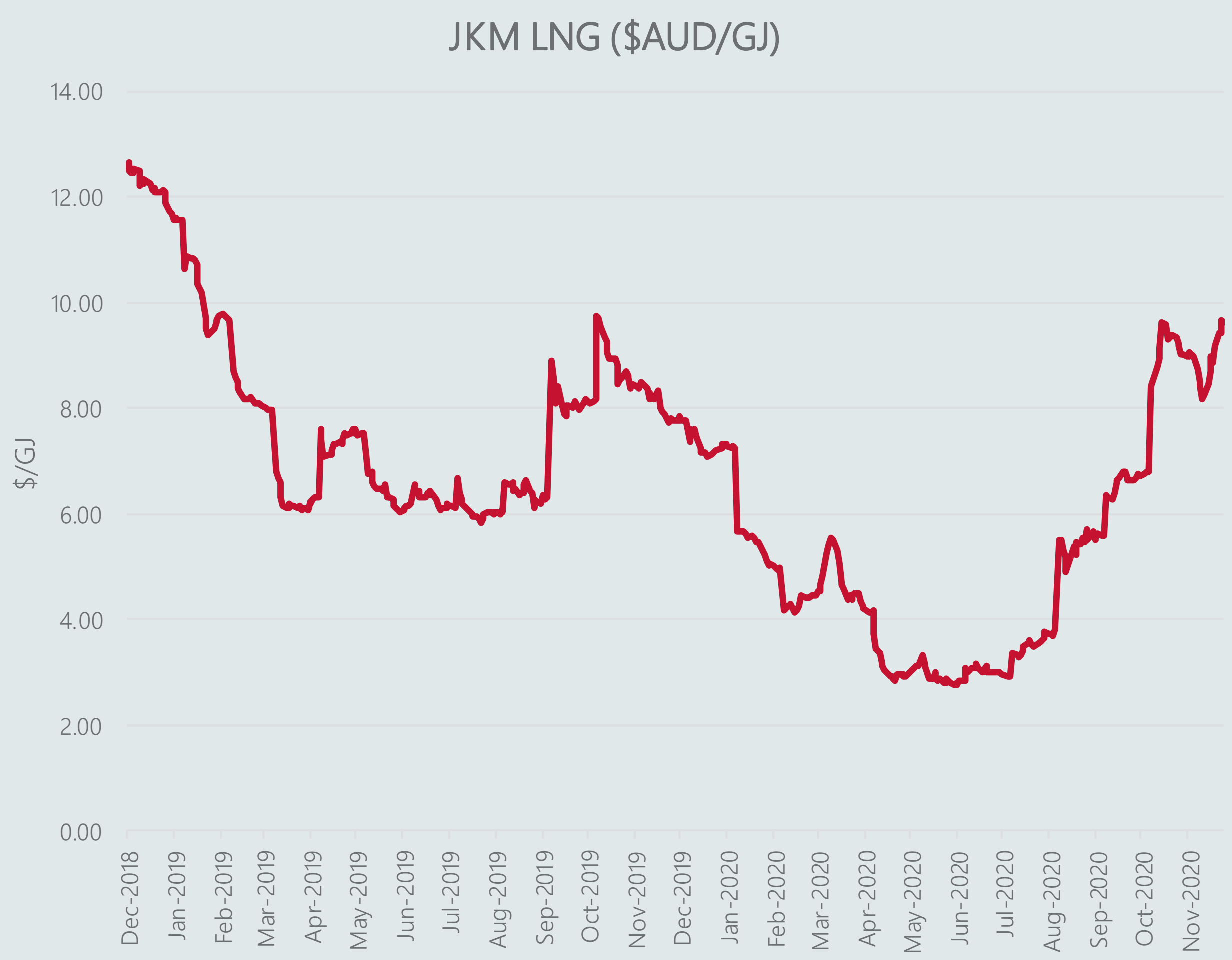
International Prices Increasing



- Since hitting a low in June, the reference price for spot physical cargoes has been increasing
- Prices have returned to pre Covid levels
- This is contributing to higher domestic prices

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System Demand

Demand Region	System Demand (PJ)			Max Demand (TJ)	HDD and EDD*		
	2020	2019	Move	2020	2020	2019	Move
Brisbane	7.4	6.8	9% ▲	96	10	14	29% ▼
Sydney	18	19.2	6% ▼	266	92	107	14% ▼
Victoria	43.3	48.3	10% ▼	995	287	350	18% ▼
Adelaide	4.6	4.7	2% ▼	80	207	239	13% ▼
QLD LNG	352.9	342.7	3% ▲	4,157	-	-	

- Demand decrease in Sydney, Adelaide and DWGM due to milder weather
- Brisbane demand increase due to higher industrial demand
- QLD LNG exporting at record levels. Biggest increase from GLNG

