

SEPTEMBER 2021

# Transitioning to a gas producer



VINTAGE ENERGY

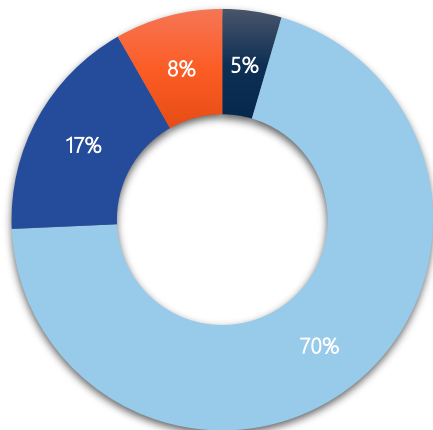


# Vintage Energy

Active operational period delivering success through the drill bit; 100% success from wells drilled

- Oil and gas exploration and appraisal success
  - Four Cooper Basin gas wells (two exploration)
  - One onshore Otway Basin CO<sub>2</sub> gas well
- Management and technical staff with proven onshore basin exploration success
- Numerous upcoming share price catalysts
- Supportive share register with increased retail component

## Share Register Breakdown



- Institutional – International
- Retail
- Institutional – Australia
- Board and management



# Quality portfolio of permits

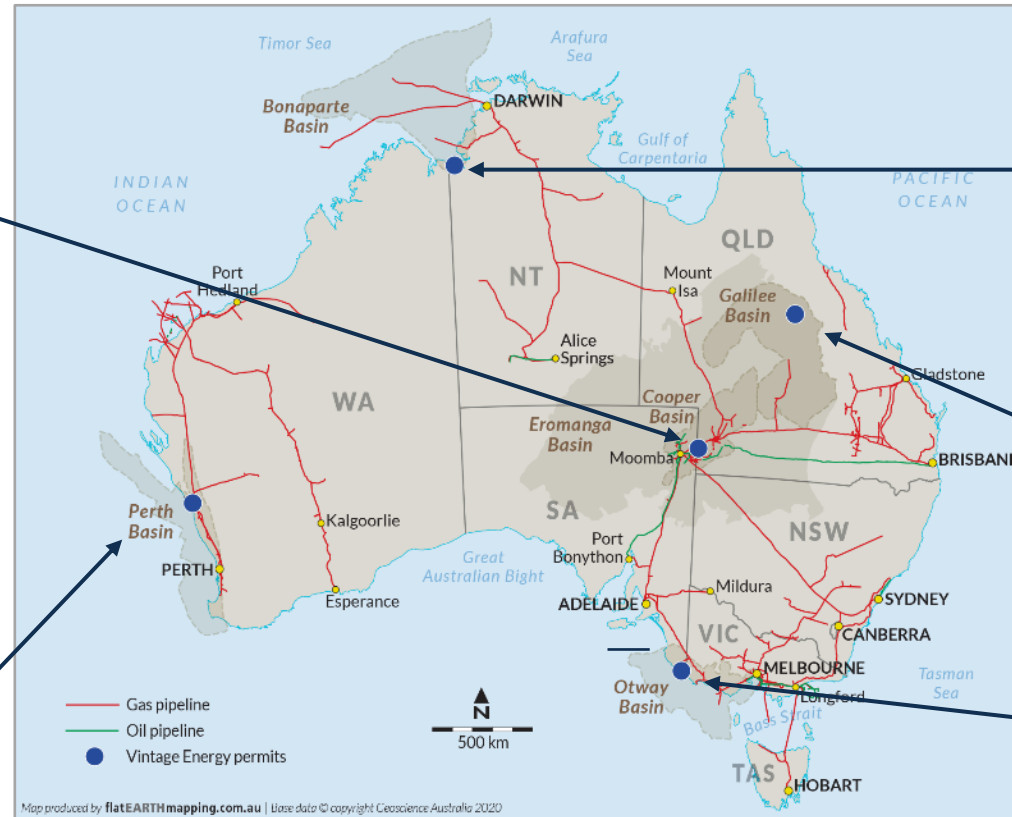
Geographically diverse and gas focused portfolio; cash flow anticipated in H1 2021

## Cooper / Eromanga Basins

- Growing, multi-permit, footprint
- ATP 2021: Commercial gas field proven at Vali
- PRL 211: Odin-1 gas discovery
- PELA 679: Gazettal success

## Perth Basin

- Cervantes oil prospect
- Located on trend with Hovea, Jingemia and Cliff Head oil fields



