
armour energy

OCTOBER 2022

Pathway to sustainable growth & profitability



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Statements in this presentation as to gas and petroleum reserves has been compiled from data provided by Armour's Reservoir Engineering Advisor, Mr John Mackintosh. Mr Mackintosh has over 25 years of diverse oil and gas industry experience and has significant reservoir engineering, production technology and operations experience in multiple basins worldwide with a variety of International Operators and Consulting firms. He has previously held roles in Santos (Australia/Houston), Halliburton Consulting (Russia), Wintershall (Norway) and Apache (Egypt). Mr Mackintosh has sufficient experience that is relevant to Armour Energy and Lakes Blue Energy for reserves and resources to qualify as a Reserves and Resources Evaluator as defined in the ASX Listing Rules. Mr Mackintosh has consented to the inclusion in this report of the matters based on his information in the form and context in which it appears.

HIGHLIGHTS

- 1 Armour Energy is well placed to deliver materially increased gas supply into the robust east coast gas market
- 2 100% owned & operated Kincora processing facility is close to market with ready capacity
- 3 100% owned Newstead gas storage facility provides optionality for Armour and 3rd parties
- 4 Drill ready prospects in the Otway basin with short cycle time to market – Target up to 419Bcf
- 5 Numerous conventional and unconventional exploration opportunities can be accelerated
- 6 Capital raising to strengthen the balance sheet and provide working capital for near-term well optimization and exploration activities
- 7 Actively negotiating new gas sales agreement with a number of interested parties – very strong demand environment

Armour Energy Quicklook

Producer of Gas, LPG, Condensate and Oil

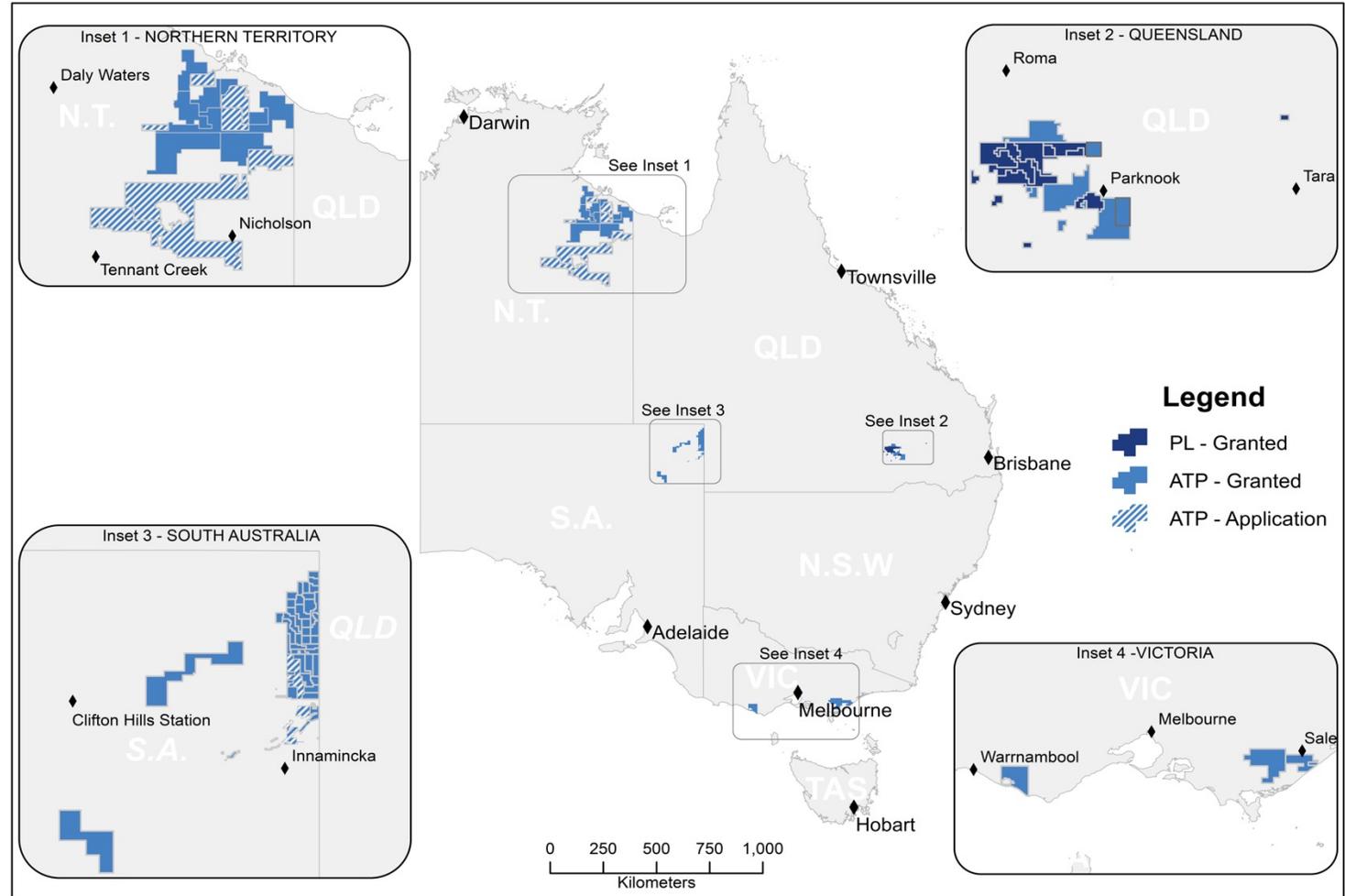
Long Life Production Assets

Gas Processing Facility in Strong Commercial Environment

Commanding Acreage Position and Diverse Portfolio

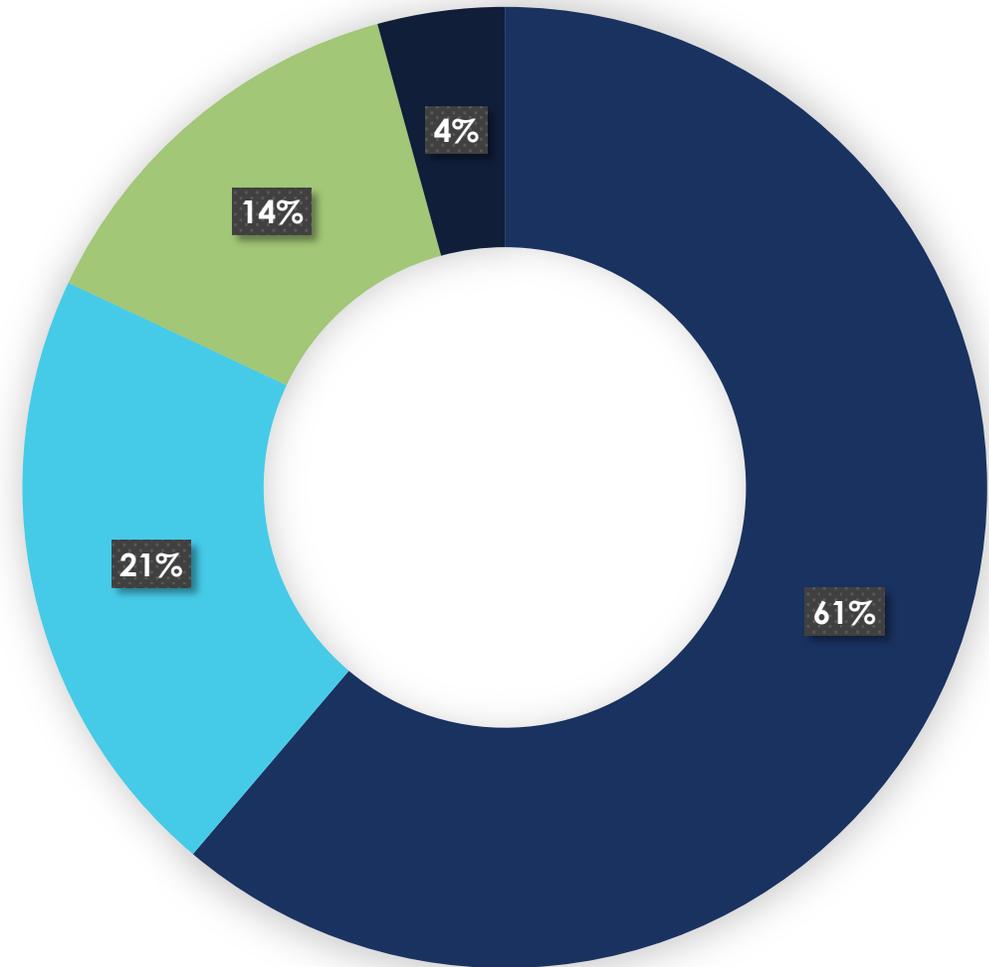
Vast Under-explored Opportunities

Current and Future Development & Exploration Plans



12-month sales revenues to June 30, 2022

Revenue Stream	A\$'000
Gas	11,005
Oil	765
Gas Condensate	3,743
LPG	2,472
Total	17,985



■ Gas

■ Condensate

■ LPG

■ Oil



Nick Mather

- Founding Director and Executive Chairman of Armour Energy Limited
- More than 25 years experience in junior resource sector
- Former Founding Director, Arrow Energy Limited
- Former Director Bow Energy Limited
- Managing Director of DGR Global Limited



Stephen Bizzell

- Non-executive Director of Armour Energy Limited
- Corporate advisor with extensive finance, governance and resource and energy sectors experience
- Former Founding Executive Director of Arrow Energy Limited, Bow Energy and Stanmore Resources
- Currently the Chairman of Bizzell Capital Partners, MAAS Group Holdings and Savannah Goldfields
- Director of Strike Energy and Renascor Resources.



Eytan Uliel

- Non-executive Director of Armour Energy Limited
- Finance executive with significant oil and gas industry experience
- Chief Executive Officer of Challenger Energy Group plc
- Former CFO and CCO of Dart Energy Limited
- Former CCO of Arrow Energy International Ltd



Christian Lange

- Chief Executive Officer of Armour Energy Limited
- More than 30-years global oil & gas experience
- Former executive, strategy, M&A, capital markets, Schlumberger Ltd
- Former Managing Director of Neptune Energy Services Limited
- Founder & Managing Director of Griffin Energy Solutions



Geoff Walker

- Chief Financial Officer of Armour Energy Limited
- Chartered accountant and member of the Australian Institute of Company Directors
- 30+ years of commercial experience including CFO of ASX listed Eagers Automotive Limited (APE)
- Former CFO of Range International Limited (RAN)
- Extensive experience formulating and executing strategic initiatives and managing change

CAPITAL STRUCTURE & TOP 20 SHAREHOLDERS

Snapshot - Sept 30, 2022

ASX Code	AJQ
Shares (Ordinary)	2,258,450,876
Options (Unlisted)	50,000,000
Options (Listed)	748,548,084
Convertible Notes (Unlisted)	\$12m
Share Price	\$0.006
Market Capitalisation	\$14.67m
Enterprise Value	\$50.17m
Cash on Hand	\$2.6m
Total No. Shareholders	2,195

Rank	Name	A/C designation	20 Sep 2022	%IC
1	DGR GLOBAL LIMITED		374,709,708	16.59
2	MR PAUL COZZI		161,500,000	7.15
3	ASLAN EQUITIES PTY LTD	<ASLAN EQUITIES A/C>	136,604,205	6.05
4	CITICORP NOMINEES PTY LIMITED		121,117,640	5.36
5	ROOKHARP CAPITAL PTY LIMITED		105,000,000	4.65
6	CHOICE INVESTMENTS DUBBO PTY LTD		51,951,472	2.30
7	TALBRAGAR RIVER HOLDINGS PTY LTD		47,945,613	2.12
8	MR PAUL AINSWORTH		39,000,000	1.73
8	CANCELER PTY LTD	<CLARENCE SUPER FUND A/C>	39,000,000	1.73
9	MR PETER MAROUN KAHWAJI		19,100,000	0.85
10	CPS CONTROL SYSTEMS PTY LIMITED	<THE IAN CAMPBELL S/FUND A/C>	19,025,382	0.84
11	PINEMONT TECHNOLOGIES AUSTRALIA PTY LTD		18,019,735	0.80
12	MR NEVILLE AYROUTH		16,200,000	0.72
13	HEALTH CARE MEDICAL AND DENTAL SERVICES PTY LTD		15,750,000	0.70
14	MR MICHAEL ROBERT LAURENT		15,746,333	0.70
15	BU & WANG PROPERTY NOMINEES PTY LTD	<BU & WANG SF A/C>	15,161,823	0.67
16	MR SIMON WILLIAM TRITTON	<INVESTMENT A/C>	15,012,608	0.66
17	PANORAMIC ROAD PTY LTD		13,500,000	0.60
18	MR NIKHILKUMAR KANTILAL SHAH		12,892,230	0.57
19	BLUBAY TRADE PTY LTD	<BLUBAY TRADE A/C>	12,649,907	0.56
20	MRS MARGARET HELEN WILLIAMS		12,500,000	0.55
	Total		1,262,386,656	55.90
	Balance of register		996,064,220	44.10
	Grand total		2,258,450,876	100.00

REFOCUSING ARMOUR ENERGY



Target: Sustainable development to meet growing demand for cleaner energy.



Assets: Diversified portfolio of high-quality assets in Australia.



Tactics: Relentless pursuit of objectives: Efficiency driven outcomes.



ESG: Respect, Dignity & Stewardship.