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* EDD for DWGM/VIC

GPG

Demand Region	Total State GPG (PJ)			DWGM/STTM GPG (PJ)		
	2020	2019	Move	2020	2019	Move
QLD	8.8	10	13% ▼	1.5	0	▲
NSW	1.9	8.1	76% ▼	-	-	-
VIC	2.7	8	67% ▼	1.2	5.6	79% ▼
SA	10.8	15.2	29% ▼	-	-	-
TAS	0.2	0.3	44% ▼	-	-	-
∑GPG	24.3	41.6	41% ▼	2.7	5.6	52% ▼

- Large GPG decreases across all regions due to return of coal stations Loy Yang A and Mt Piper.
- Notable decreases: NSW - Tallawarra (-2.7 PJ) and Uranquinty (-3.5PJ), SA - TIPS (-3.2 PJ), VIC – Newport (-3.3 PJ), QLD – Darling Downs (-0.7 PJ)

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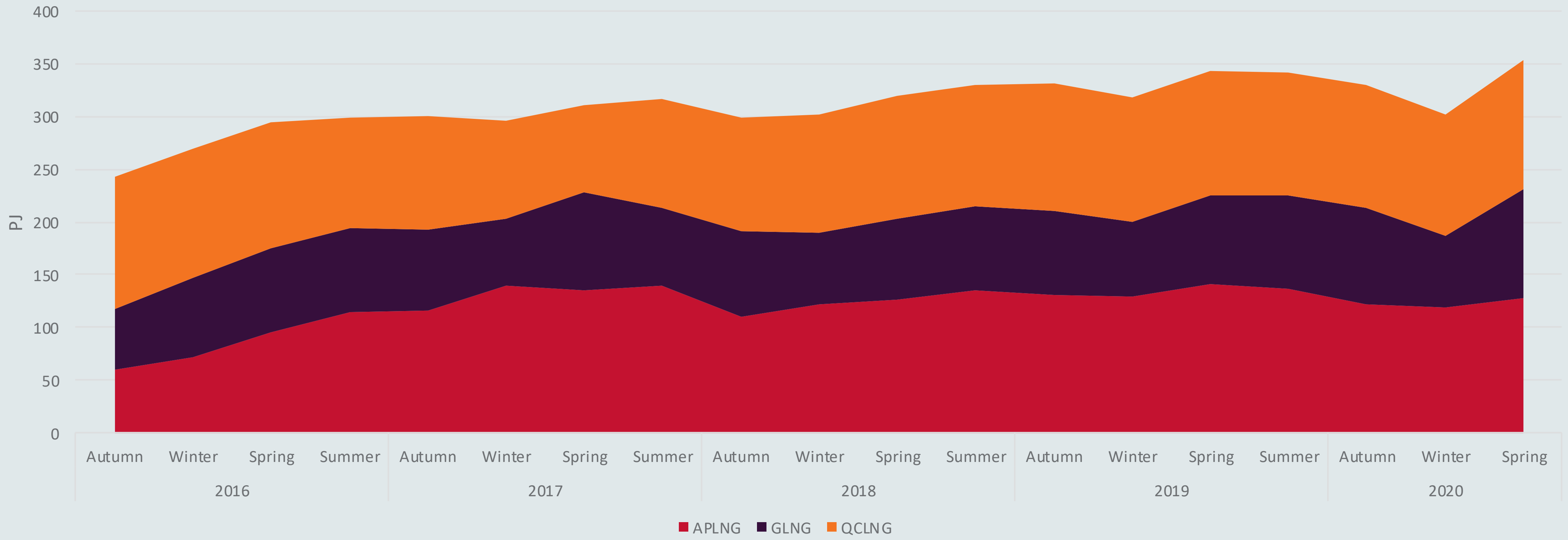
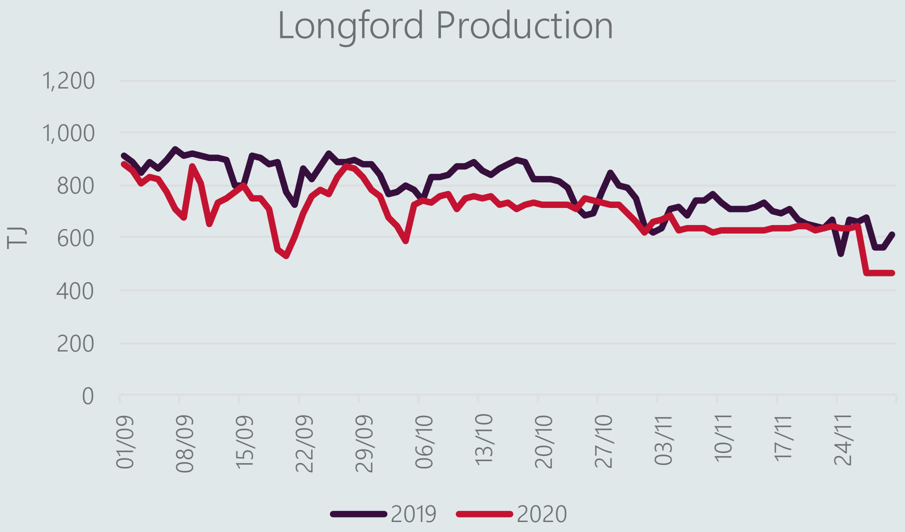
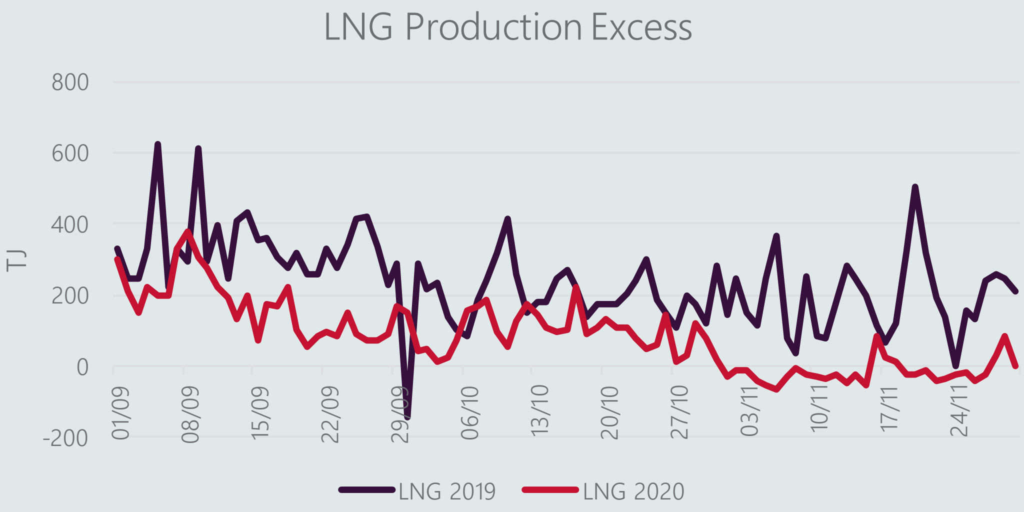
QLD LNG Demand

