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Winter 2021 Market Review

September 2021

Key Messages for Winter 2021

- Gas prices in all regions were at record levels
  - Average $11.55/GJ compared to $4.35/GJ in Winter 2020 (all time high)
  - Prices peaked in July. Adelaide set an all time high ($28.01/GJ), Sydney and Brisbane second highest prices ($27.56/GJ and $20.08/GJ). DWGM 10am price of $58.44/GJ was the third highest price since market start
  - Higher international prices continue to be the biggest contributing factor to the price increases
- Iona Gas Storage decreased at record rates in June due to GPG covering for coal-fired outages, reduced supply from QLD to southern markets and supply reduction from Longford
- QLD LNG exports were at an all time high for winter, GPG demand was up in the first half of winter before decreasing sharply in the second half
  - QLD LNG +26 PJ due to GLNG(+36.6 PJ), APLNG (+1.4 PJ) and QCLNG (-11.1 PJ),
  - GPG demand down 3.2 PJ
  - Non GPG demand was down 2.5 PJ, mostly due to milder temperatures, particularly in August
- Day Ahead Auction usage at record levels (+4.4 PJ) with increases on most pipelines
- GSH delivered volumes also highest on record (+4.7 PJ)

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[1] *Winter = Jun to Aug*

Gas Market Prices

	Average Price ($/GJ)		Movement
	Winter 2021	Winter 2020	
DWGM	10.75	4.72	127% ▲
ADL STTM	12.47	5.62	122% ▲
SYD STTM	12.14	4.33	180% ▲
BRI STTM	11.44	3.59	219 ▲
GSH	10.96	3.49	214% ▲

- All markets recorded all time high winter average prices
- Adelaide recorded its all time high price, DWGM its third highest price, and Brisbane and Sydney their second highest ever price

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JKM Closing In On Record Winter Price

- JKM near record price (A$25/GJ) as Hurricane Ida disrupts US LNG shipments
- European gas prices near record levels due to outages, high demand to refill gas storages ahead of winter
- Asia pays premium to attract LNG tankers away from Europe to refill their storages
- JKM prices ~A$24/GJ now, A$15/GJ in mid 2022 and ~A$11/GJ mid 2023

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System Demand

Demand Region	System Demand (PJ)				Max Demand (TJ)	HDD and EDD*			
	2021	2020	Move		2021	2021	2020	Move	
Brisbane	7.8	7.0	12%	▲	99	229	206	11%	▲
Sydney	25.2	25.0	1%	▲	348	524	491	7%	▲
Victoria	77.9	80.1	4%	▼	1,133	821	884	7%	▼
Adelaide	6.6	6.9	5%	▼	90	540	625	14%	▼
QLD LNG	329.2	302.3	9%	▲	3,810	-	-		

- Brisbane higher due to an increase in industrial demand
- Sydney demand higher due to colder weather mostly in June and July
- Victoria and Adelaide down due to milder weather
- QLD LNG demand at all time winter high

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GPG

Demand Region	Total State GPG (PJ)			DWGM/STTM GPG (PJ)		
	2021	2020	Move	2021	2020	Move
QLD	15.0	16.4	9% ▼	1.2	3.4	64% ▼
NSW	4.6	2.5	89% ▲	-	-	-
VIC	6.7	6.1	11% ▲	4.0	2.5	59% ▲
SA	14.2	18.3	23% ▼	-	-	-
TAS	0.1	0.6	85% ▼	-	-	-
∑GPG	40.7	43.9	7% ▼	5.3	5.9	12% ▼

- GPG lower in QLD, SA and TAS, higher in NSW and VIC
- Notable changes: QLD – Braemar 1 (+0.9 PJ), Swanbank E (-2.2 PJ), NSW – Uranquinty (+2 PJ), SA – Pelican Point (-1 PJ), TIPS (-2.7 PJ), VIC – Newport (+1.2 PJ), Mortlake (-0.8 PJ)

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QLD LNG Demand

- Record QLD LNG winter exports
- GLNG recorded the biggest increase compared to winter 2020 (+36 PJ), QCLNG decreased due to planned train maintenance (-11 PJ), and APLNG slightly higher (+1.4 PJ)

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Supply

Longford production higher (+3.4 PJ)
Otway slightly higher (+0.4 PJ)
Bass Gas production lower (-1 PJ)
Orbost production higher (+0.8 PJ)
Moomba production lower (-2.3 PJ)
Net QLD production to domestic market lower (-13.7 PJ)
Northern Territory supply to QLD slightly lower (-0.2 PJ)

Iona Gas Storage

- Iona recorded record rates of depletion during June
- Fast depletion was caused by a reduction in southerly flows from QLD combined with cold weather, higher GPG and a tight supply situation in the first half of winter
- Second half of winter saw a decrease in GPG demand, an increase in QLD southerly flows and milder weather and enabled storage levels to recover

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DWGM Marginal Injection Bids

- Higher winter 2021 prices influenced by large increase in marginal bids priced above $11/GJ
- After a record July average, bid prices eased in August
- Bidding changes reflect higher JKM LNG prices compared to 2020, as well as the tight supply situation in the first half of winter

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Gas Supply Hub

- GSH volumes rebounding, with winter delivered volumes at record levels
- 6.9 PJ was traded across winter, with 10.1 PJ delivered

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Day Ahead Auction

Summary

A Auction volumes set a new record for any season. Largest increases came from EGP, RBP and WCF

B MSP was the most utilised pipeline, followed by SWQP

C Average auction clearing price on EGP was $0.21/GJ; MSP was $0.11/GJ, RBP $0.07/GJ, SWQP was $0.05/GJ. Other locations were at or close to zero

DWGM EDD

- 2021 was a slightly below average winter
- The first half was colder than the second half
- Highest EDD of 13.6 occurred on 3 July (record since 2000 is 16.8)

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* EDD for DWGM/VIC

Winter Demand Comparisons

- Adelaide and Melbourne had a milder August
- Sydney had a colder July but a milder August
- Brisbane increase due to higher industrial demand

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/

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