## Bonaparte Basin

- Multiple oil and gas play types in frontier region

## Galilee Basin

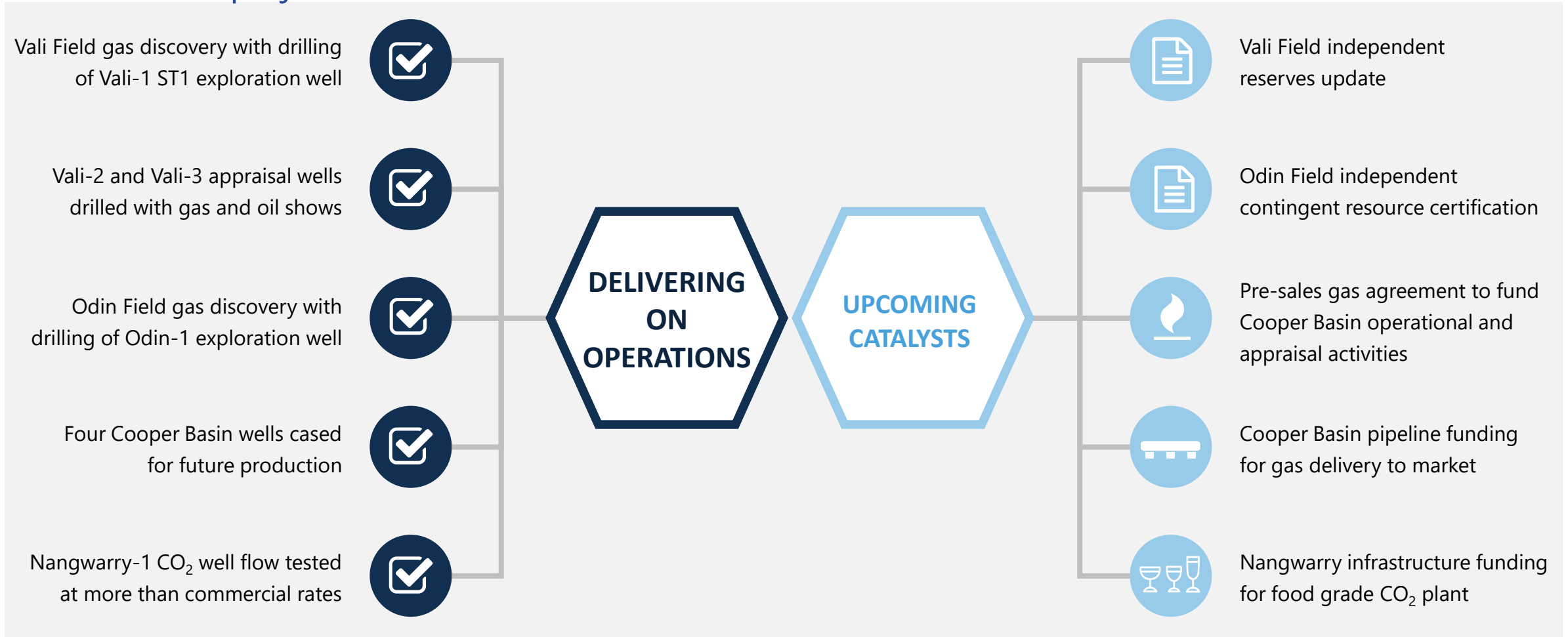
- Albany Field
- Numerous prospects and leads
- Gas flow from Albany-1

## Otway Basin

- Nangwarry-1 CO<sub>2</sub> discovery
- Interest from multiple parties

# Operational excellence delivering catalysts

Discussions well advanced for non-equity funding options for upcoming operational and infrastructure projects



# Three gas fields discovered

Three successful exploration wells and two successful appraisal wells

## VALI FIELD

### Vali-1 ST1 exploration well

First operated well

Fracture stimulated and flow tested

Extended production test gas flow at 4.3 MMscfd

Net gas pay ~80 metres in the Patchawarra Formation

Vali-1 ST1 results deliver first independently certified reserves

**2P: 16.6 PJ (net)<sup>1</sup>**

## VALI FIELD

### Vali-2 appraisal well

Gas shows in Toolachee and Patchawarra formations

Gas sample from Toolachee

Net gas pay ~150 metres

### Vali-3 appraisal well

Gas shows in Lower Nappamerri, Toolachee, Epsilon and Patchawarra formations and Tirrawarra

Net gas pay ~178 metres

Both wells cased for future production

**2P: 16.6 PJ (net)<sup>1</sup>**

## ODIN FIELD

### Odin-1 exploration well

Interpreted gas pay in Toolachee, Epsilon and Patchawarra formations

Gas samples recovered from Toolachee and Epsilon

Net gas pay 172.5 metres

Toolachee gas sample 83% hydrocarbons, 17% inerts, Epsilon gas sample 77% hydrocarbons, 23 % inerts