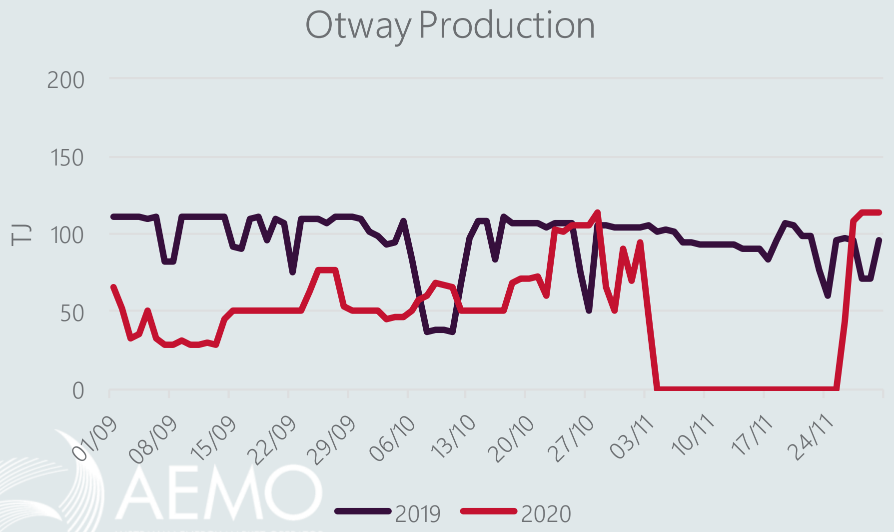


- QLD LNG exports at all time high, mostly driven by increase at GLNG to its highest recorded flows
- October set the monthly record (120.2 PJ), then beaten by November (122.4 PJ)
- Highest daily maximum flow record of 4,118 TJ on 4 November