Team: High Performance, Innovative, Passionate, Question the Status Quo

OVERARCHING NEAR-TERM STRATEGY



Increase Gas Production & Sales



Strengthen the Balance Sheet



Field Development of Roma Shelf Assets



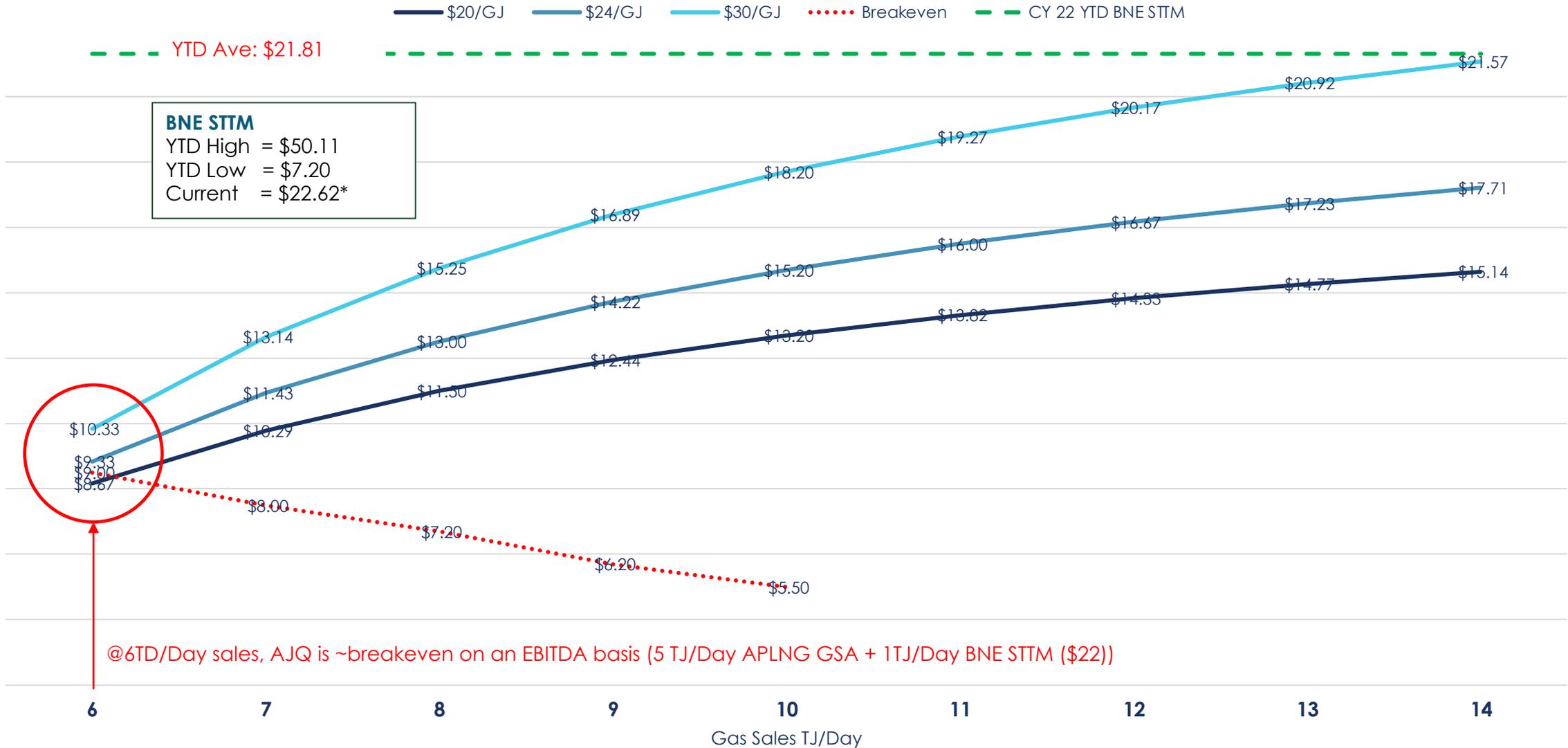
Strategic De-risking of the Portfolio

Increase gas production & sales

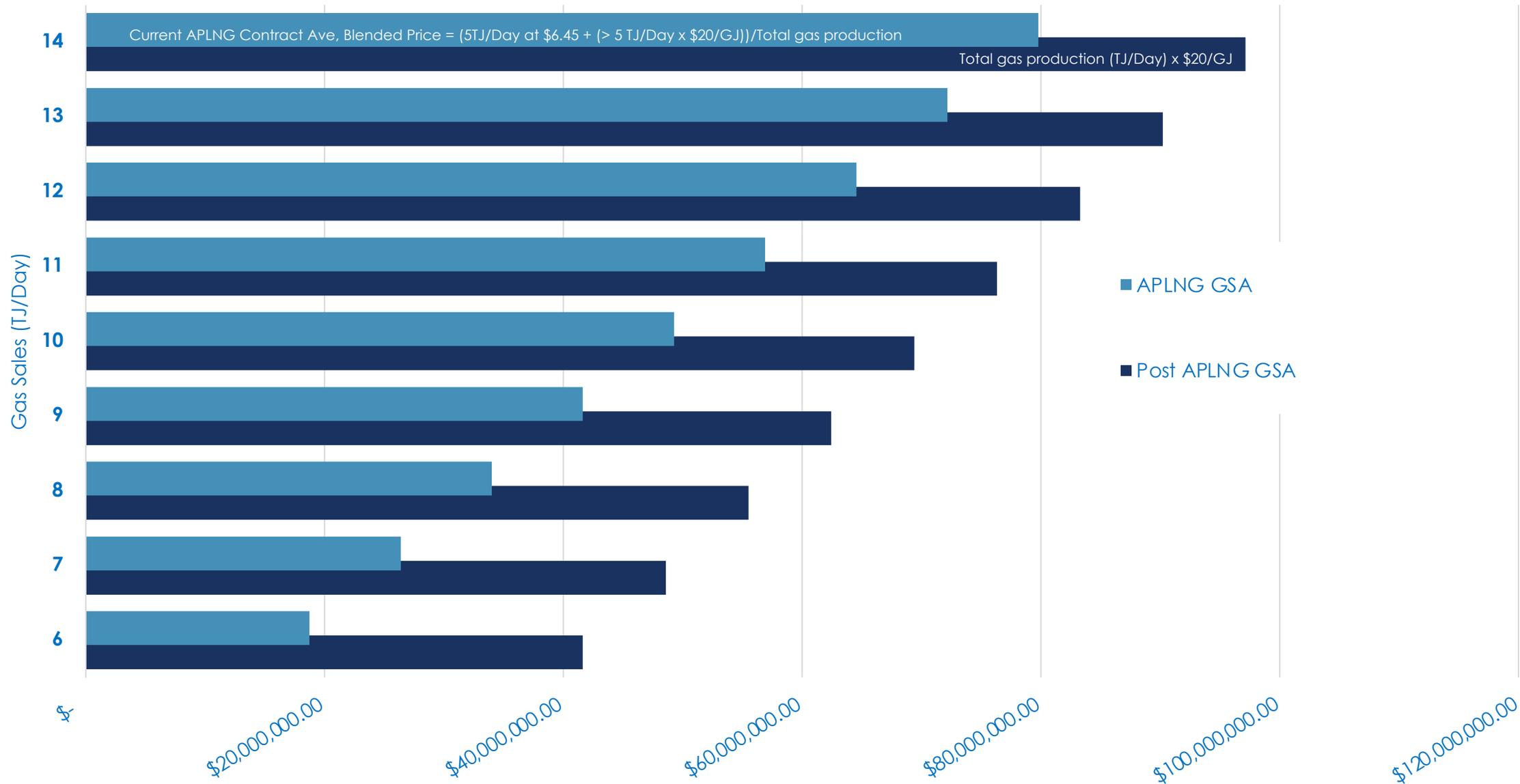
- ◎ Restore base production of ~6TJ/day (Dec 22)
 - Net cash benefit +\$11.3m over life of APLNG contract
- ◎ New Gas Sales Agreement (GSA) to kick off in December '23
 - 1st tranche of 4 TJ/Day
 - 2nd tranche > 4TJ/Day inc. pre-investment
 - Very strong market environment
- ◎ Integrated Optimisation Project (Wells-Reservoir-Facilities) to 10+ TJ/Day
 - Compression & Network modelling
 - Wells management
 - Plant debottlenecking
 - In-wellbore programs
- ◎ Pathway to 20+ TJ/Day
 - 3D seismic program
 - Riverside & Myall Creek field development



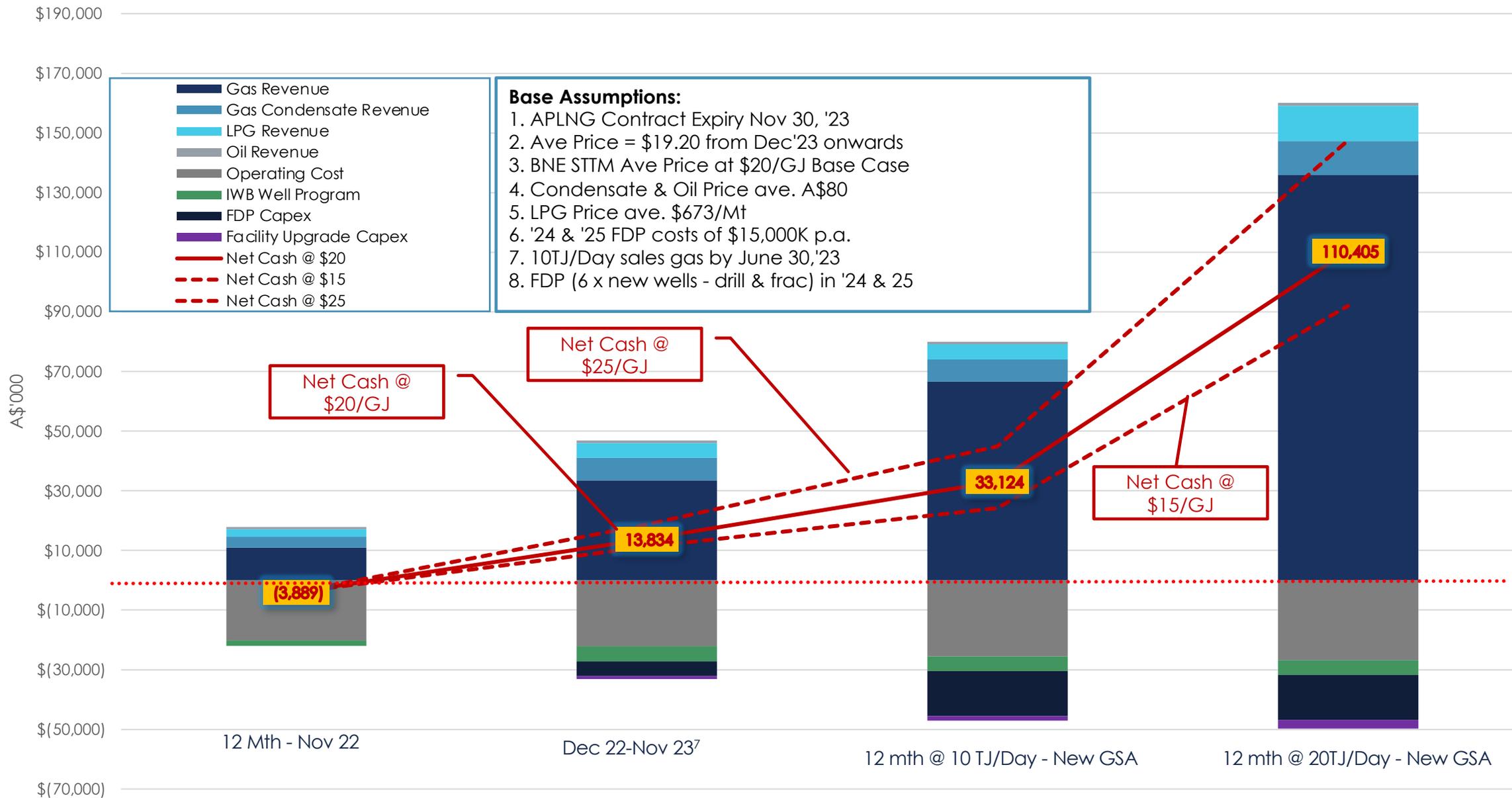
Average Blended Sales Price (APLNG Contract + BNE STTM[^])

