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**FY20 Results/ FY21 Outlook**  
31 August 2020



Ocean Monarch drilling Annie-1 gas discovery well, Otway Basin Victoria

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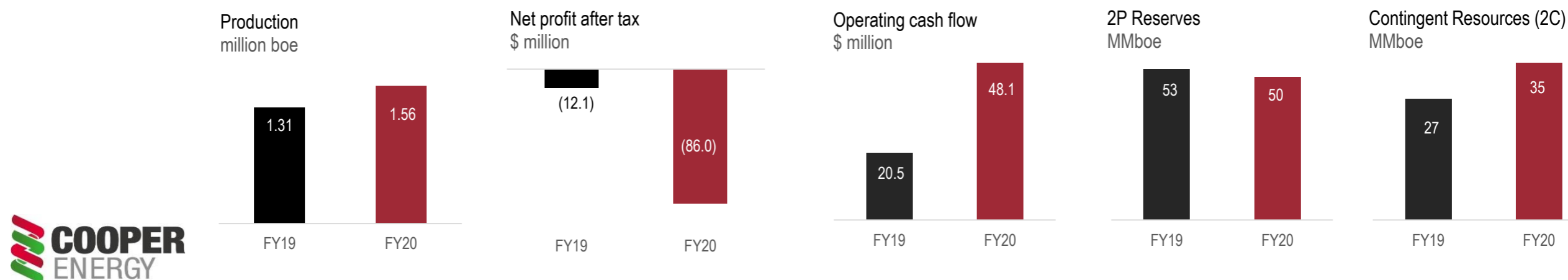
P50 as it relates to costs is best estimate; P90 as it relates to costs is high estimate.

Authorisation : Approved and authorised for release to ASX on 31 August 2020 by David Maxwell, Managing Director, Cooper Energy Limited.

Address: Level 8, 70 Franklin Street, Adelaide 5000.

## FY20: 3 standout features

1. Impact of COVID-19 energy demand and prices on financial results and near-term gas prices.
2. Impact of the delayed completion of the Orbost Gas Processing Plant for Sole gas.
3. Growth in Cooper Energy's gas assets and opportunities and the portfolio's alignment with the tight supply forecast from 2022/23.



## 5 Key outcomes from FY20 and what do they mean?

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1. Impairment to asset carrying value of \$76 million after tax

*Uncontracted gas revalued at COVID-19 low prices and for development and abandonment costs from FY20 price discovery*

2. Sole offshore project completed for \$335 million vs budget of \$355 million, on time and LTI free

*Demonstration of competence in offshore gas development*

3. Acquisition of Minerva Gas Plant and FID for connection and upgrade as Athena Gas Plant

*Secured cornerstone asset for growth in Otway gas. Production and cost benefits. Strengthens position as very cost competitive offshore Victoria producer*

4. Annie and Dombey gas discoveries  
New offshore and onshore exploration acreage

*New gas supply opportunities being pursued, close to gas plants and markets*

5. OGPP incomplete and Transition Agreement with APA post year end

*~ 10 PJ term gas sales deferred  
Finance agreement rescheduling occurring  
Pathway agreed for plant completion and term sales to commence*

# Health, Safety, Environment and Community

## Safety: one lost time injury aboard Ocean Monarch

### Health

- Effective COVID response (as detailed on next page)

### Safety

- One LTI aboard Ocean Monarch (September 2019)
- Contractor injured during rig maintenance operation while changing out drill line on Annie-1 well location. Now fully recovered and back to work
- Ongoing Emergency Response Readiness drills

Safety metrics	FY20	FY19
Hours worked	283,672	505,300
Recordable incidents	1	0
Lost time injuries	1	0
Lost time injury frequency rate	3.53	0
Total recordable injury frequency rate (TRIFR) <sup>1</sup>	3.53	0
Industry TRIFR <sup>2</sup>	5.27	4.07

# COVID-19 response

Rapid response ensured safety of personnel. Limited direct impact as all gas production is via unmanned subsea facilities and locally staffed gas plants. Indirect impact via gas prices, supply chain and access restrictions

## Prioritising safety & health

- Pandemic Response Team established and resourced incorporating support of independent medical practitioner
- Early implementation of working from home (WFH) with on-site staffing restricted to minimal IT support and skeleton crew at Athena Gas Plant
- Staff health and wellbeing monitored through chain of command. Daily team and weekly whole of company video conferencing
- WFH from March to May in Adelaide and Perth, ready for rapid reinstatement if needed
- Pandemic Response Team continues to operate and advise Board, Managing Director and Executive Leadership Team as well as broader staff

## Assessing & monitoring risk to business continuity

- All gas production is via unmanned subsea installations, operated remotely via locally staffed 3<sup>rd</sup> party gas plant control rooms
- No impact on production
- Remote emergency response measures rigorously tested
- Cooper Energy plant operators at Athena. Local employment, no FIFO workers
- Domestic and international travel restrictions impacted in person attendance at Orbest – conducted remotely via video conference
- COVID-19 is assessed as not being among key Corporate risks
- Some indirect impact through gas prices, gas demand and supply chain disruption