Supply responded to lower demand

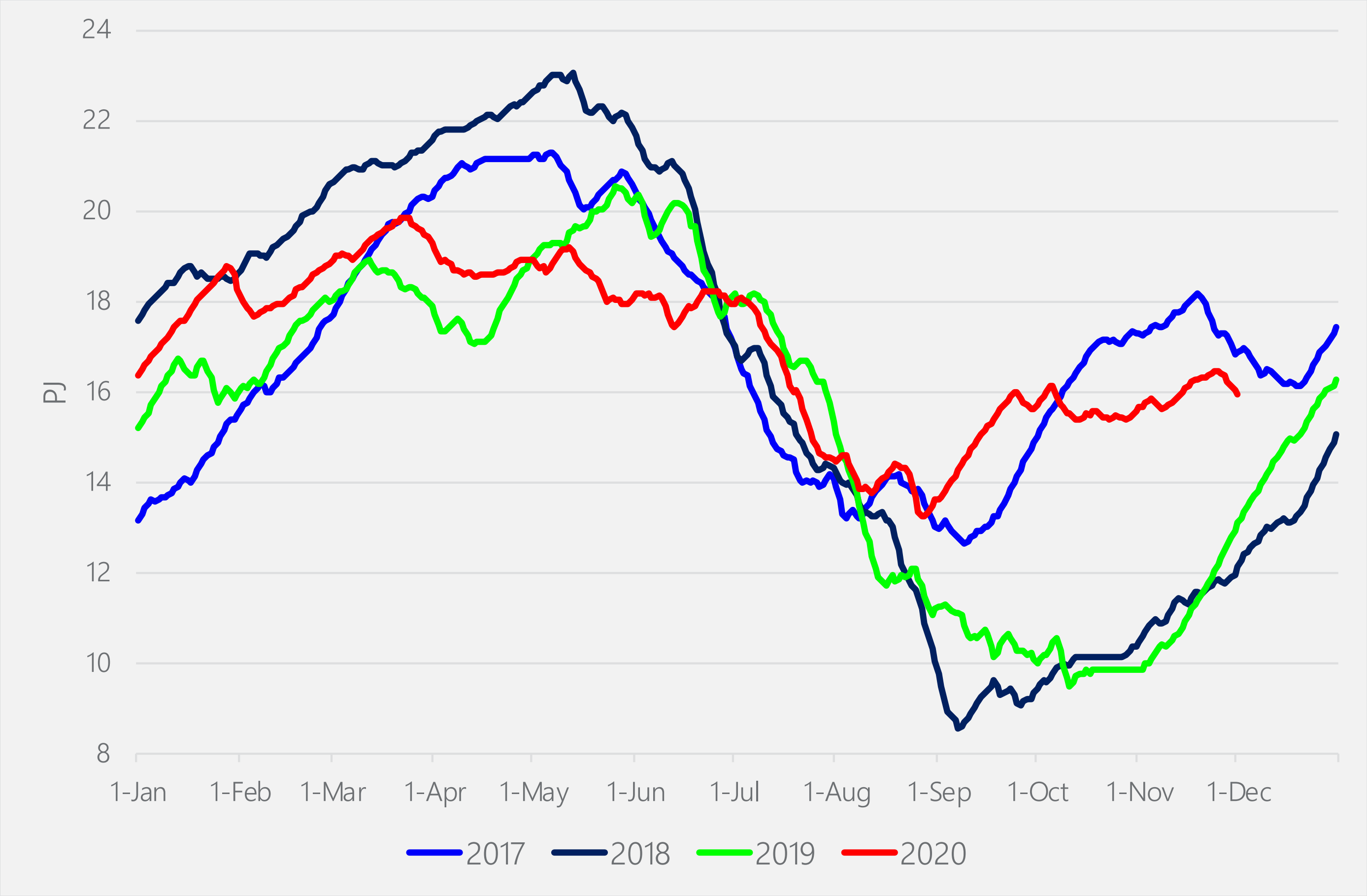






Longford production lower (-8 PJ)
Otway production lower (-4.5 PJ)
Bass Gas production lower (-0.4 PJ)
Orbost supplied 1.9 PJ suppressed by technical issues.
Moomba production slightly higher (+0.2 PJ)
LNG production excess to the domestic market lower (-14.1 PJ)
Northern Territory supply to QLD lower (-1.6 PJ)

Iona Gas Storage



- 2020 Spring storage levels took a very different trajectory compared to 2019 and 2018, particularly in September
- In October and November Iona storage was utilised more frequently to support Culcairn northerly flows, as well supply during an Otway outage and Longford reduced capacity