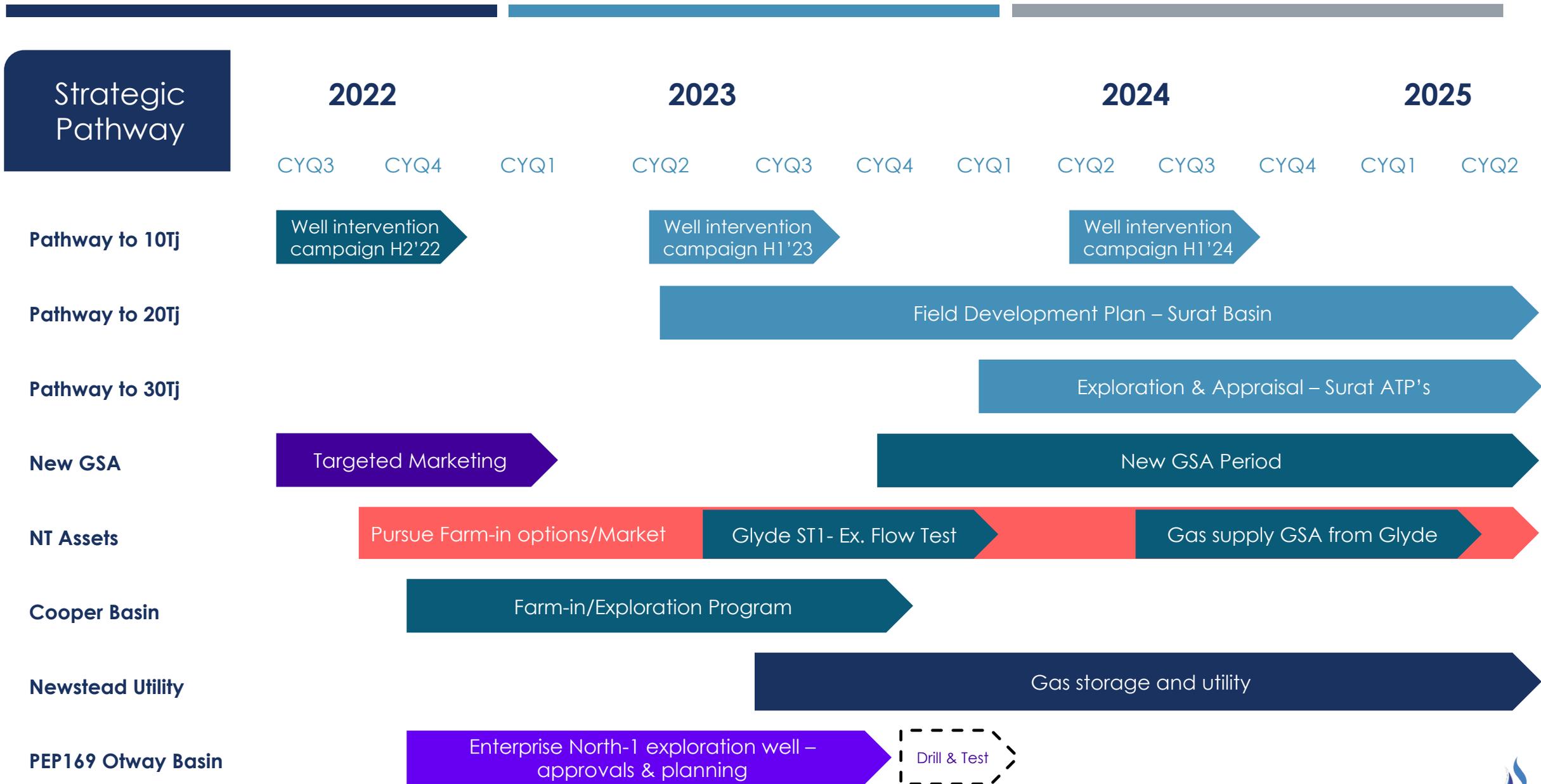


Annualised Gas Revenues¹ @ \$20/GJ

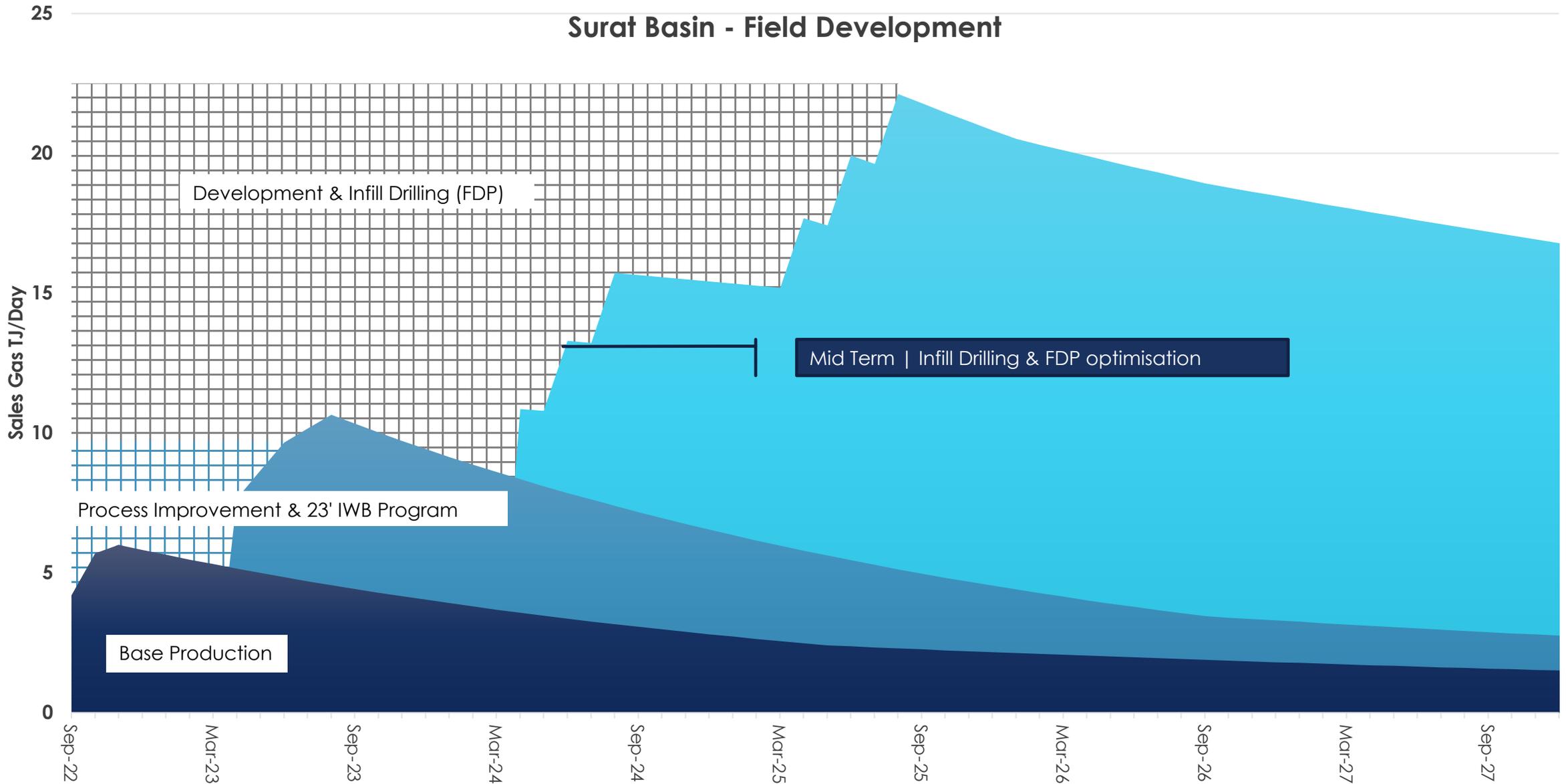


1. Plant uptime at 95%





Surat Basin - Field Development





Short-term Goals

- ◉ Strengthen the balance sheet
- ◉ Operating cash flow positive by Dec 31, '22
- ◉ 10 TJ/Day sales gas by June 30, '23
- ◉ Zero unplanned releases to atmosphere
- ◉ Top quartile HSE performance
- ◉ Measure, Monitor and Improve impact on communities in which we operate



Mid-term Targets

- ◉ Unit cost of incremental production from well intervention programs < \$1.50/scf/d
- ◉ 20 TJ/Day gas sales by end 2025
- ◉ Newstead gas storage facility fully operational by mid 2023
- ◉ NT Gas Supply – Production by end '24
- ◉ Digital transformation across production assets



Strengthen the Balance Sheet



Strengthening the Balance Sheet

Amortising Bonds	YE 2021 A\$m	YE 2022 A\$m	Q1 2023 A\$m	YTD Q2 2023 A\$m
FIIG Bonds	32.2	23.9	21.4	21.4
Tribeca Facility	5.3	5.2	3.2	1.7

Significant Balance Sheet Re-structuring Actions since 31 December 2021

- FY Q3 2022
 - ✓ Issued \$2.3m Convertible Notes
 - ✓ Issued 11.8m Shares
 - ✓ Reduced FIIG Bonds by \$2.2m
- FY Q4 2022
 - ✓ Issued \$3m Convertible Notes
 - ✓ Issued 59.8m Shares
 - ✓ Reduced FIIG Bonds by \$2.2m
 - ✓ Reduced Tribeca Facility by \$0.1m
- FY Q1 2023
 - ✓ Issued \$3.8m Convertible Notes
 - ✓ Issued 219m Shares
 - ✓ Reduced FIIG Bonds by \$2.5m
 - ✓ Reduced Tribeca Facility by \$2m
- FY Q2 2023
 - ✓ Issued \$1.5m in Convertible Notes
 - ✓ Reduced Tribeca Facility by \$1.5m



Funding Plan

Source of funds	A\$m	Use of funds	A\$m
Combination of;	50.0	Corporate, technical and operating costs	5.3
• Convertible Notes*		FIIG Secured Amortizing Bond Redemption	19.0
• Rights Issue		Tribeca Facility Redemption	1.7
• Share Placement*		MOG Note conversion	12.0
		Convertible note issue costs	2.0
		'23 Well optimization program	5.0
		Exploration activities	5.0
Total Sources	50.0	Total Uses	50.0

Note: *Subject to shareholder and FIIG bond holder approvals



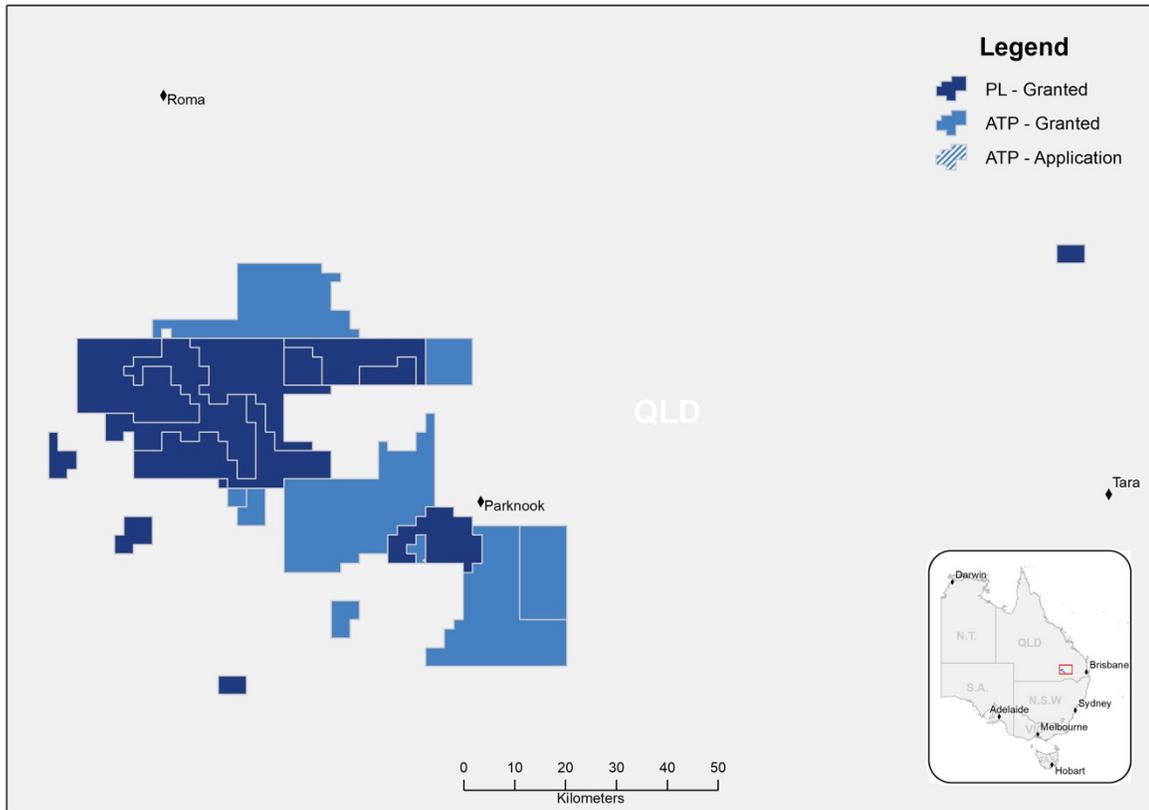
Capital Restructure

- Extinguish FIIG Bonds
 - ✓ +\$12m p.a net cashflow benefit from reduced amortization
- Extinguish Tribeca Facility
 - ✓ + \$214k/month cash benefit
- Fund 2023 Well Optimisation Program
 - ✓ Lift gas production/sales to target 10 TJ/Day by June 30
 - ✓ Fund 3D seismic acquisition in Surat Basin – materially improve drilling success rate
- Generate +ve cash flows, net of investing
 - ✓ Self fund pathway to 20 TJ/Day field development plans



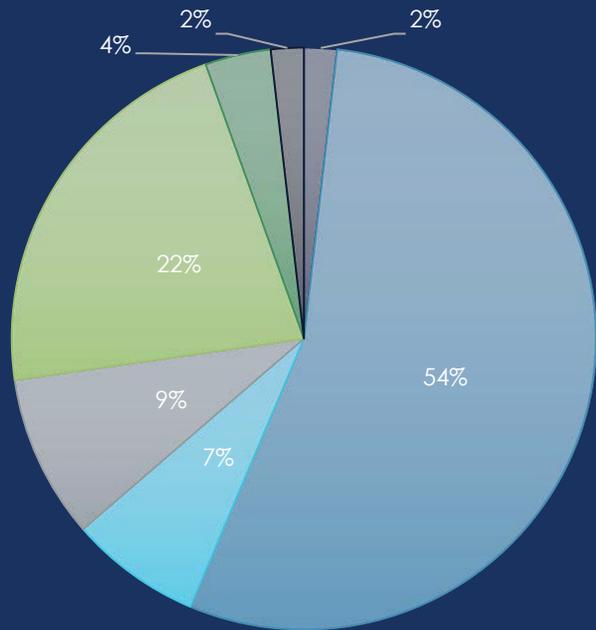
Exploration & Development

Surat Basin (QLD)

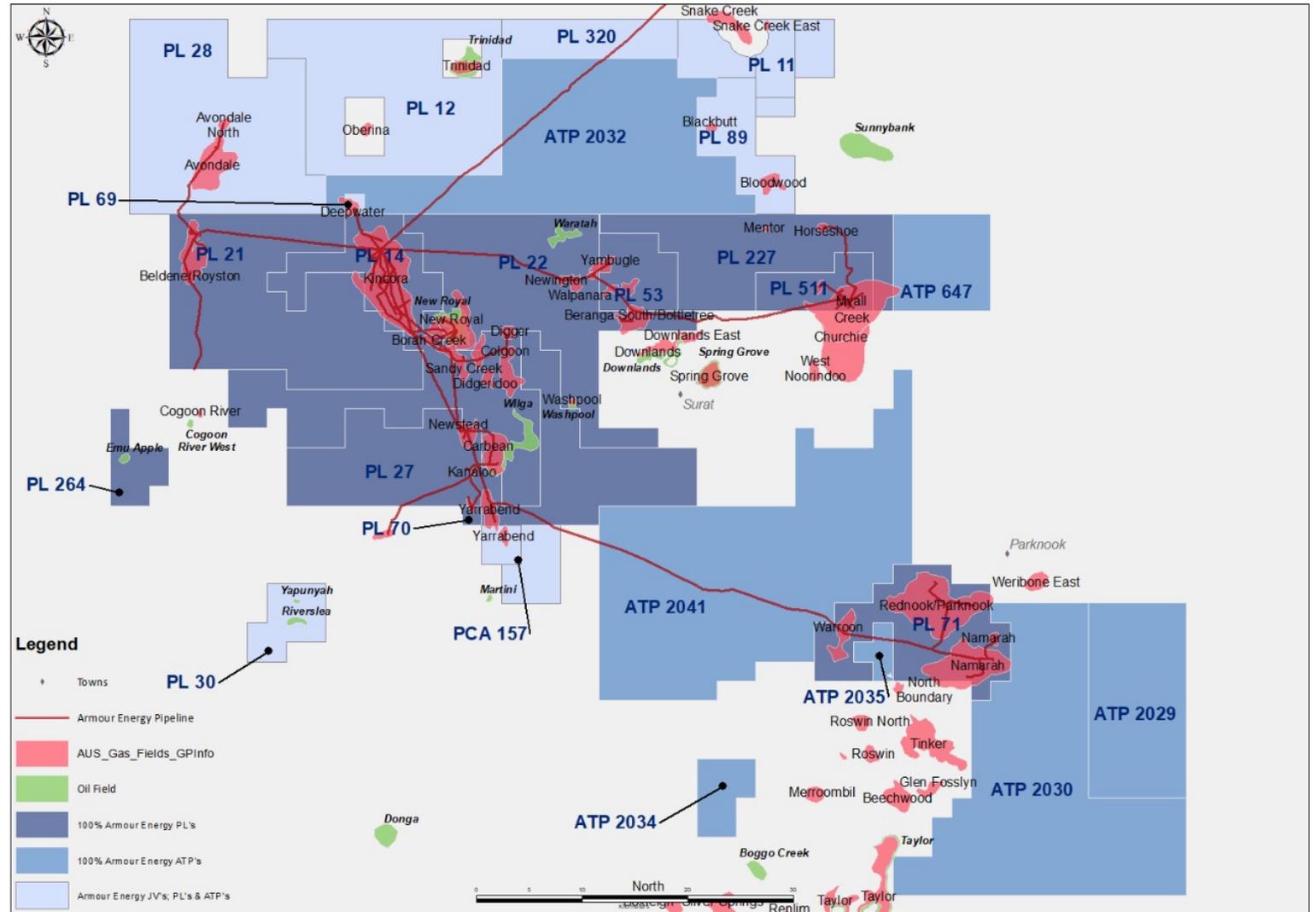


- Armour 100% owner & operator of Kincora Gas Project
- Operator of 3,000 km² of production licenses and exploration licenses*
- 4 exploration Authority to Prospect (ATP) licenses covering over 2,000 km²
- 90 development wells in 39 gas fields and 6 oil fields with 40 current production wells
- Multiple producing oil & gas fields with further development potential
- Proven, established gas storage facility with material expansion potential
- 2P Sales Gas Reserves = 145.8 PJ
- Large uncontracted gas position (> 100 PJ)
- Material appraisal/development projects
- Transformational exploration opportunities

CURRENT WELLFIELD PRODUCTION DISTRIBUTION



- Compression
- Free Flow
- Plunger Lift
- Intermittent
- Suspended
- Pump
- Not Connected