Cased for future production

**2U: 5.7 Bcf (net)<sup>2</sup>**

## NANGWARRY FIELD

### Nangwarry-1 exploration well

Production test CO<sub>2</sub> gas flow at 10.5-10.8 MMscfd

Sizeable volume of CO<sub>2</sub> estimated to be present

Confidence to commence planning for development

Potential field life of 30+ years

ERCE revised recoverable 'Best' estimates increased

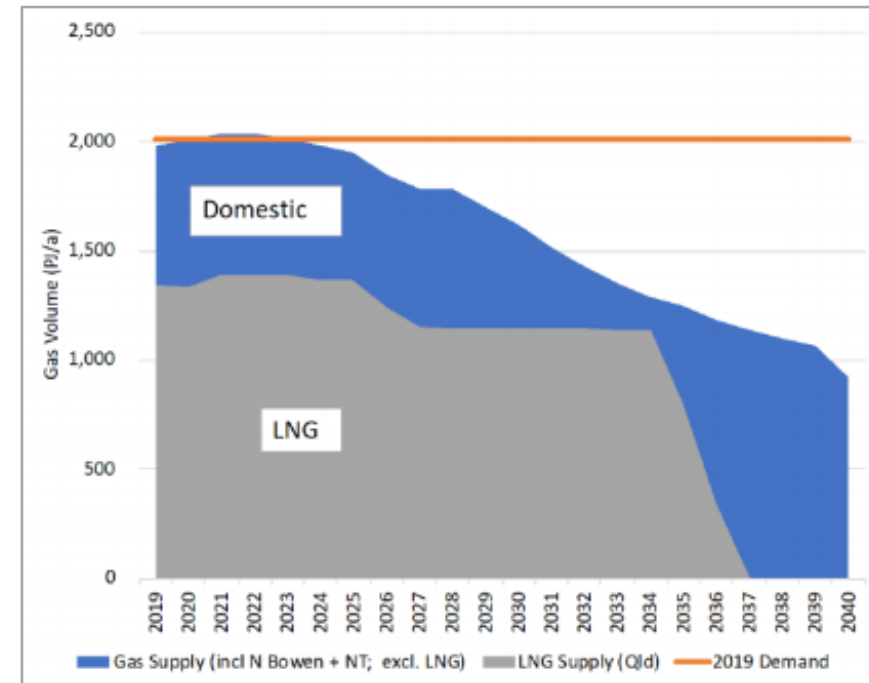
**Best: 12.9 Bcf (net)**

# Projected eastern and south-eastern gas production vs demand

New gas discoveries required to ease dependence on production from 'undeveloped 2P Reserves' and 'anticipated developments' to meet forecast demand

- Federal Govt has identified gas companies and the delivery of gas to market as an essential service
- Forecast demand, underpinned by LNG, expected to be steady over the long-term
- Significant investment, needed to meet forecast demand, required for:
  - Development of 2P undeveloped
  - Development 'anticipated developments'
  - Development of new discoveries
  - Exploration and appraisal
- Recent ACCC papers indicate contract gas pricing in the \$9-10/GJ range

Forecast east coast gas supply vs 2019 demand



Source: EnergyQuest, March 2020

AEMO stated in its March 2020 Gas Statement of Opportunities that: "Actual operational constraints, particularly within the Victorian DTS, may lead to transportation limitations throughout the system, creating potential supply gaps during peak winter days from 2024."

# Cooper / Eromanga Basin



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# Building a sizeable footprint in the Cooper Basin

Acquiring permits with familiar geology for best chance of success

- Total acreage position of 862.8 km<sup>2</sup>

## ATP 2021

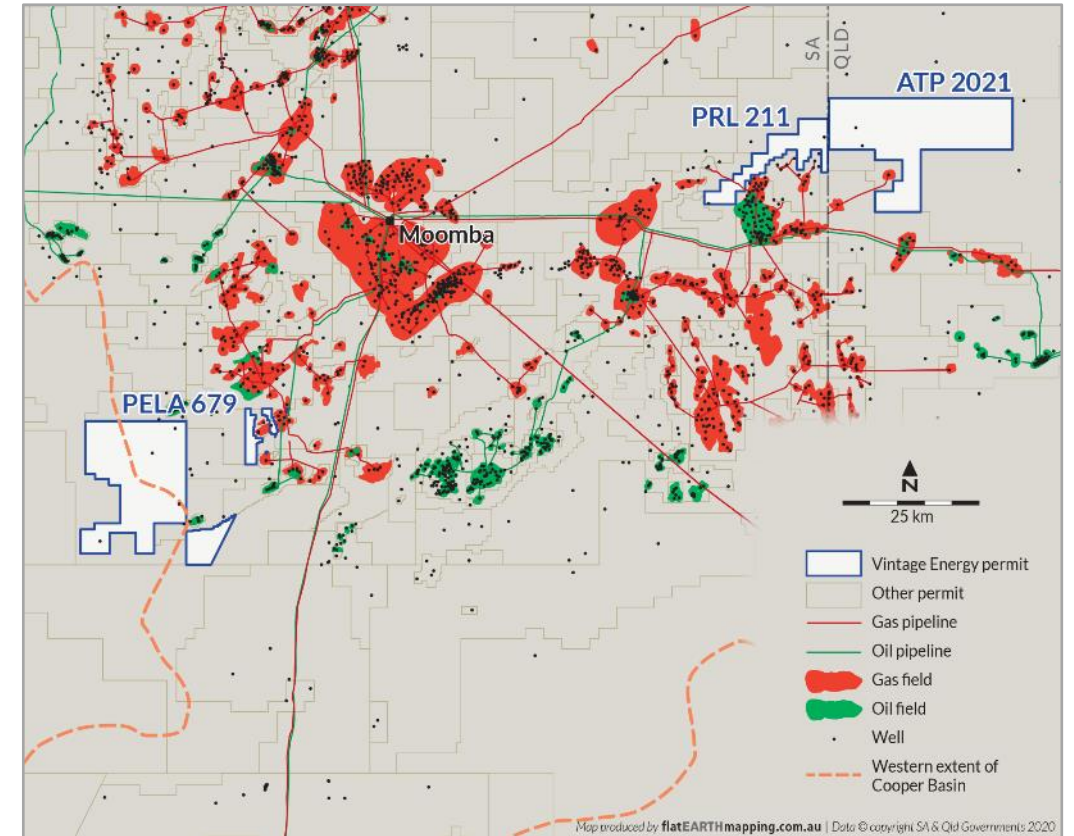
- Farm-in for 50% and operatorship (July 2019)
- Three successful wells (Vali-1 ST1, Vali-2 and Vali-3)
- Vali-1 ST1 fracture stimulated and flow tested; stabilised flow rate of 4.3 MMscfd through 36/64" choke at 942 psi
- Independently certified Reserves booked
- Highly prospective permit with numerous gas and oil targets remaining