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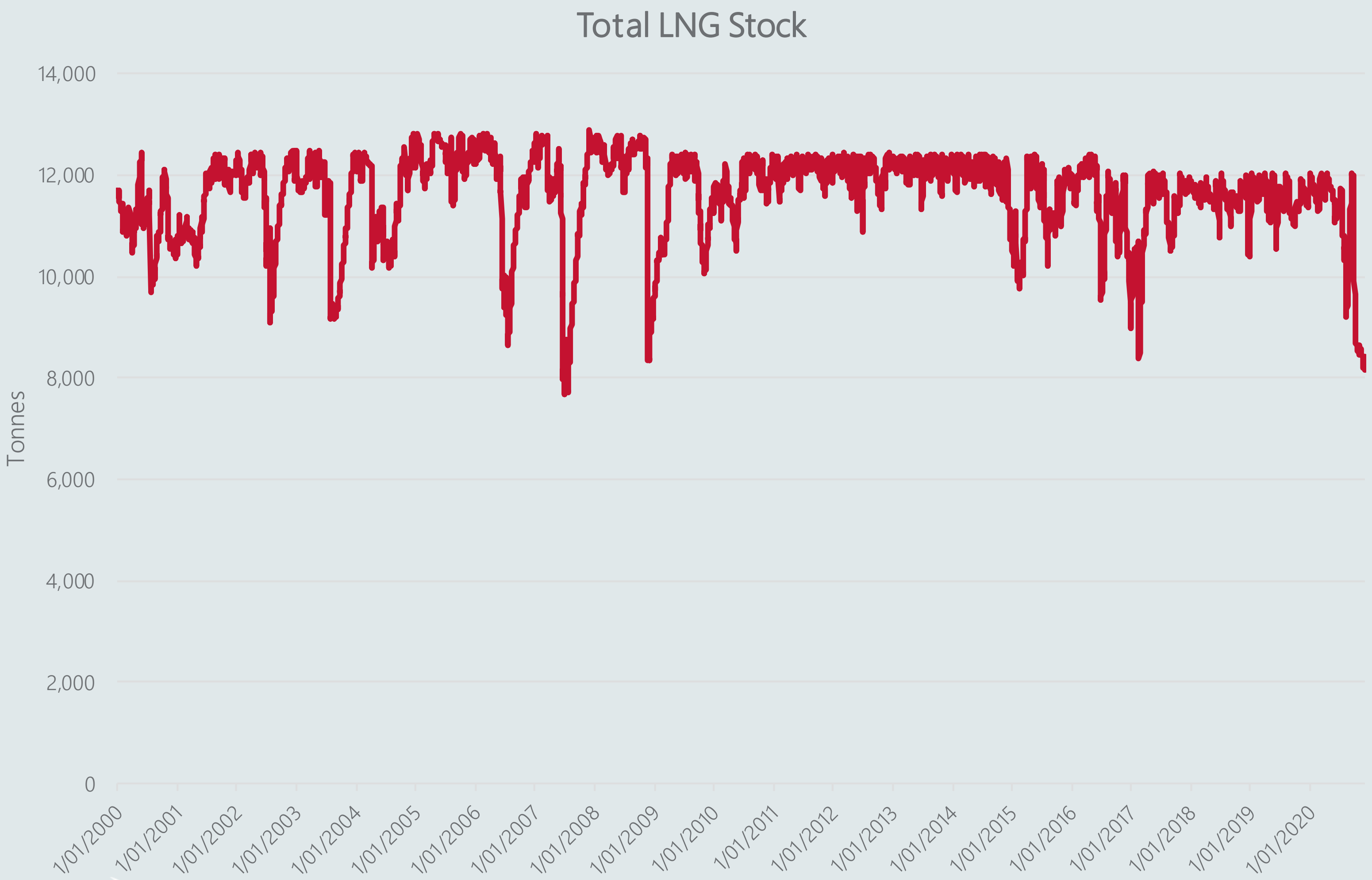
Dandenong LNG Storage



- After reaching capacity by 23 September, storage level fell to 479 TJ by end of November.
- This is its lowest level since winter 2007
- LNG plays an important role in managing intra-day system pressures and can be called out of merit order if AEMO issues a threat to system security.
- If AEMO needed to inject 40 TJ of LNG at $800/GJ participants would be up for their share of $32m of uplift charges.