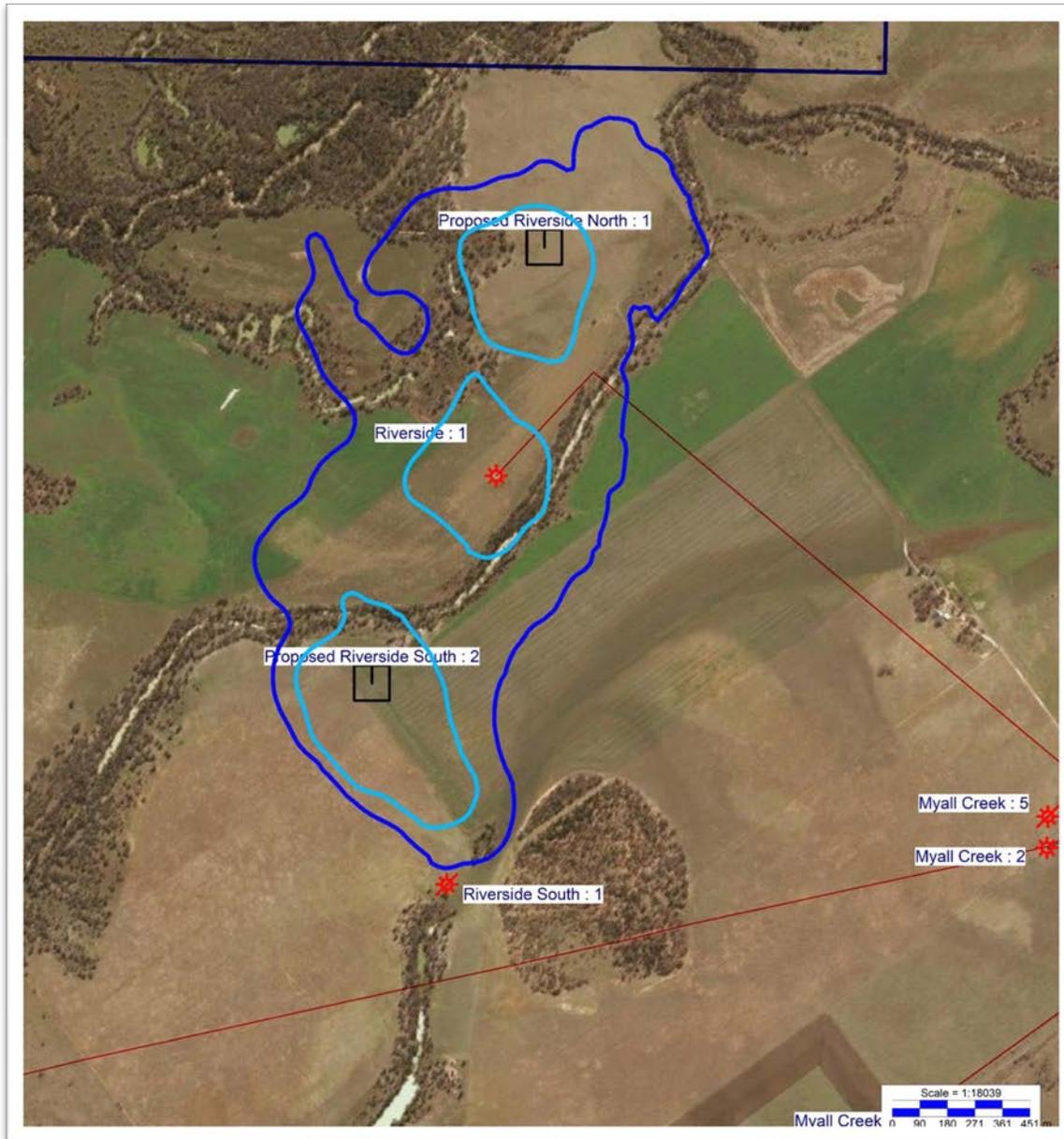


KINCORA (SURAT BASIN) RESERVES – 30/6/22



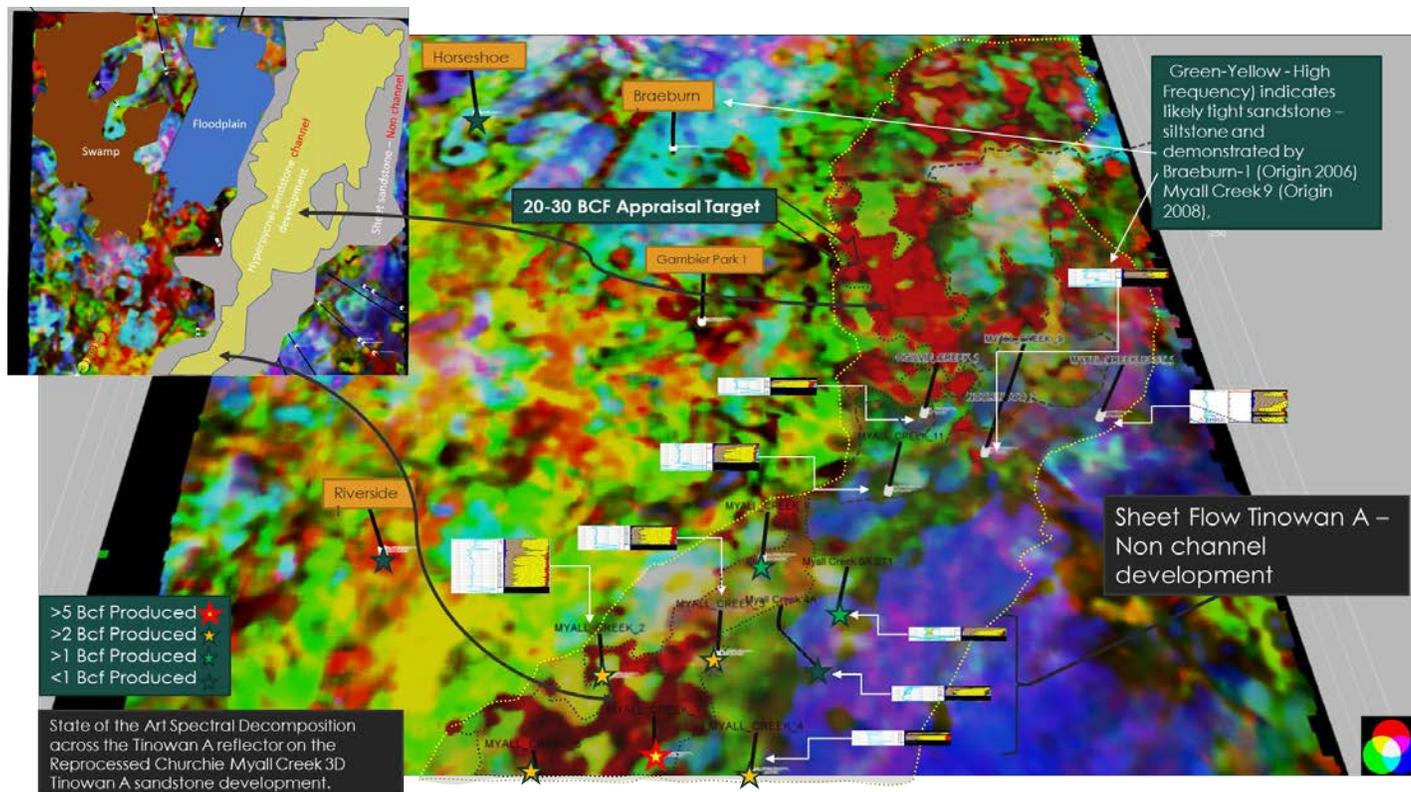
Kincora Project	1P	2P	3P
Raw Gas (BCF)	35	128.3	286
Sales Gas (PJ)	39.8	145.8	325.2
LPG (k tonnes)	82	301	671
Condensate (k Bbls)	396	1,449	3,232
Oil (k Bbls)	204	1,200	2,619

Proposed Riverside Field Development Plan



- **Riverside 1** (workover & frac)
 - POOH current completion, Run PNX log to de-risk RN1
 - Frac Tinowon C, Rewan & Showgrounds
- **Riverside North 1** (new drill)
 - Targeting multiple horizon, de-risked by Riverside 1 result and PNX
- **Riverside South 1** (re-entry)
 - Perforate and test the Bandanna formation (1950-1956 m) contingent on R1 Bandanna
- **Riverside 2** (new drill)
 - Targeting multiple horizons, de-risked by R1 Bandanna, PNX and RN1
- **Installation of a Pipeline from Riverside South 1 and Riverside 2 to Myall Creek 2**
 - After success at Riverside 2

MYALL CREEK – EXPLORATION / APPRAISAL

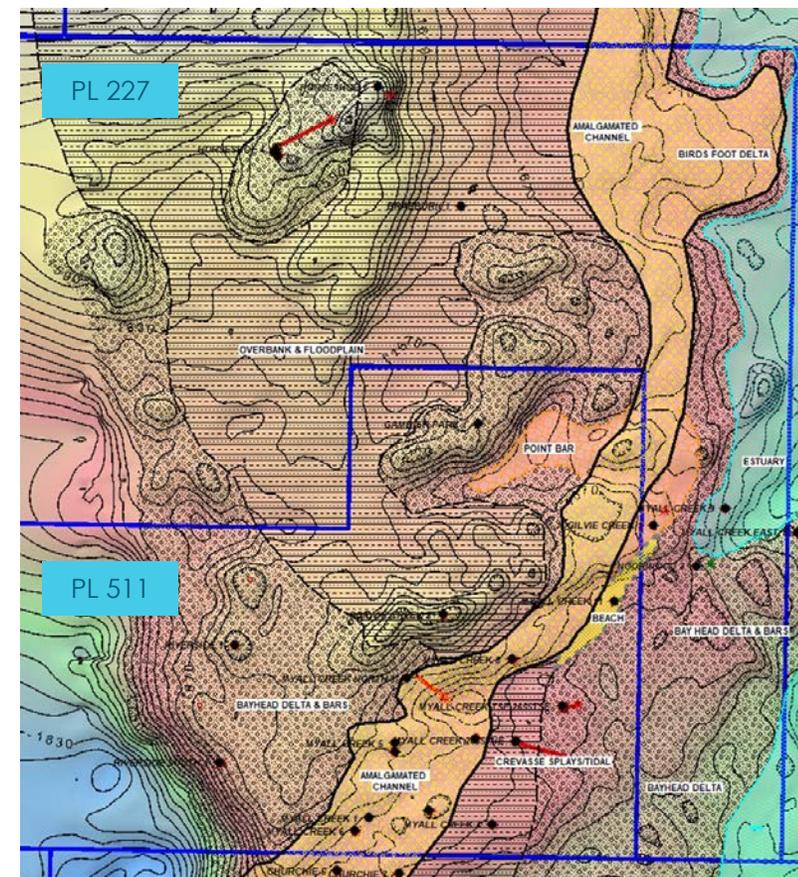


Seismic Spectral Decomposition across Tinowan A reflector

Shows Tinowan A sandstone development moving in northerly direction from Myall Creek proven development.

Next Steps

Iodine surface geochemistry survey across the Myall Creek North area. If iodine anomaly, spectral decomposition channel anomaly are oriented and sizable indicating the potential for a 20-30 Bcf field; Drill 1 well and prepare contingent drilling upon success.



Tinowan A Facies Map

Myall Creek channel sand in yellow.

Northern extent of channel is guided by similarity of seismic topography at Myall Creek in PL 511 with the northeast corner of PL227.

It represents a coastal deposit or beach environment with tidal influence and is prospective for additional gas reserves.

'Eureka' 3D Seismic Survey

○ Current 2D seismic coverage

- Geological complexity not addressed sufficiently by existing 2D
- A significant lead inventory is mapped on 2D data, however lack of trap certainty limits confidence, prioritization.

○ Stratigraphic trapped volumes can be significant

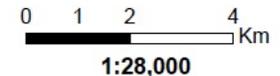
- Mapping on 2D seismic data acquired 1980's and 1990's is limiting
- The majority of fields have stratigraphic components not mappable on 2D seismic

○ 3D seismic will lead to;

- Lower risk, more robust future exploration/appraisal opportunities
- Significantly increased confidence in defining high delivery oil and gas well locations (with 2D seismic restricted to drilling on lines)
- Significantly more accurate GIP & OIP volumes
- More accurate inputs to reservoir modelling & simulation leading to more accurate production performance
- Optimises horizontal drilling opportunities

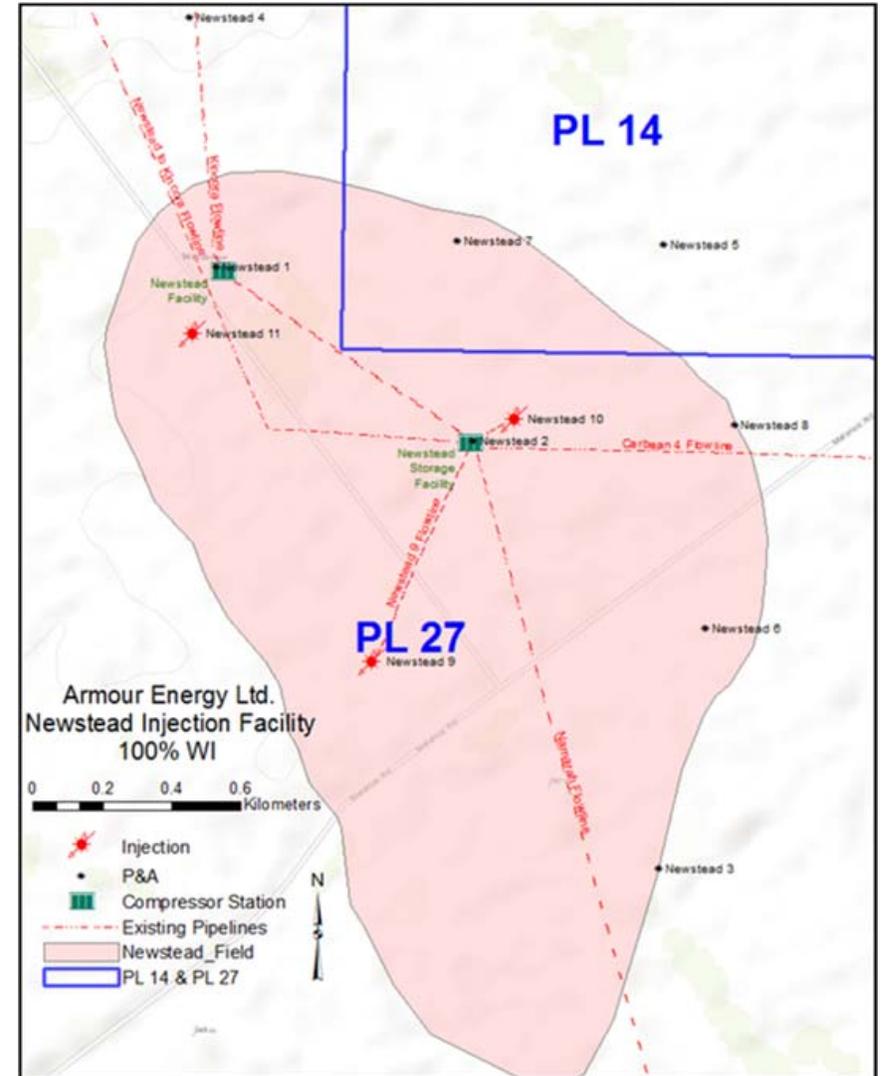
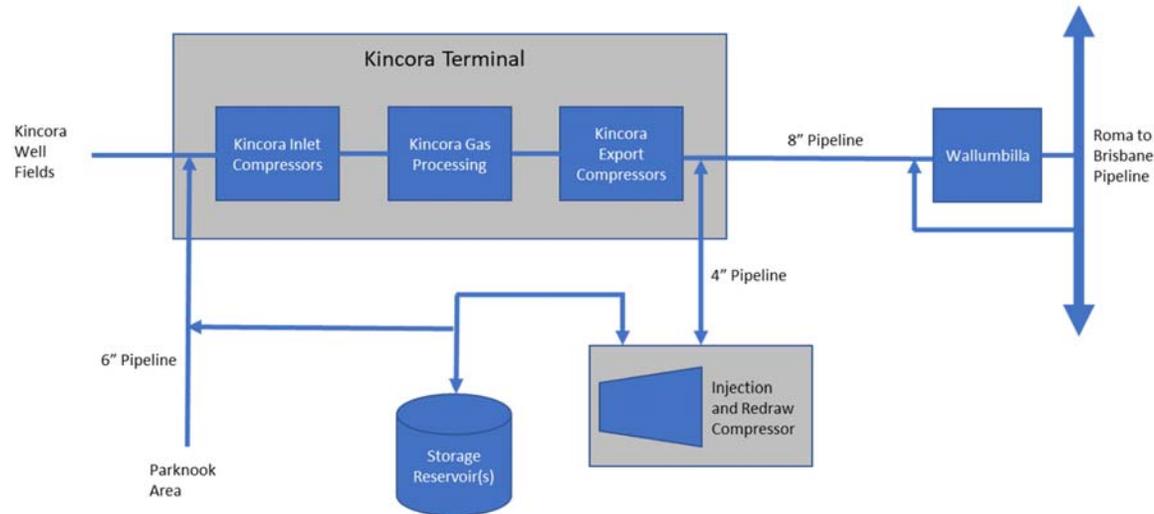