## PRL 211

- Farm-in for 42.5% and operatorship (January 2020)
- Odin-1 gas discovery cased for production

## PELA 679 (CO2019-E)

- Successful gazettal application
- Geology similar to Western Flank (oil)
- Four oil prospects (three Jurassic and one Patchawarra)
- 3D seismic required to refine existing targets and identify new ones





# Cooper / Eromanga Basins – Southern Flank (ATP 2021)

Vali-1 ST1 extended flow test at 4.3 MMscfd through 36/64" choke at 942 psi wellhead pressure

- Vintage 50% and operator (Metgasco Ltd 25%, Bridgeport Cooper Basin Pty Ltd 25%)
- Vali-1 ST1 the first operated well for Vintage with a two-day extended flow test with strong and stable gas flow rate
  - 4.3 MMscfd through 36/64" choke at 942 psi wellhead pressure
  - Gas composition ~75% methane, ~1% ethane, ~24% inerts
- Vali-2 has 150 metres of net gas pay interpreted primarily in Toolachee and Patchawarra formations
- Vali-3 has 178 metres of net gas pay interpreted in lower Nappamerri Group, Toolachee, Epsilon and Patchawarra formations, and the Tirrawarra Sandstone
- Oil shows encountered in all Vali wells which is positive for oil potential in ATP 2021
- All Vali Field wells cased for perforation, fracture stimulation and production, with gas sales targeted end of Q2 2022



# Cooper / Eromanga Basins – Southern Flank (ATP 2021)

Reserves increase anticipated due to Toolachee net gas pay identified in Vali-2

- Prior to drilling Vali-2 and Vali-3, ERCE independently certified Vali Field 2P Reserves<sup>1</sup> of 33.2 PJ (gross)
- Increase to Reserves expected as reserves only reflect gas in the Patchawarra Formation, with Toolachee Formation net gas pay identified in Vali-2
- Further leads and prospects to benefit from targeted 3D seismic<sup>1</sup>
  - Significant gas and oil potential across ATP 2021
  - Kinta gas prospect a priority target