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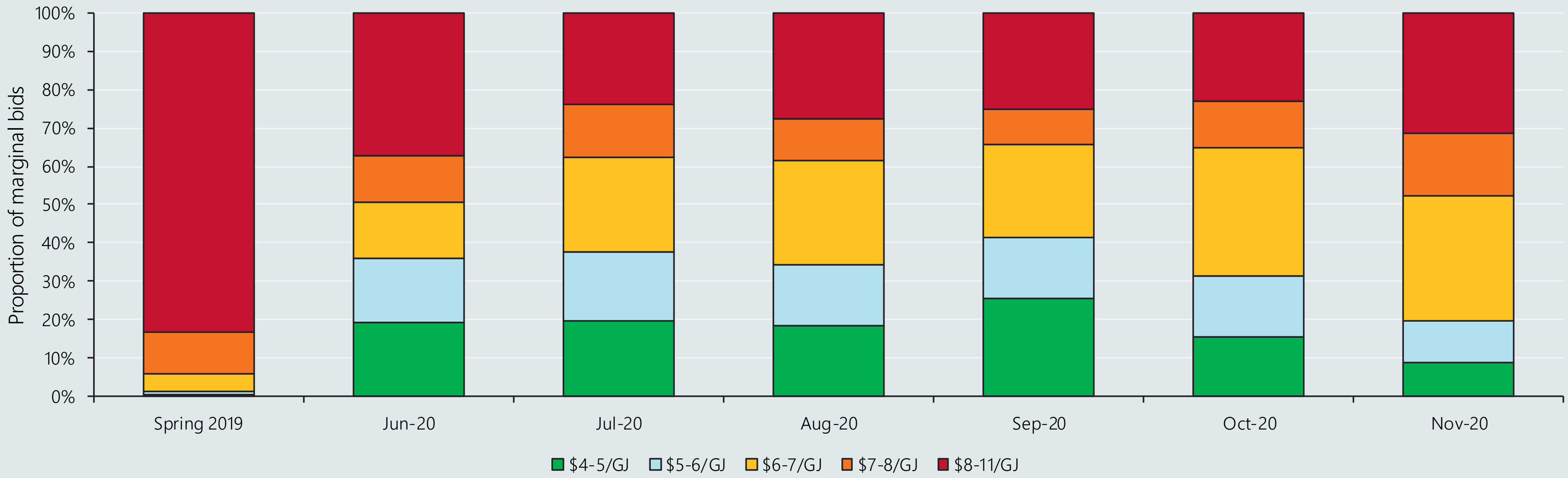
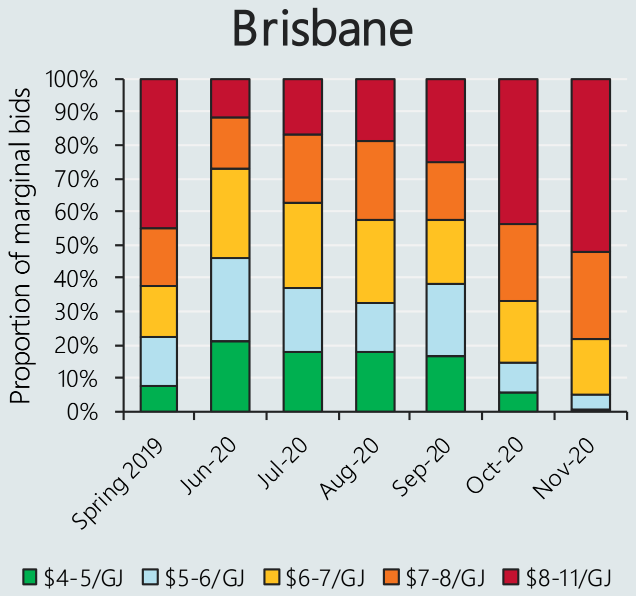
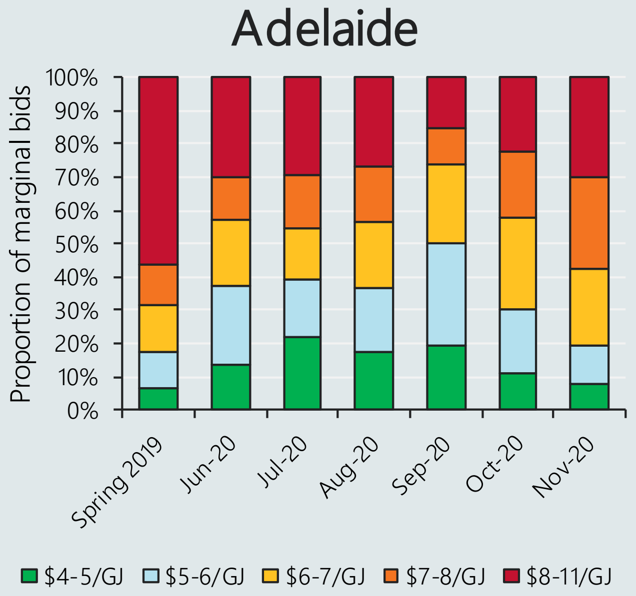
DWGM Marginal Injection Bids