Survey Area	Legend
Armour Energy Eureka 3D Seismic	— Eureka 3D Design 1 210x252 Source Monclova Clip
Date: 30/11/2021 Revision: A	— Eureka 3D Design 1 210x252 Receiver Monclova Clip
	□ Survey Area
	□ Petroleums Permits



Newstead Gas Storage Facility

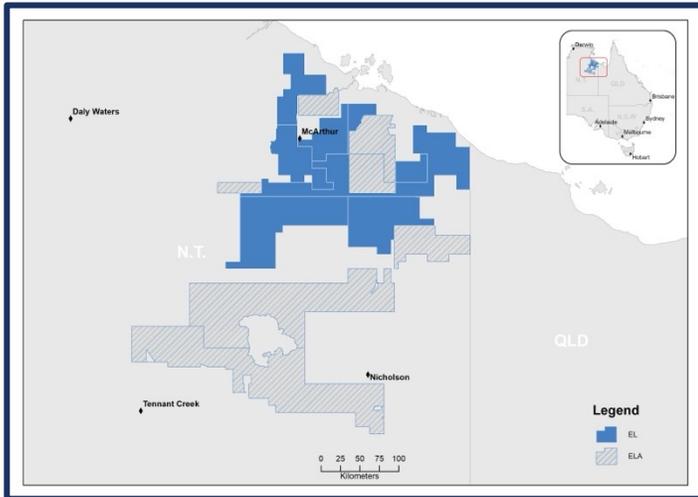
- Inject up to 12 MMscf/Day of Gas
- Storage capacity of up to 7.4 Bcf
- Withdrawal rates of up to 10 MMscf/Day
- Min. 1.5 PJ cushion gas required
- Storage may be increased to 10 Bcf with addition of Carbean wellbores
- ~\$1.5m investment required to increase compression, pipelines and bi-directional custody metering.



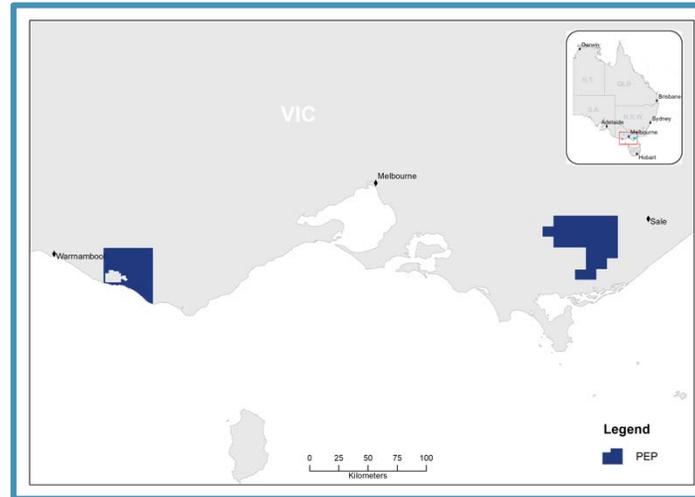


Strategic De-risking Portfolio

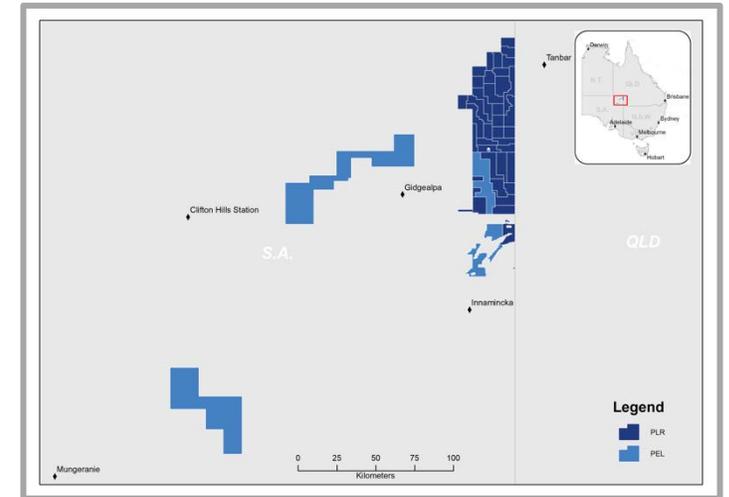
STRATEGIC DE-RISKING



- Re-analyse flowtest data from Glyde resource
- Evaluate reservoir and develop appraisal plan
- Capital Cost ~\$250k



- Drill, evaluate and complete Enterprise North-1
- Capital Cost ~\$2,500k*

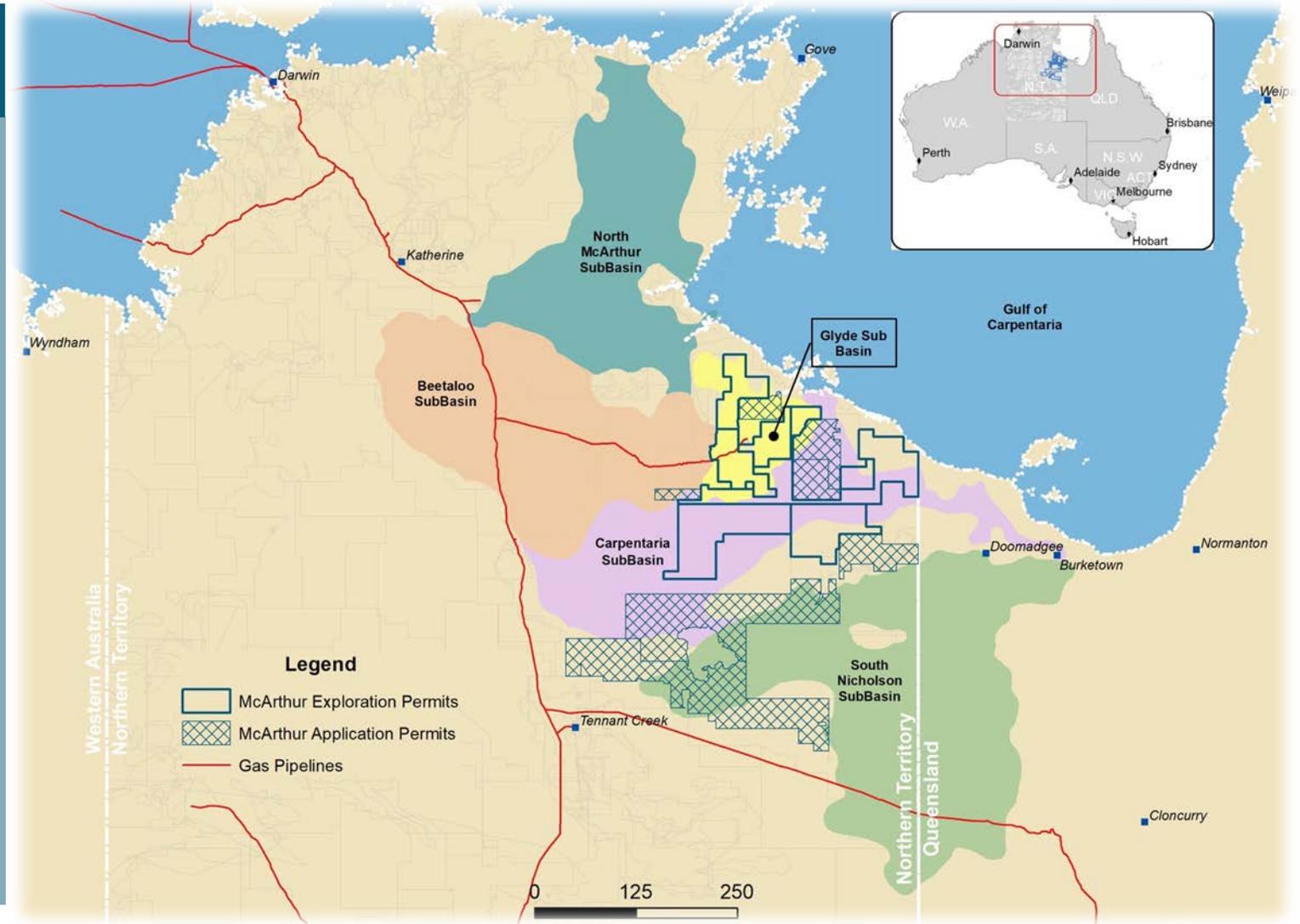


- Airborne AEM-PTP, AI seismic evaluation + Further QI geophysical work
- Develop risked & ranked leads & prospects
- Capital Cost ~\$500k

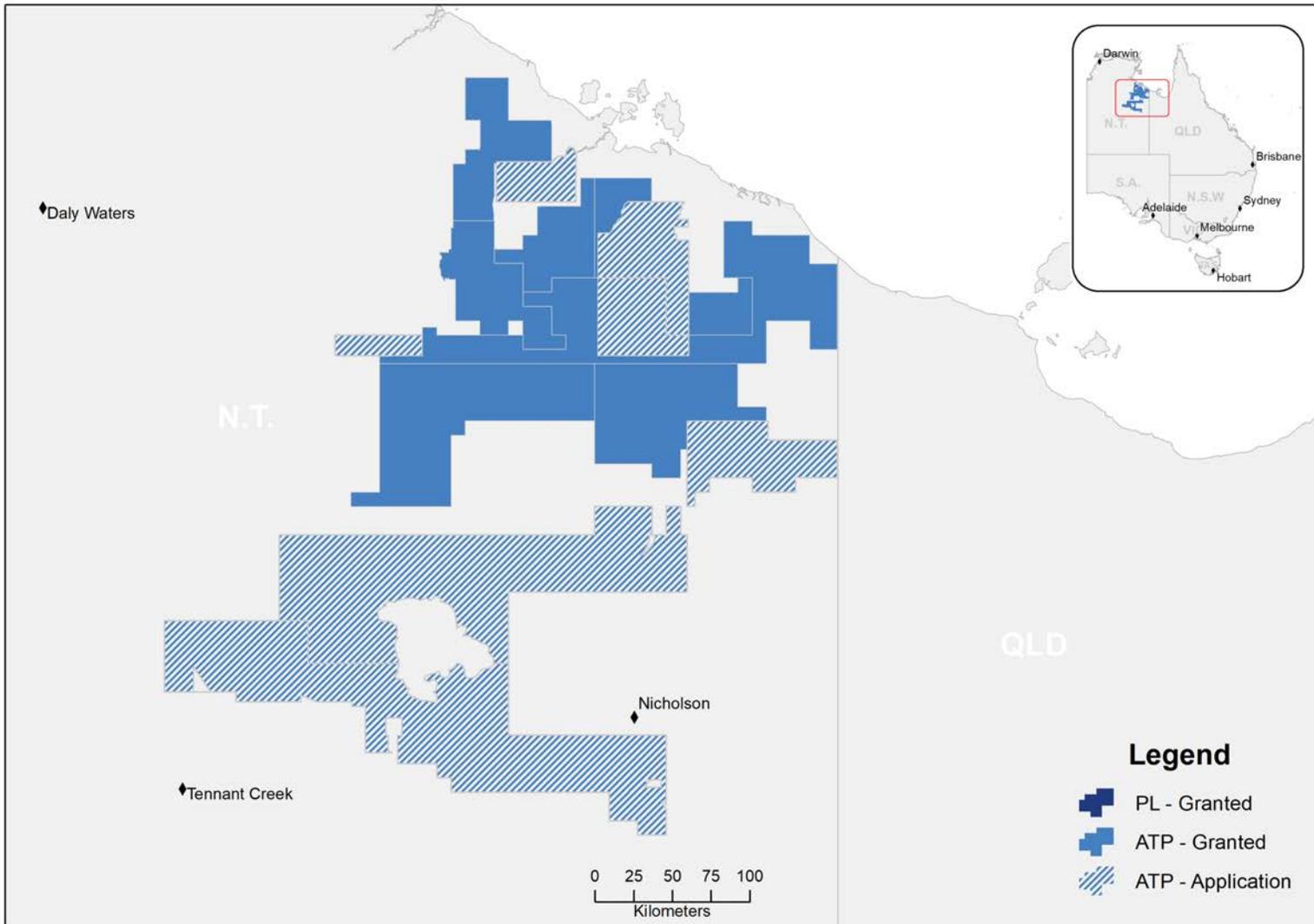
* AJQ share

Northern Territory

Armour (100%) operator
12 permits
70,755 km²



Northern Territory



PERMITS SPAN BOTH THE **MCARTHUR** AND **SOUTH NICHOLSON BASINS**

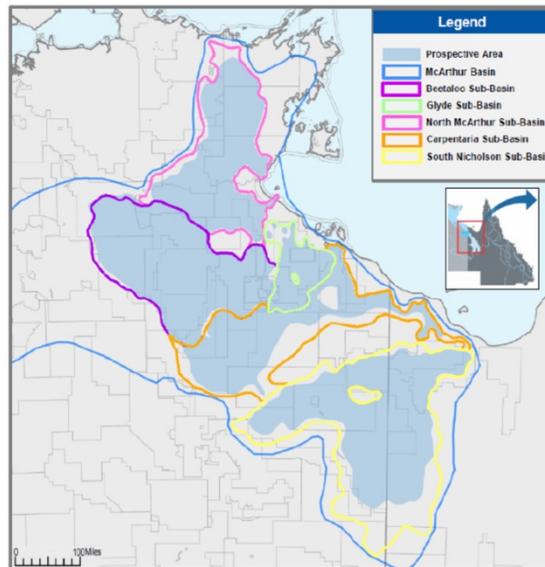
- Holder of material interest across **multiple proven & prospective basins**
- Acreage covers significant **conventional & unconventional fairways**
- Pervasive **thick Multi-TCF unconventional shale gas sequences**
- Potential for stacked **conventional & unconventional pay**
- Unique position over **proven Coxco conventional play fairway**