## Vali Field Net Reserves<sup>2</sup>

	1P	2P	3P
Patchawarra Formation	6.1 Bcf	15.1 Bcf	39.4 Bcf
	6.7 PJ	16.6 PJ	43.3 PJ

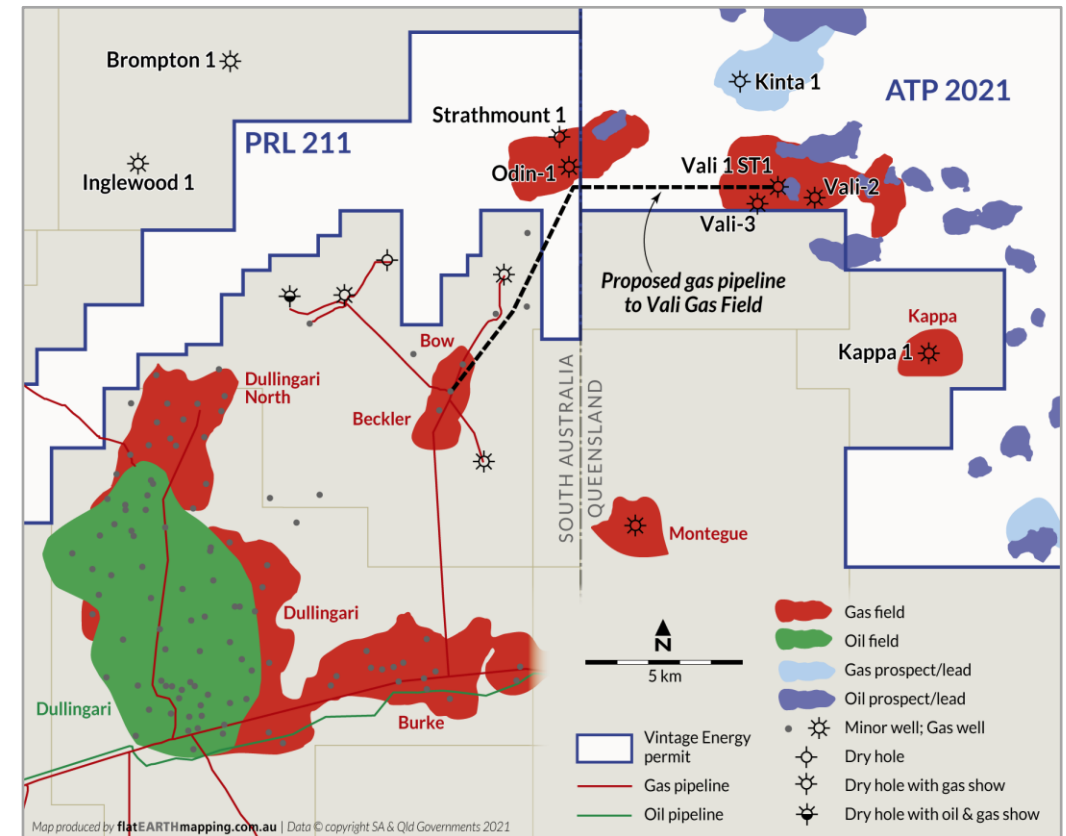
1. Subject to JV approval

2. Notes: 1. Reserves estimates reported here are ERCE estimates, effective 1 December 2020. 2. Vintage has acquired material new data with the drilling of Vali-2 and Vali-3, however this data has not been fully interpreted and analysed at the date of this presentation. When this data has been incorporated into a reserve revision a further announcement will be made. 3. Reserves estimates have been made and classified in accordance with the Society of Petroleum Engineers ("SPE") Petroleum Resources Management System ("PRMS"). 4. Net Reserves attributable to Vintage represent the fraction of Gross Reserves allocated to Vintage, based on its 50% interest in ATP 2021. 5. Allowance for Fuel and Flare has been made. 6. Conversion of Bscf to PJ has been estimated based on gas sampled and measured from Vali-1 ST1. 7. ERCE Reserves presented in the tables are the totals for all 20 Patchawarra reservoir intervals.

# Vali Field forward plans

Excellent appraisal drilling results provide optionality

- Flow test results at Vali-1ST1, along with field and analogue well data analysis, indicate ~5 MMscfd raw gas initial rate and ~5 Bcf of raw gas per well for the Patchawarra Formation
- Vali-2 and Vali-3 prove up additional Toolachee reservoir
  - Additional reserves booking from Toolachee expected
  - Toolachee sands generally higher quality than Patchawarra
  - Higher hydrocarbon content in Toolachee gas
  - Potential Toolachee gas production without fracture stimulation
  - Opportunity to defer some capex with no loss of production potential
- Plan to connect first three wells will provide invaluable production data for optimal forward plan



# Cooper / Eromanga Basins – Southern Flank (PRL 211)

Odin-1 cased for production with gas shows in Toolachee, Epsilon and Patchawarra formations

- Vintage (operator with 42.5%), Bridgeport CB (21.25%) and Metgasco (21.25%) free carry Impress Energy (15%)
- Odin-1 exploration well cased as a gas discovery for future production
- Extensive gas pay in Toolachee and Patchawarra formations, as well as a basal sand in a secondary target in the Epsilon Formation
- Gas samples recovered from the Toolachee and Epsilon formations
- 172.5 metres of net gas pay estimated made up of the following intervals:
  - Toolachee Formation conventional pay: 37 metres (porosity greater than or equal to 8%)
  - Epsilon Formation conventional pay: 4.5 metres (porosity greater than or equal to 8%)
  - Patchawarra Formation conventional and low permeability pay: 126 metres (porosity greater than or equal to 6%)
  - Tirrawarra Sandstone conventional and low permeability pay: 5 metres (porosity greater than or equal to 6%)
- Potential production from the Odin Field could be tied-in to the Vali production network



# Otway Basin



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# Otway Basin

Nangwarry-1 CO<sub>2</sub> discovery potentially capable of commercial production over 30+ years

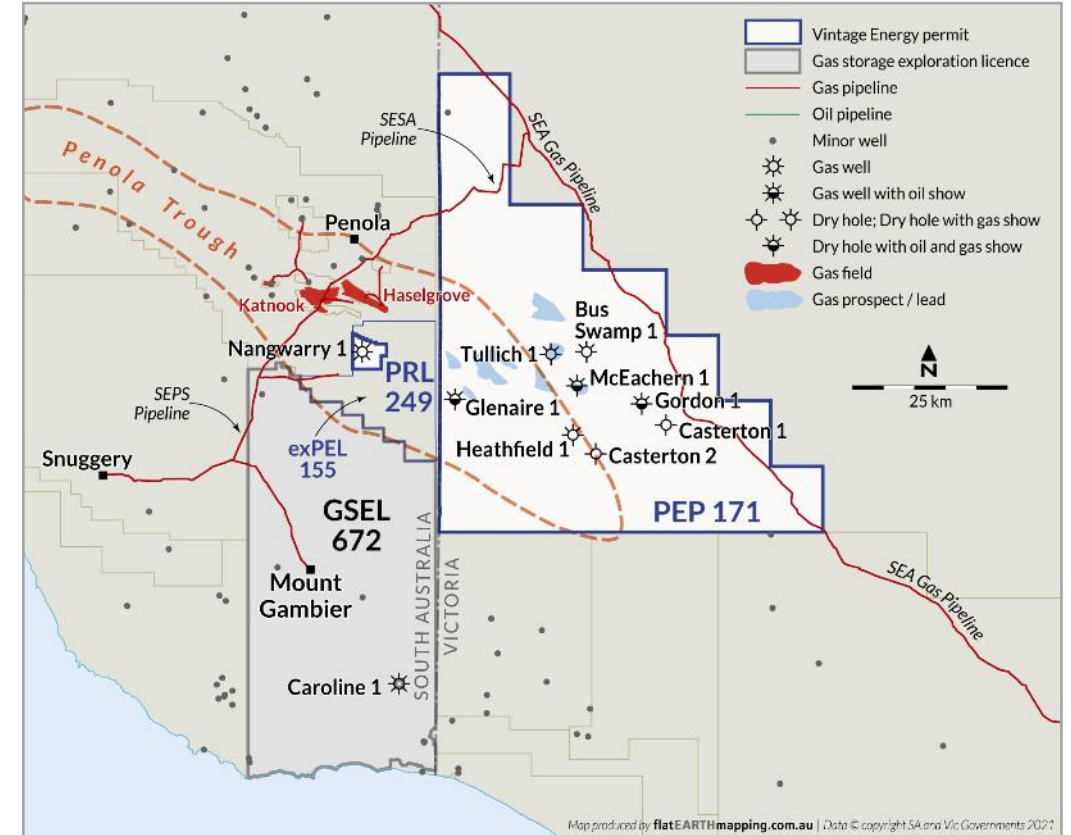
## PRL 249 (exPEL 155)