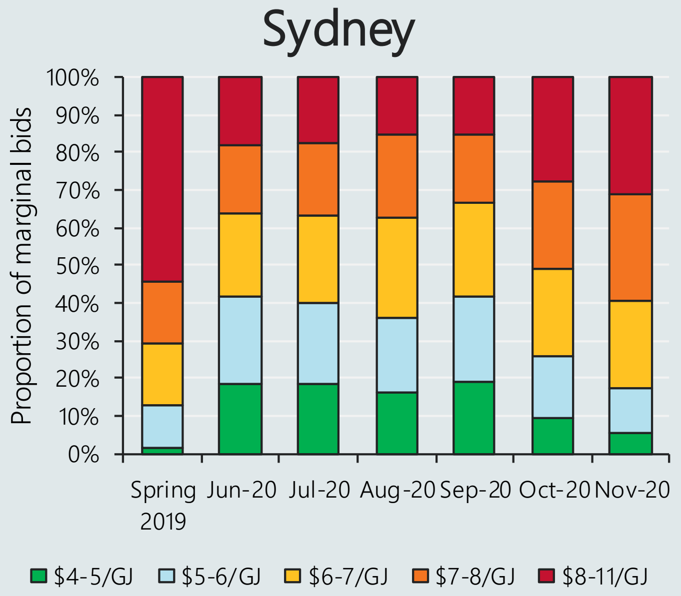


- Lower 2020 prices influenced by large increase in marginal bids priced between $4-6/GJ across all months
- Prices began to increase from October coinciding with an increase in marginal bids priced above $6/GJ

STTM Marginal Injection Bids







- All hubs have followed a similar pattern to DWGM
- Brisbane price has noticeably increased in November with an increase in bids above $6/GJ

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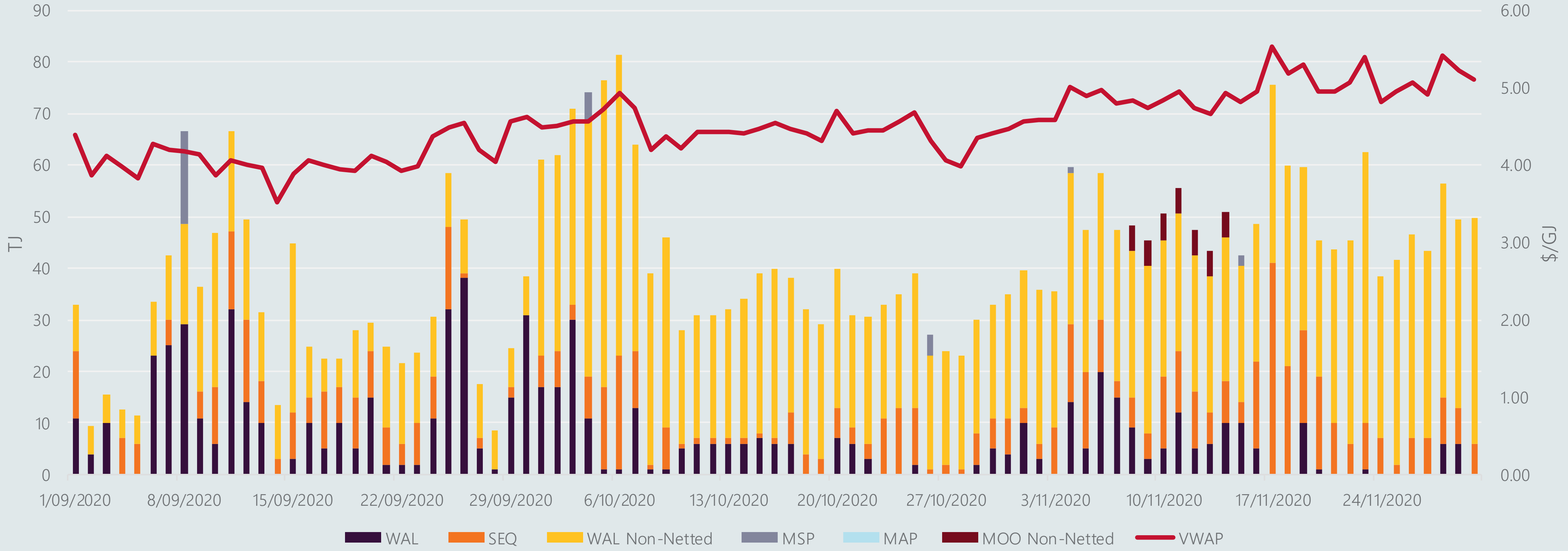
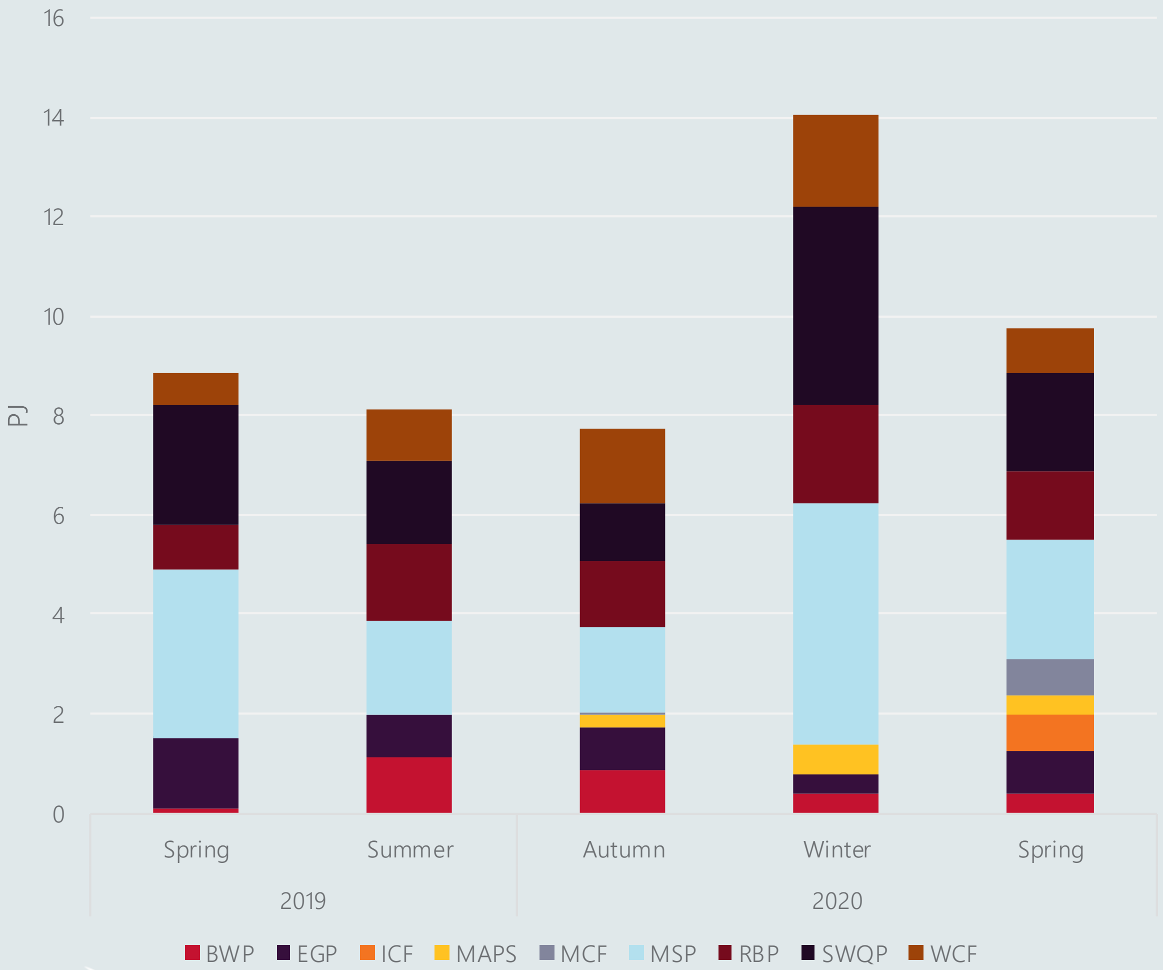
Gas Supply Hub