NT PROSPECTIVE RESOURCES

Northern Basins – McArthur Basin Resources*

Target	Contingent (BCF)			Prospective (TCF)		
	1C	2C	3C	Low	Best	High
Coxco-Cooley	2.4	6	10.3	1.3	4.8	29.9

*Net to Armour / Contingent Resources are limited to Glyde Proposed Production License Area

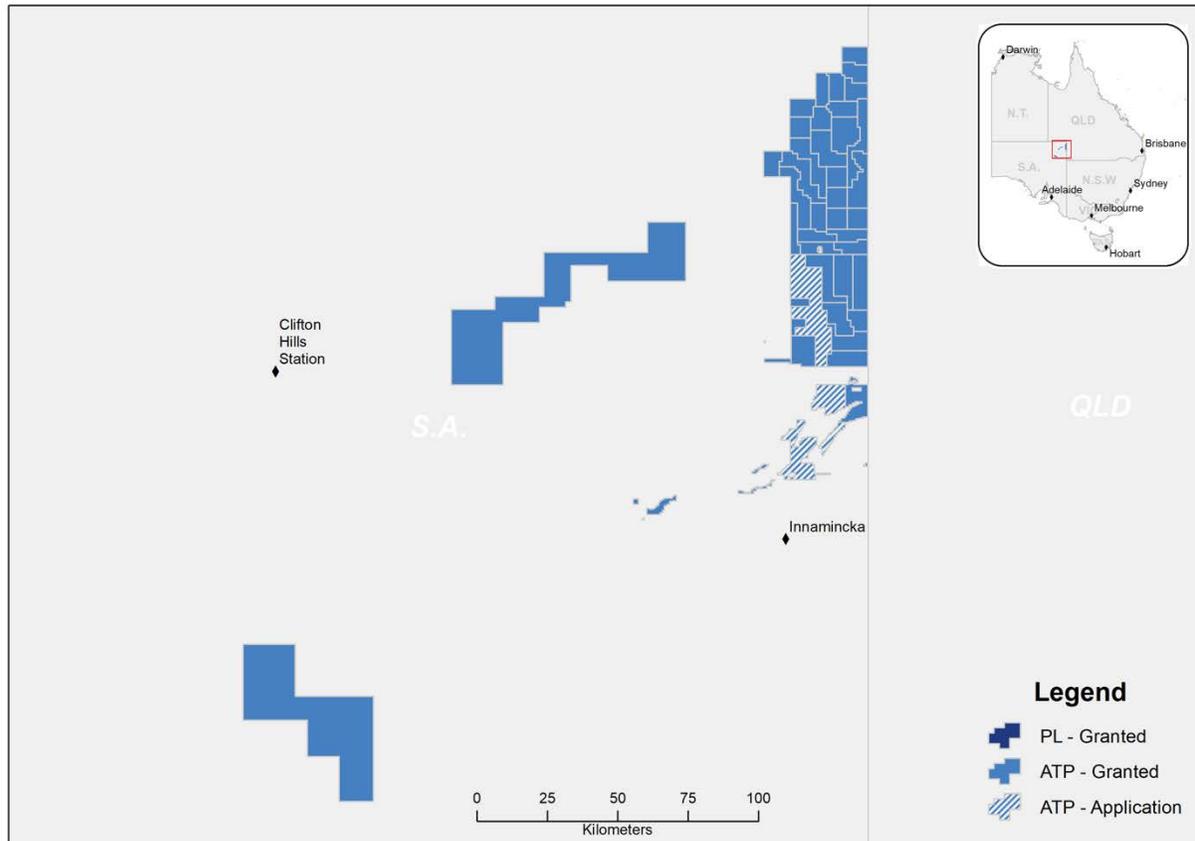


Northern Basins – South Nicholson Basin Prospective Resources*

Unconventional Target	Low	Best	High
Barney Creek Shale (TCF)	3.8	12.9	39
Wollogorang Shale, Tawallah Group (TCF)	0.0	6.9	141.4
McDermott Shale, Tawallah Group (TCF)	0.0	10.1	152.1
Total	3.83	30.0	332.5

*Net to Armour

Cooper Basin (SA)

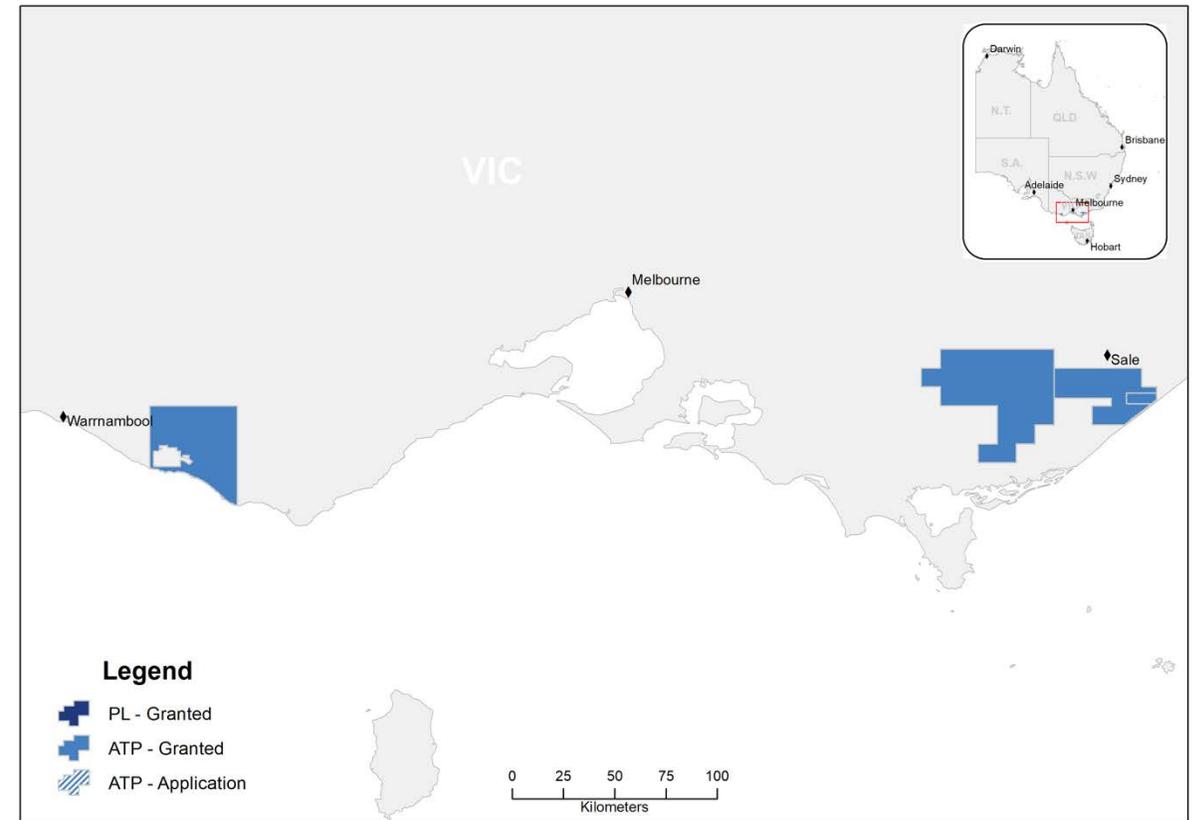
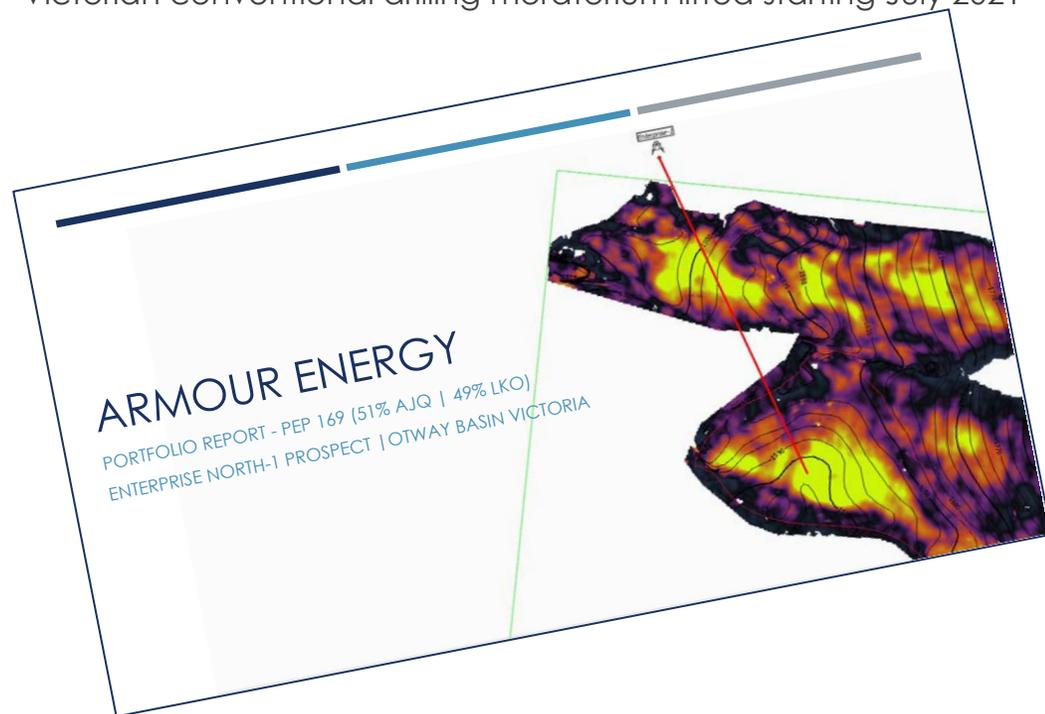


30 Licences: (3 PELs and 27 PRLs)

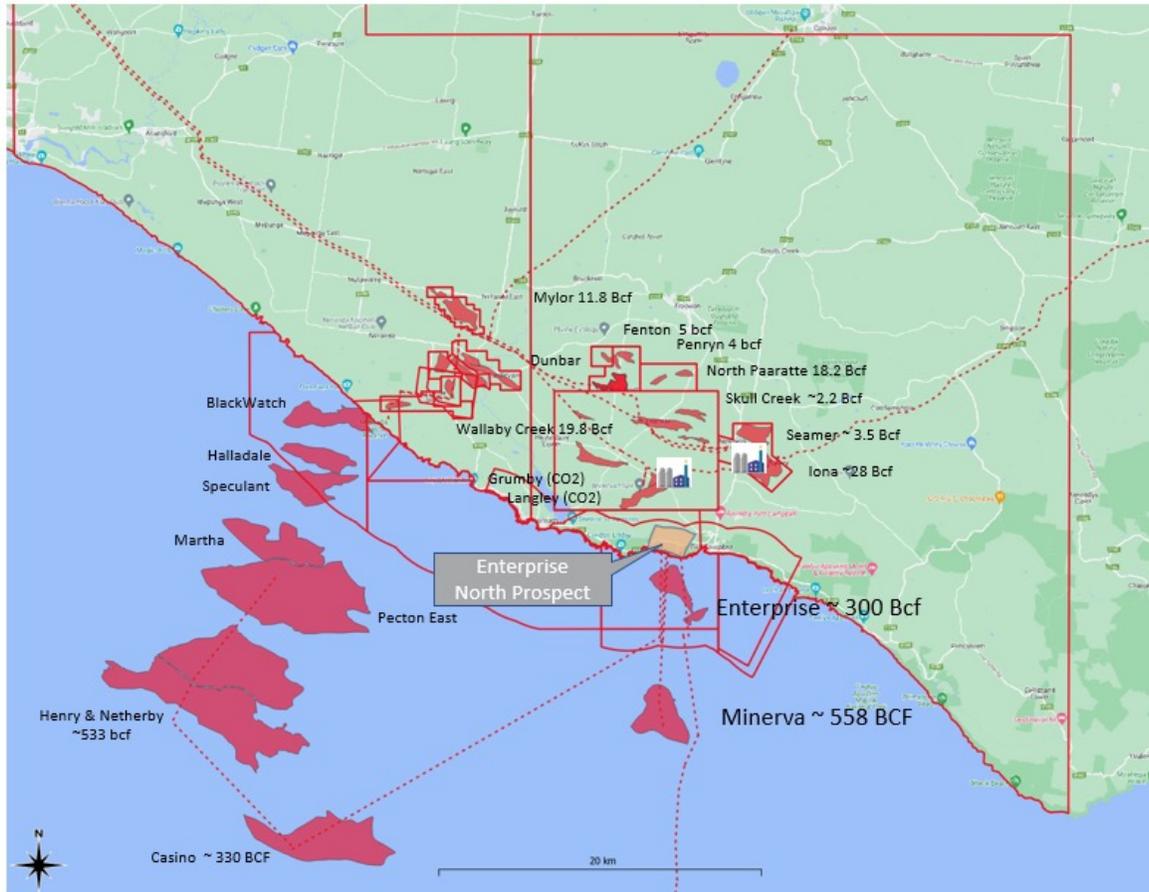
- Major strategy – hunt for stratigraphic and subtle traps along extensions of
- proven oil and wet gas fairways
- 27 PRLs: Location - Northern Flank adjacent to Cook-Cuisinier-Barta, includes 800 km² Cordillo 3D. Triassic oil and Permian gas discovery
- 2 Older PELs: Location – North and South extensions of Western Flank. Each licence holds a small 3D seismic survey
- PEL 444 – oil recovery on test on eastern boundary
- PEL 113 – Northeast corner covers major Migration pathway out of the deeper basin
- Recently awarded PEL: Location - Northern flank, Flax/Juniper and Arcasia area. Holds several 3Ds, adjacent to oil and gas discoveries

Southern Basins

- Multiple exploration opportunities
- Otway & Gippsland Basin interest
- 51% interest and operator of PEP 169
- 15% JV interest in PRL 2 – Wombat & Trifon Tight Gas Discoveries
- Multi-TCF conventional/unconventional prospects ready for drilling
- Victorian conventional drilling moratorium lifted starting July 2021