- Nangwarry CO<sub>2</sub> discovery
- Successful well testing flowed CO<sub>2</sub> at stabilised rate of 10.5-10.8 MMscfd
- Possible production for 30+ years
- Potential for reliable source of food grade CO<sub>2</sub>
  - CO<sub>2</sub> vital in medical, food/beverage and manufacturing sectors
- Low cost to develop and potentially highly profitable

Nangwarry CO <sub>2</sub> discovery (net to Vintage) <sup>1</sup>						
	CO <sub>2</sub> Sales Gas (Bcf)			Unrisked hydrocarbon Contingent Resources (Bcf)		
	Low	Best	High	1C	2C	3C
Pretty Hill Sandstone	4.5	12.9	32.2	0.3	0.8	2.0

## PEP 171

- Strong acreage position via Cooper Energy deal
- Victorian Moratorium to be lifted in July 2021 with gas shortage looming



<sup>1</sup> Refer to ASX release dated 31 August 2020

# Nangwarry Field commercialisation

Production to replace recently decommissioned Caroline-1 well

- Discussions with multiple parties regarding food grade CO<sub>2</sub> offtake
- Cost of facility expected to be \$25-30 million
- Capacity of up to 150 tonnes per day, with facility positioned next to well
- No further wells required to develop Nangwarry Field
- Nangwarry Field would replace the recently shut-down (2017) Caroline-1 well, which was on production for 50 years
- Many industrial uses for food grade CO<sub>2</sub> including:
  - Carbonation of soft drinks, fruit juices and beer
  - Winemaking
  - Medical devices
  - Cold storage / refrigeration
  - Accelerating growth of farm produce as an atmosphere additive
  - Production of paints and varnishes and manufacture of foam rubber



Photograph courtesy of GLP, depicting a CO<sub>2</sub> plant

# Other permits



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# Perth Basin – Oil potential

## Equity interest in Cervantes oil prospect and option to drill a second structure

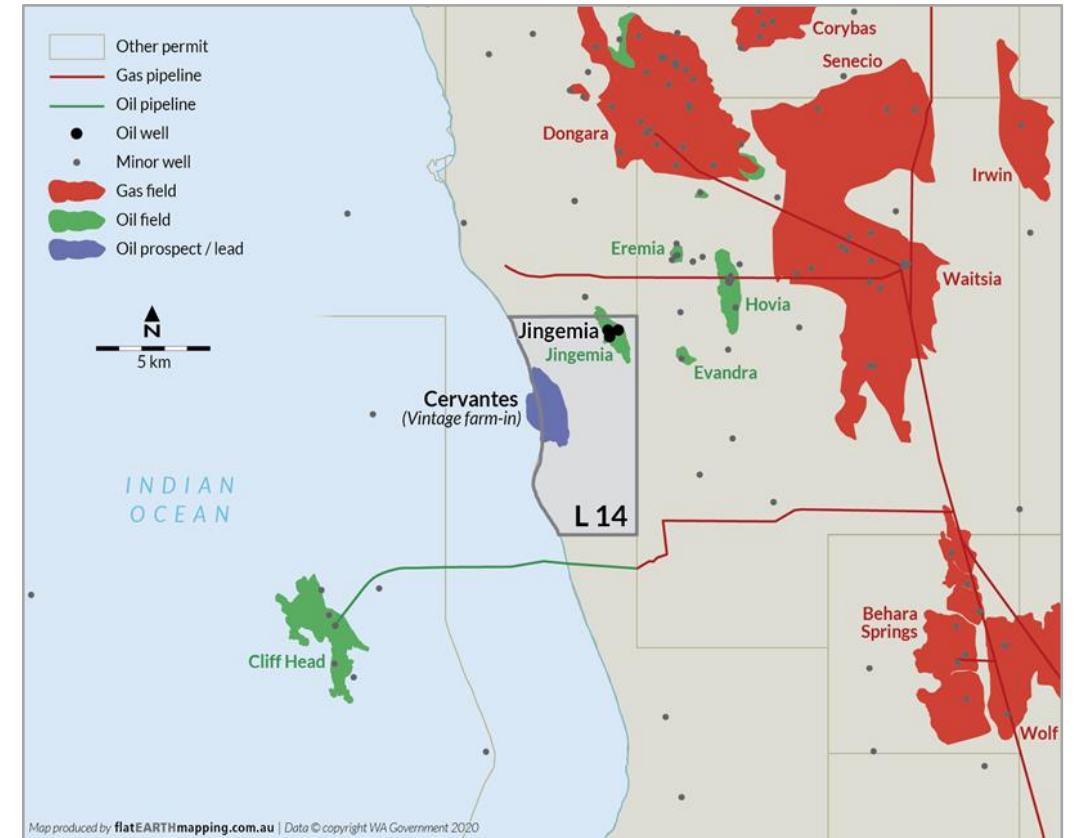
- L14, located within the Perth Basin, is a 39.8 km<sup>2</sup> production licence granted over the Jingemia oilfield and surrounds