- 3.7 PJ was traded and delivered across winter, compared to 6.1 PJ in 2019
- September in particular was a very quiet month

Day Ahead Auction



Summary

A Auction volumes have increased overall compared to Spring 2019. Increases mostly due to Iona and Moomba compressor. SWQP East also heavily used

B MSP still the most utilised pipeline, followed by SWQP, though both have decreased compared to 2019; RBP volumes have increased

C Average auction clearing price on SWQP increased to $0.23/GJ in November; EGP was $0.01/GJ in October and $0.05/GJ in November; RBP $0.02/GJ in September. Otherwise, prices were at or close to zero

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Web Links

- Pipeline Flows, Production Flows, Capacity and GPG Data
  - https://www.aemo.com.au/energy-systems/gas/gas-bulletin-board-gbb/data-portal
- DWGM
- Gas Held in Storage
  - https://www.aemo.com.au/energy-systems/gas/gas-bulletin-board-gbb/data-portal
- Market Price (INT310), Bid Stack (INT314)
  - https://aemo.com.au/energy-systems/gas/declared-wholesale-gas-market-dwgm/data-dwgm/daily-dwgm-reports
- STTM
- Ex-Ante Market Price (INT651) & Schedule Quantity (INT652)
  - https://aemo.com.au/energy-systems/gas/short-term-trading-market-sttm/data-sttm/daily-sttm-reports
- Gas Supply Hub
- Traded Volume and Volume Weighted Average Price
  - http://nemweb.com.au/Reports/Current/GSH/GSH_Historical_Trans_Summary/