PROSPECT PEP 169, 'ENTERPRISE NORTH-1' VICTORIAN HIGH-VOLUME HIGH-RATE GAS DRILLING



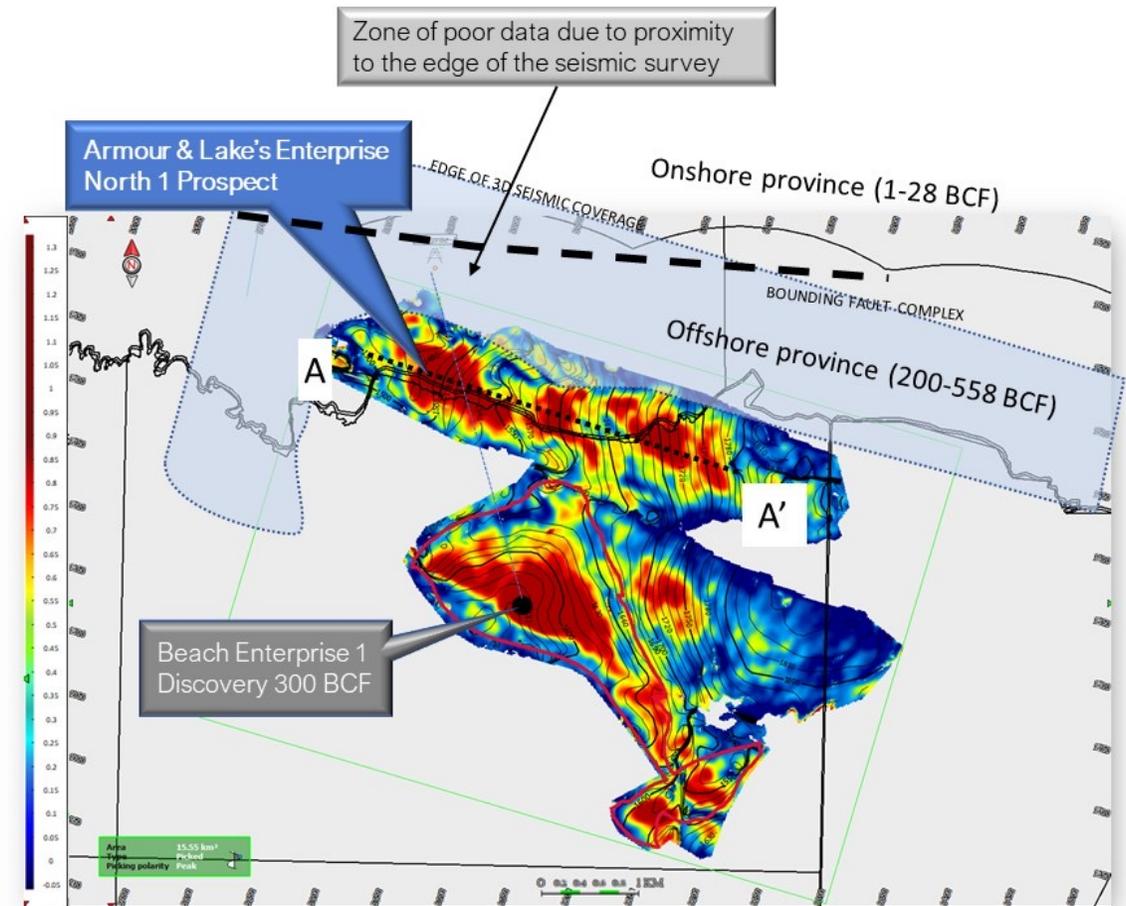
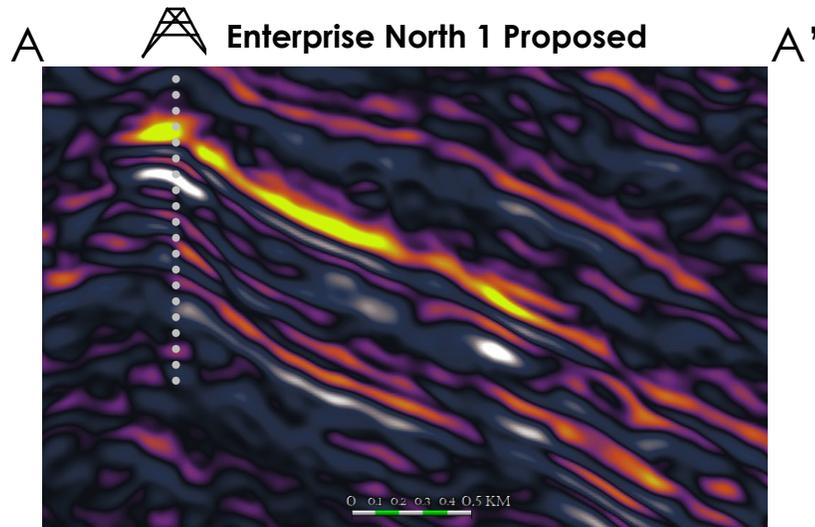
Highlights

- ❖ Enterprise North is a drill ready prospect following reinterpretation of merged 3D seismic.
- ❖ Various workstreams being rapidly progressed to enable the drilling of the prospect. These activities include; Environmental and regulatory approvals; native title and landholder access agreements; procurement of long-lead items and contracting of the drilling rig and ancillary services.
- ❖ Drilling location near the Enterprise-1 (Beach Energy) well location.
- ❖ Targeting up to 419 Billion cubic feet of gas and 10 Million barrels of condensate in place.
- ❖ Flow rates could deliver up to 60 MMscf/day from a single well from the proven & prolific Waarre Sandstone Reservoir.

ENTERPRISE NORTH-1 SEISMIC AMPLITUDE ANOMALIES ARE CALIBRATED TO LARGE OFFSHORE OTWAY BASIN GAS DISCOVERIES

HIGHLIGHTS:

- Enterprise North 1 is 2.4 km from Enterprise-1 in a proven Waarre Sandstone Reservoir with 115 m of net gas reservoir thickness*.
- New transition zone data allows the seismic to be calibrated to known fields (Minerva and Enterprise) reducing subsurface risk
- Success case would see Enterprise North-1 cased and suspended as a future producer
- 3D seismic Merge to better image the northern zone of the Enterprise North structure is under evaluation



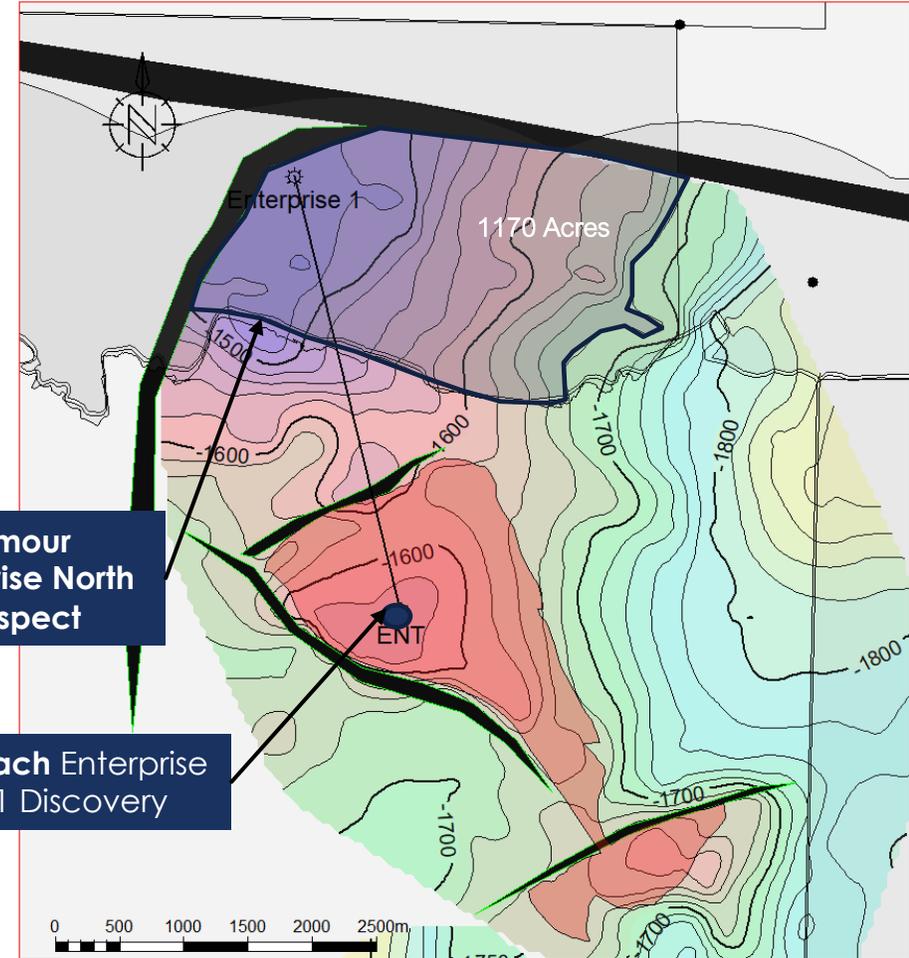
WAARRE SANDSTONE - AN EXCEPTIONALLY PRODUCTIVE RESERVOIR

Enterprise-1 discovery has significantly reduced Enterprise North-1 risk

- Seismic amplitude anomalies indicate closure, seal and charge.
- Volumes are estimated based upon regional offset data.

LOGNORMAL DISTRIBUTION								
FORMATION	Unrisked Original Gas In Place (Bcf)				Unrisked est. Recoverable Gas (PJ)			
	Low	Mid	Pmean	High	Low	Mid	Pmean	High
Waarre Gas	47.40	141.00	202.00	419.00	23.40	65.80	91.79	193.80
					Estimated Rec. Condensate (Mill Bbl)			
Waarre Cond					0.59	1.67	2.11	4.88

RISK ASSESSMENT	
Risk	Geological (Pg)
Closure	95%
Reservoir	95%
Seal	80%
Charge	100%
Total	72% Chance of Success



Armour Enterprise North Prospect

Beach Enterprise 1 Discovery

Symbol legend		
	Fault Polygons	
	Polygons 2	
		Gas

Volume Input Assumptions (P90/P10): Drainage Area 250/1170Acres, Hydrocarbon saturation 70/83%, Net pay 24/110m, Recovery factor 50/75% CO2 10/20% Gas Volume factor 190/210 scf/rcf, Gas energy content 1.104 MJ/SCF, 10% shrinkage for LPG, 8% Plant Fuel. LPG 1.6 ktonn/PJ, Condensate 12/25 bbl/MMscf

INVESTMENT DRIVERS

Undervalued, diverse & extensive assets with multiple income potential

Core Producing Business



Extensive development portfolio



Strong market fundamentals



Ready route to market with excess capacity



Varied income streams – Oil, Gas, LPG & Gas Condensate



Government support for energy transition and domestic producers

Exploration Opportunities



Diverse oil & gas portfolio



Staged approach to investing



Low-cost initial de-risking



Ready route to markets



Short cycle time to commercialisation

APPENDIX:

ENERGY MARKETS

East Coast Thematic

EAST COAST GAS MARKET (SPOT AND CONTRACT MARKET)



Two types of east coast gas markets:

- 1) Wholesale spot gas markets are short term markets – gas transactions generally for a period of 1 day to 7 days:
 - spot gas markets are transparent and often transacted electronically, gas prices are published every day
- 2) Wholesale contract gas market is a medium to long term market - transactions generally for a period of 1 year up to 5+ years:
 - contract gas market - bi-lateral negotiated agreements between wholesale buyers and sellers and remains confidential between the parties i.e. contract gas prices are not public

MARKET INFLUENCES

The era of cheap east coast gas is over!

- 🔥 For 50 years, Australia was long on supply and short on demand
- 🔥 The LNG export era has radically transformed the domestic playing field
- 🔥 East coast market is now long on demand and short of supply

Why?

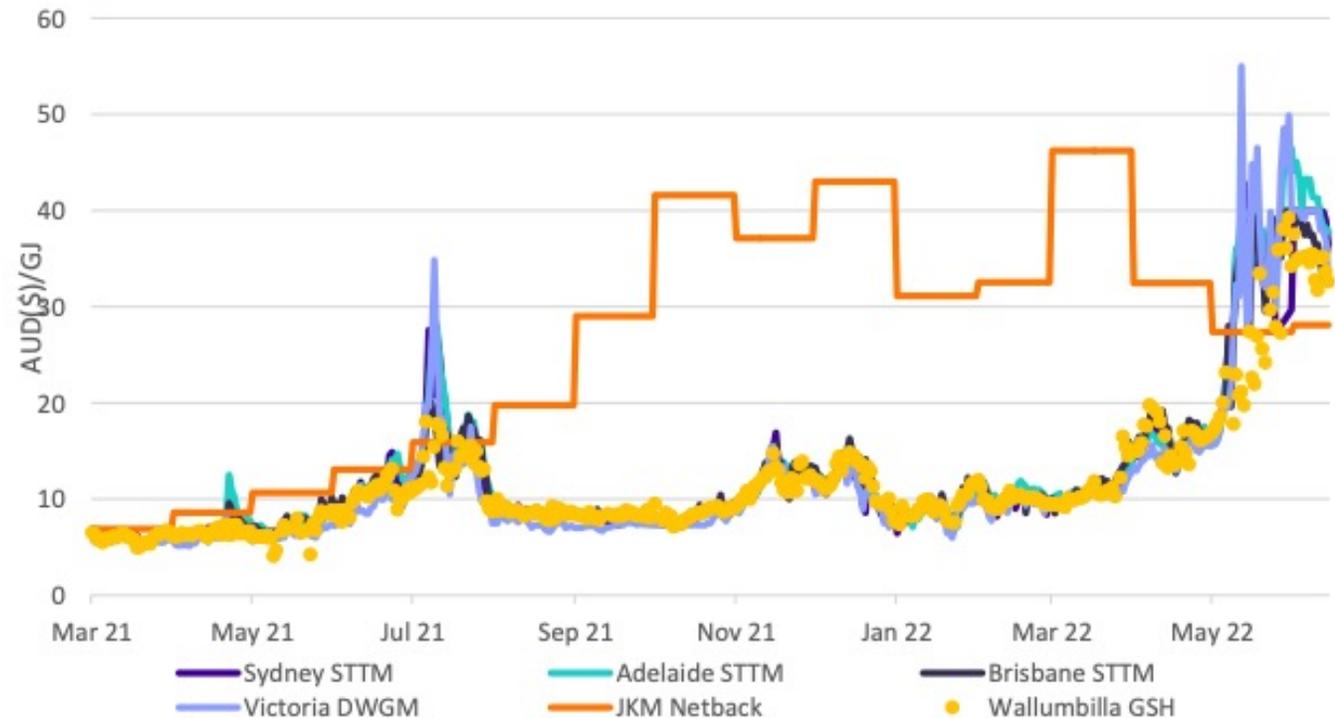
- 🔥 Strong, sustained Asian LNG demand (the driving force behind the enormous LNG developments on both east & west coasts)
- 🔥 Legacy contracts between major east coast gas suppliers which effectively contribute to net withdrawals from the domestic market – to meet LNG contracts
- 🔥 Political posturing and commentary
- 🔥 Geopolitics and the drive to net zero
- 🔥 Weather events
- 🔥 Cost of long-run gas development

MARKET VOLATILITY

Domestic prices began increasing from the end of March 2022, exceeding falling LNG netback prices in May 2022. This has been driven in part by cold weather, electricity generator outages and high international prices for coal and gas.

By mid-May 2022, STTM prices had risen to around \$37-\$40/GJ, well above LNG netback prices, with DWGM prices of up to \$55/GJ also recorded in May. By June, DWGM prices were forecast to rise up to \$800/GJ.

AEMO introduced price caps of \$40/GJ in Sydney and Brisbane markets following the retailer of last resort event caused by Weston Energy's suspension from trading on 24 May 2022.



Source: AEMO, ACCC (JKM netback), S&P Global Platts.