### Farm-in structure

- Binding farm-in agreement executed for 30% of the Cervantes prospect (Metgasco 30%, RCMA Australia 40% and free carried on well<sup>1</sup>)
- Licence due to expire in June 2025

### Indicative funding (net to Vintage) and timeline

- Vintage to fund 50% of well cost
- FY22 – ~\$3.7 million to drill first well<sup>2</sup>
- FY23 – If Cervantes successful, ~\$0.9 million for three kilometre tie-in to Jingemia processing facility
  - Option to drill second well on similar terms to first well



1 Free carried to a well cost cap of \$8 million above which costs revert to equity share  
2 Subject to rig availability and regulatory approvals

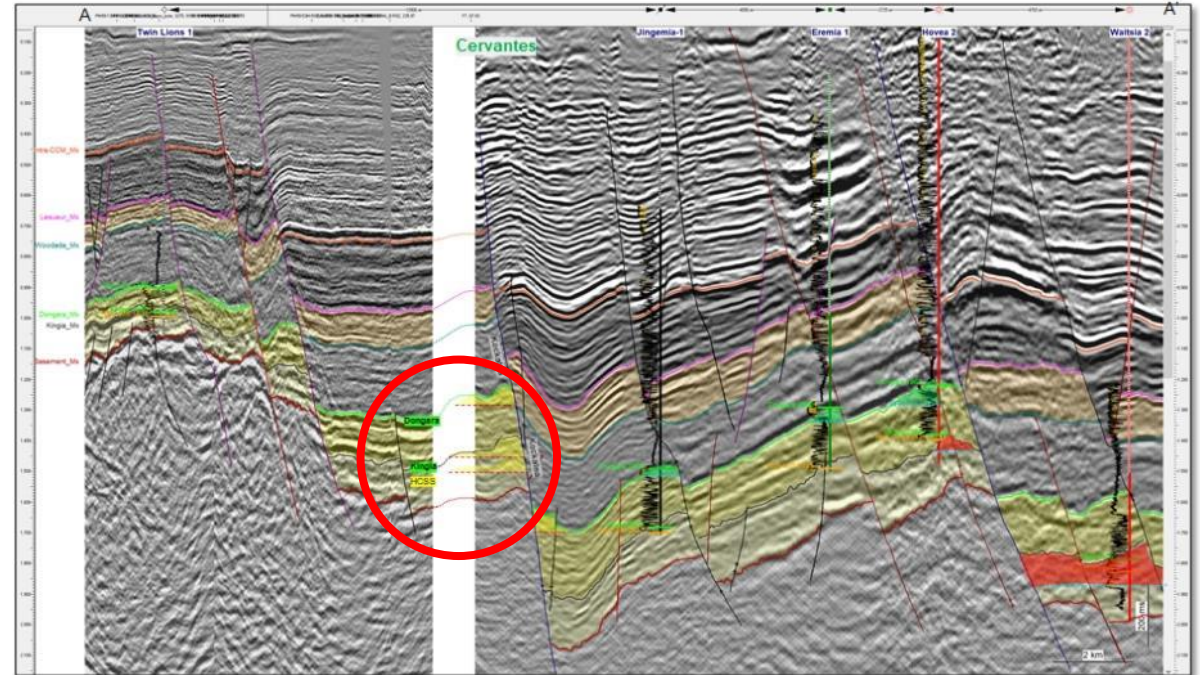
# Perth Basin – Oil potential

Adjacent to the 12 MMbbl oil in place Jingemia oil field (over 4.6 MMbbl produced to date)

- Cervantes structure located in a gap between the oil discovery trend of the Hovea, Jingemia and Cliff Head oil fields
  - High-side fault trap of multiple reservoir units (similar structural setting to existing fields)
  - Permian sandstone reservoir targets (prolific producers in Perth Basin)
  - COS of 28% and a high chance of development