WALLUMBILLA CONTRACT GAS MARKET



Contracting of Armour's uncontracted over the next 3 years should receive **strong prices**

Forward Wallumbilla contract prices remain volatile given market uncertainty:

Cal 24 ~ \$18-23/GJ

Cal 25 ~ \$ 14-19/GJ

Due to a range of factors, wholesale contract gas prices exploded in 2022

Prior to 2022, Wallumbilla contract gas prices were **under \$10/GJ** in nominal terms for the last 19 years

EAST COAST SUPPLY CRISIS



“was caused by a perfect storm of under-investment in new energy supplies, as well as cold weather hitting at the same time as coal outages and supply shortages, low renewable generation and high global commodity prices”¹

An east coast supply crisis has been building for a number of years – several factors have contributed

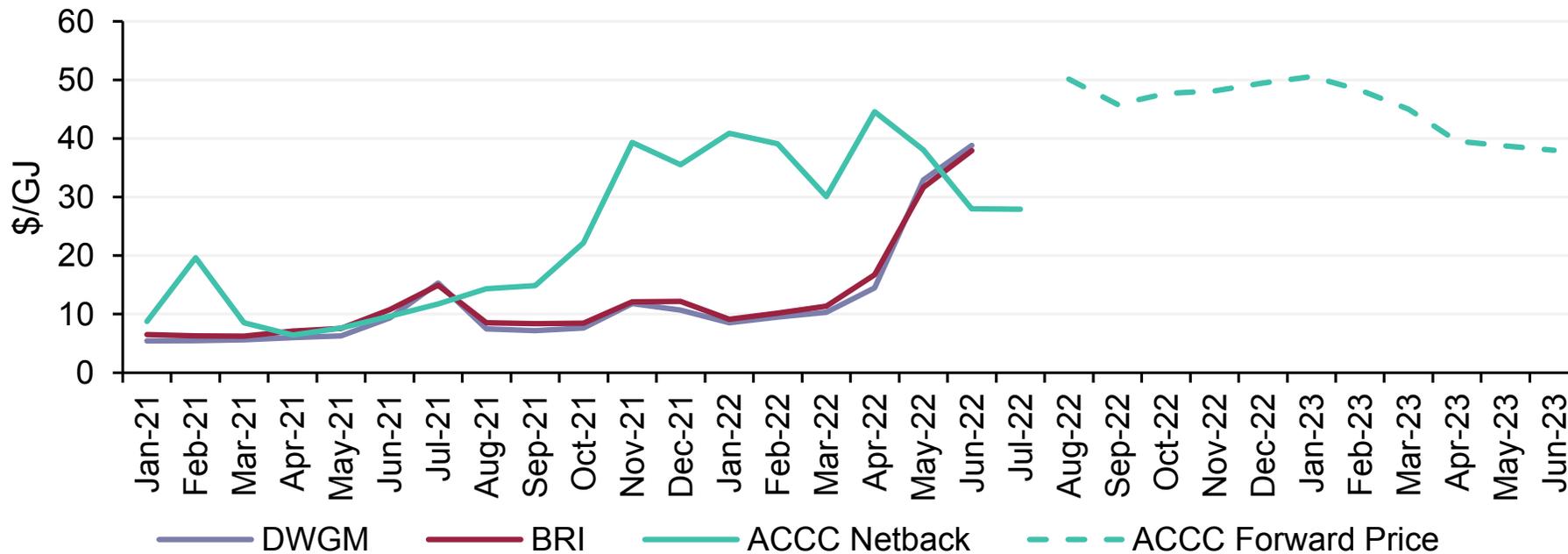
- Legacy players leaving the region or focusing capital elsewhere
- Activism and issues securing financing
- New gas lead recovery projects not coming online until mid 2020's
- LNG import projects not likely to be operational until the second half of the '20's.
- In Europe, existing sources of pipe gas and LNG are already maxed out²
- Buoyant demand for gas turbines suggests the Asian power sector is still bullish on gas-fired generation²

1. Daniel Toleman, Principal Analyst, Global LNG for Wood Mackenzie – 29/8/22
2. Simon Flowers, Chief Analyst, The Edge – 31/8/22

ACCC DOMESTIC FORECAST

Figure 59 Domestic prices reach record levels surpassing international netback in June

ACCC netback and forward prices⁴⁹; DWGM and STTM Brisbane average gas prices by month



DWGM: Declared Wholesale Gas Market - wholesale market that enables competitive and dynamic trading of gas injections and withdrawals from the Declared Transmission System (DTS), which link producers, storage providers, interconnected pipelines, major users and retailers

BRI: The Short Term Trading Market (STTM) is a market-based wholesale gas balancing mechanism established at defined gas hubs in Sydney, Adelaide and Brisbane

AVERAGE DOMESTIC GAS PRICES (STTM)

Table 5 Average gas prices – quarterly comparison

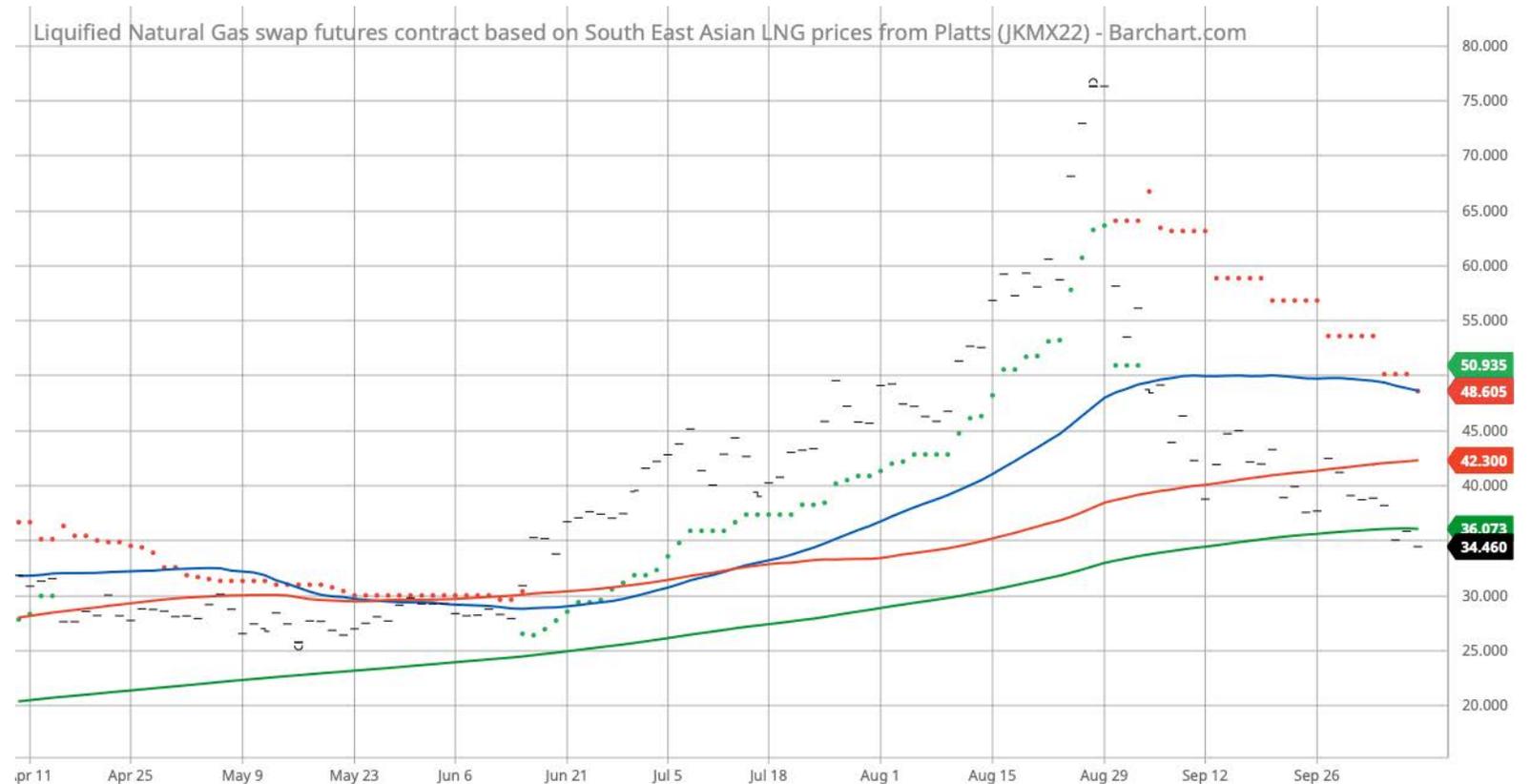
Price (\$/GJ)	Q2 2022	Q1 2022	Q2 2021	Change from Q2 2021
DWGM	28.81	9.47	7.22	299%
Adelaide	29.88	10.18	8.69	244%
Brisbane	28.81	10.22	8.48	240%
Sydney	28.87	9.81	8.46	241%
GSH	25.62	9.97	8.14	215%

- Quarterly average prices were at record levels across all AEMO markets, averaging \$28.40/GJ compared to \$8.20/GJ in Q2 2021.
- Sydney and Brisbane markets were placed under an administered price cap from 24 May to 7 June due to a retailer of last resort (RoLR) event.
- Brisbane's price was capped at \$40/GJ, while Sydney's price began at \$28/GJ then increased to \$40/GJ from 1 June.

RoLR: The Retailer of Last Resort scheme is an existing feature of the national electricity market that is designed to protect consumers when their energy retailer goes out of business.

BENCHMARKS - FORECASTING

LNG Swap Futures Contract Based on Southeast Asian LNG Prices



LNG export values are forecast to hit **AUS\$90 billion** this financial year, up from AUS\$84 billion forecast only three months ago, and more than the AUS\$70 billion reached last financial year. (Source: September 2022's Resources and Energy Quarterly, compiled by the Department of Industry, Science and Resources)

BENCHMARKS - FORECASTING

ASX Energy – Victoria Gas
Futures

Victoria Gas												
Base Quarter	Bid Size	Bid	Ask	Ask Size	High	Low	Last	+/-	Vol	OpenInt	OpenInt +/-	Settle
Q4 2022	2	21.00	29.00	2	-	-	-	-	-	216	-	21.75
Q1 2023	2	22.00	27.50	2	-	-	-	-	-	100	-	23.00
Q2 2023	2	32.00	37.50	2	-	-	-	-	-	116	-	33.85
Q3 2023	2	33.50	38.50	2	-	-	-	-	-	67	-	34.50
Q4 2023	2	21.50	26.50	2	-	-	-	-	-	64	-	21.85
Q1 2024	2	21.00	26.00	2	-	-	-	-	-	22	-	21.85
Q2 2024	2	27.00	34.00	2	-	-	-	-	-	24	-	28.00
Q3 2024	2	28.00	35.00	2	-	-	-	-	-	24	-	29.00
Q4 2024	2	20.00	25.00	2	-	-	-	-	-	22	-	21.75
Q1 2025	2	20.00	25.50	2	-	-	-	-	-	-	-	20.00
Q2 2025	2	23.25	32.00	2	-	-	-	-	-	-	-	23.00
Base Strip	Bid Size	Bid	Ask	Ask Size	High	Low	Last	+/-	Vol	OpenInt	OpenInt +/-	Settle
CAL 2023	2	27.25	32.50	2	-	-	-	-	-	-	-	28.31
FIN 2024	-	-	-	-	-	-	-	-	-	-	-	26.56
CAL 2024	2	24.00	30.00	2	-	-	-	-	-	-	-	25.15
FIN 2025	-	-	-	-	-	-	-	-	-	-	-	23.46

Source: https://www.asxenergy.com.au/futures_gas 10-10-2022

GAS DEMAND UNCERTAINTY



The consequences of the broad energy sector focusing on Net Zero 2050, have been;

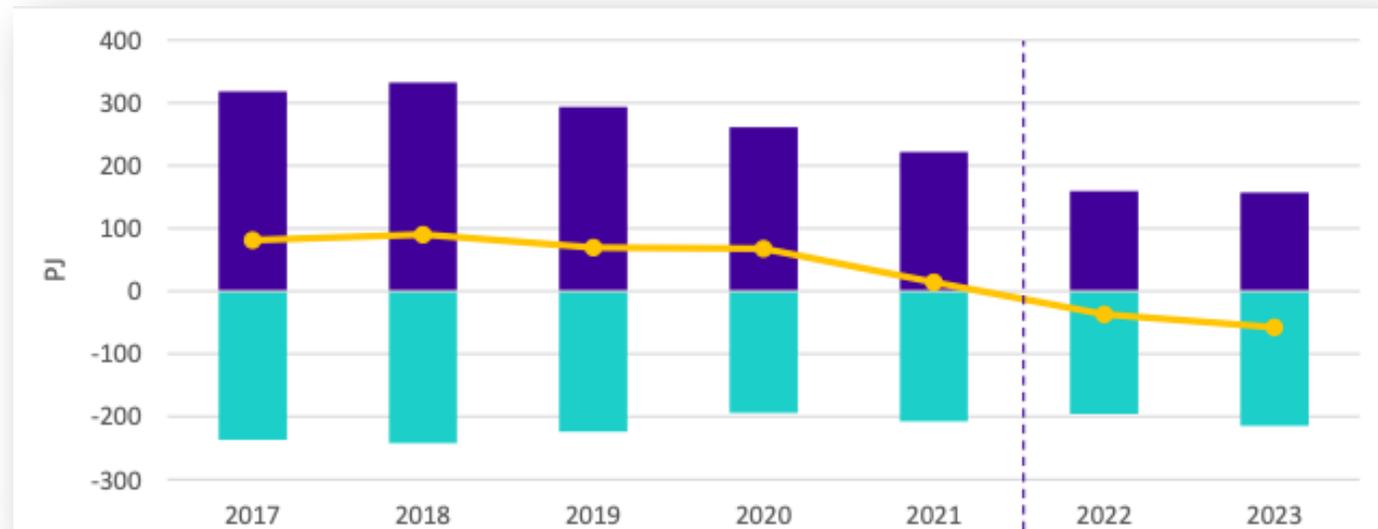
- Future domestic and global gas demand uncertainty
- Potential for increasing costs for various parts of the gas value chain
- Major banks are committed to reducing lending to carbon emitting industries, leading to;
- Higher costs of capital for fossil fuel projects
- Potential constraints on hydrocarbon resource development on one hand or promotion of gas as transitional fuel on the other
- Globally, agencies such as the International Energy Agency (IEA) forecasts of long-term declines in Oil and LNG demand and prices, despite current price increases

ADDRESSING THE SHORTFALL

Additional volumes of gas will need to be:

- produced in the east coast from gas fields that are already connected to the market
- produced in the Northern Territory and transported via the Northern Gas Pipeline (NGP) into the east coast
- withdrawn from storage and/or
- diverted by LNG exporters into the domestic market.

The LNG exporters are expected to contribute to the supply shortfall in 2023 by withdrawing 58 PJ more gas from the domestic market than they expect to supply into it¹.



- LNG Producers' supply into the domestic market under gas supply agreements
- LNG Producers' withdrawals from the domestic market under third party purchases
- LNG Producers' net contribution to east coast gas market

MARKET SUMMARY



Domestic gas prices are forecast to remain strong



The East coast market is capacity constrained



Robust International LNG demand is expected to put further strain on the domestic market



Under-investment in new domestic energy supplies has exacerbated supply shortfalls to the domestic market



Long cycle times from exploration to development means limited capacity is expected to hit the market in the near to mid term