## Gross Cervantes structure prospective resource (MMbbl)<sup>1</sup>

	1U low estimate	2U best estimate	3U high estimate
Dongara	3.7	7.4	14.6
Kingia	2.2	7.1	22.3
High Cliff	0.1	0.8	5.0
<b>Total</b>	<b>6.0</b>	<b>15.3</b>	<b>41.9</b>
<b>Vintage 30%</b>	<b>1.8</b>	<b>4.6</b>	<b>12.6</b>



<sup>1</sup> Volumetrics sourced from Metgasco. The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. These prospective resources are estimated as of 10 September 2019 and first reported to the ASX on 15 November 2019. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons. The resources have been classified and estimated in accordance with the Petroleum Resource Management System (PRMS). The prospective resources have been estimated based on the interpretation of 3D seismic integrated with offset well data. Probabilistic methods have been used to estimate the prospective resource in individual reservoirs and the reservoirs have been summed arithmetically. Vintage is not aware of any new data or information that materially affects the estimate above and that all material assumptions and technical parameters continue to apply and have not materially changed. It is expected that the prospect will be drilled in H1 FY21 and that no further material exploration activities, including studies, further data acquisition and evaluation work are to be undertaken prior to that activity. Resource estimates are net of shrinkage.

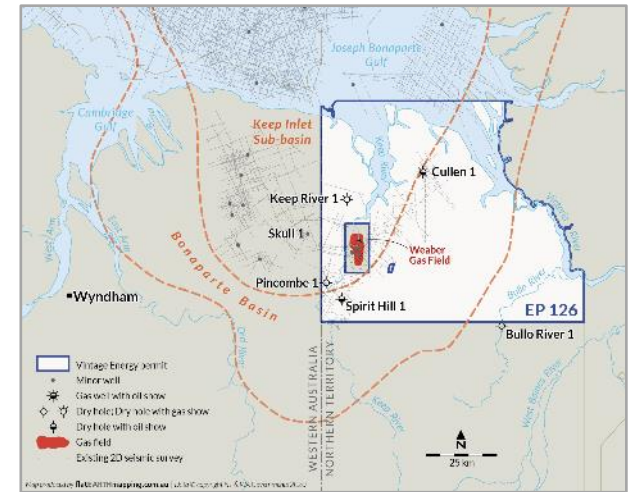
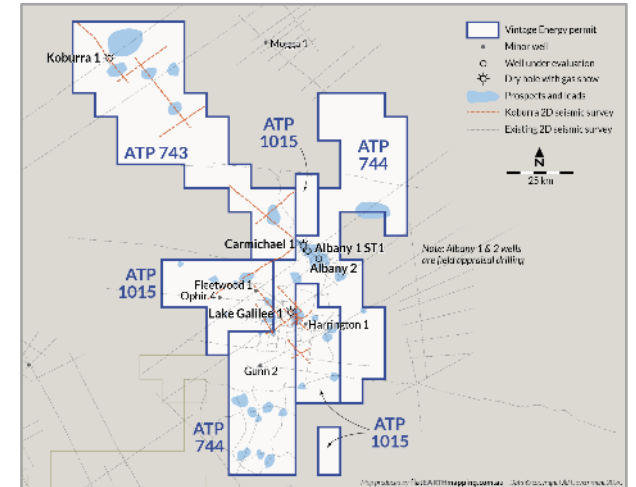
# Other permits

## Galilee Basin – ATPs 743, 744, 1015 (“Deeps”)

- Underexplored and areally extensive permits of more than 9,000 km<sup>2</sup>
- Albany Field is a large robust anticlinal structure over 61 km<sup>2</sup>
- Targeting Lake Galilee Sandstone, with potential follow up wells
- Potential for additional structures with large gas accumulations
- MOU signed with APA
- Albany-1 ST1 remains to be fracture stimulated
- All operations currently suspended by operator

## Bonaparte Basin, Northern Territory – EP 126

- Low-cost entry into large 6,700 km<sup>2</sup> permit
- Zone of strong gas shows identified for flow testing
- Potential to supply gas to local industrial users
- NT Government recently defined ~50% of the NT as proposed reserved areas
- Negotiation process with the NT Government continuing
- Hydrocarbon shows in Cullen-1



# In summary

Three key growth projects; near-term production and cash flow expected from Vali/Odin (Cooper Basin) and Nangwarry (Otway Basin)

## Australian east coast energy market



Gas and energy shortage on east coast placing upward pressure on pricing

## Gas focused with oil potential



Focused on onshore permits with gas and oil potential

## Market accessibility



New discoveries and permits close to infrastructure

## Quality team



Lean and innovative team thinking outside the box and delivering results

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The hydrocarbon resource estimates in this report have been compiled by Neil Gibbins, Managing Director, Vintage Energy Limited. Mr. Gibbins has over 35 years of experience in petroleum geology and is a member of the Society of Petroleum Engineers. Mr. Gibbins consents to the inclusion of the information in this report relating to hydrocarbon Contingent and Prospective Resources in the form and context in which it appears. The Contingent and Prospective Resource estimates contained in this report are in accordance with the standard definitions set out by the Society of Petroleum Engineers, Petroleum Resource Management System.