# Key financial results

<i>\$ million unless indicated</i>	<b>FY20</b>	<b>FY19</b>		<b>change</b>
<b>Production MMboe</b>	<b>1.56</b>	1.31	▲	<b>19%</b>
<b>Sales revenue</b>	<b>78.1</b>	75.5	▲	<b>3%</b>
<b>Other income</b>	<b>19.8</b>	0.8	▲	<b>2,375%</b>
<b>Gross profit</b>	<b>23.6</b>	31.7	▼	<b>(25)%</b>
<b>Gross profit/Sales revenue %</b>	<b>30.2</b>	42.0	▼	<b>(28)%</b>
<b>Statutory profit/(loss) after tax</b>	<b>(86.0)</b>	(12.1)	▼	<b>(611)%</b>
<b>Underlying EBITDAX</b>	<b>29.6</b>	34.3	▼	<b>(14)%</b>
<b>Underlying (loss)/profit after tax</b>	<b>(6.6)</b>	13.3	▼	<b>(150)%</b>
<b>Cash flow from operations</b>	<b>48.1</b>	20.5	▲	<b>134%</b>
	<b>30 June 20</b>	<b>30 June 19</b>		
<b>Drawn debt</b>	<b>229.4</b>	218.2	▲	<b>5%</b>
<b>Cash</b>	<b>131.6</b>	164.3	▼	<b>(20)%</b>
<b>Net debt</b>	<b>97.8</b>	53.9	▲	<b>81%</b>

# Statutory and underlying loss

Impairment charges, liquidated damages restoration restatement responsible for difference between statutory and underlying profit

For the year ended 30 June 2020:

\$ million

**Net loss after tax**

**86.0**

Adjustments for:

Impairment announced 25 August

107.5

Liquidated damages Orbost Gas Processing Plant

(19.8)

Non-cash restoration expense

14.1

Tax impact of underlying adjustments

(22.4)

**Total significant items after tax**

**79.4**

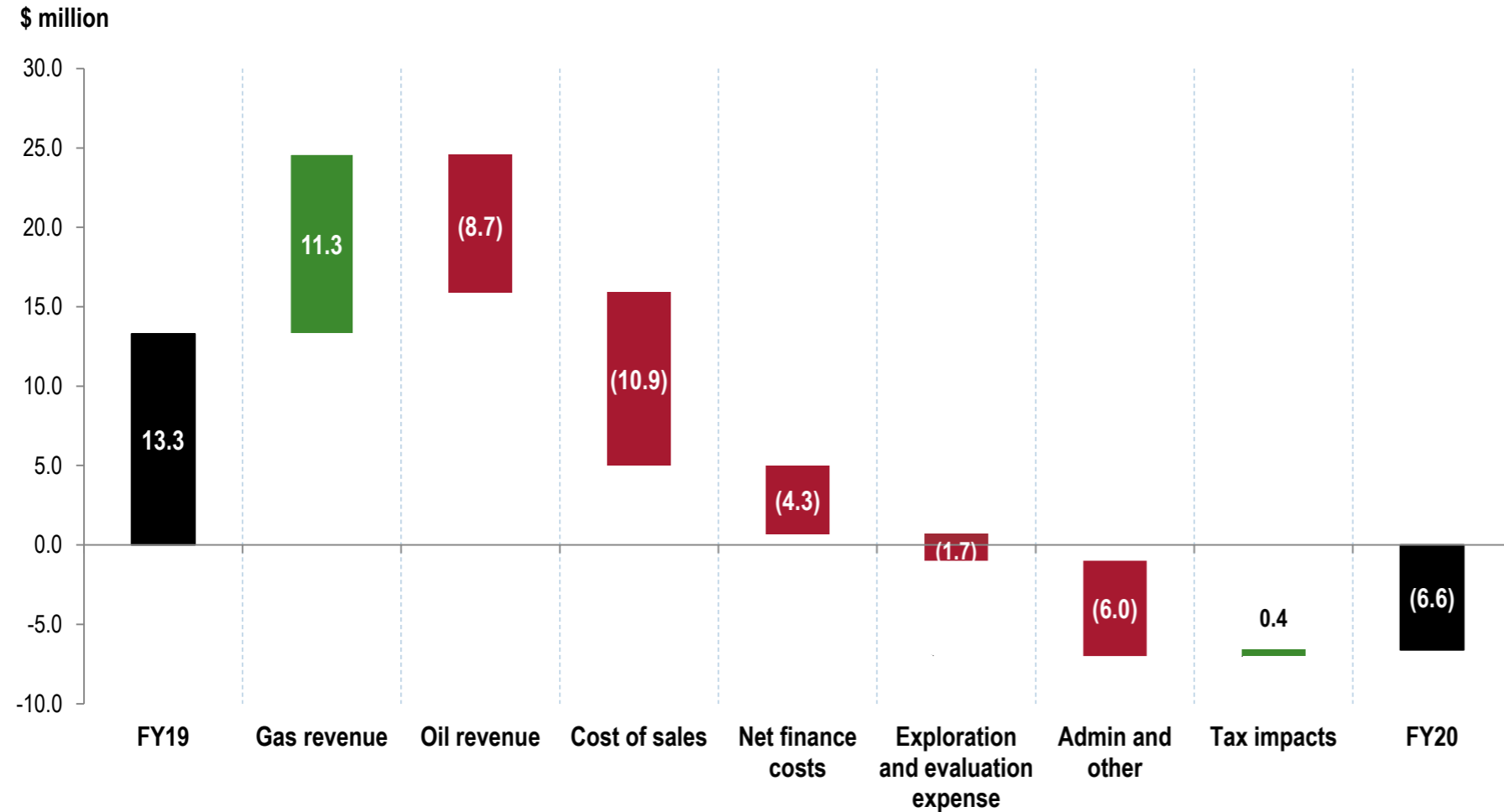
**Underlying loss after tax**

**6.6**



# Underlying NPAT movement

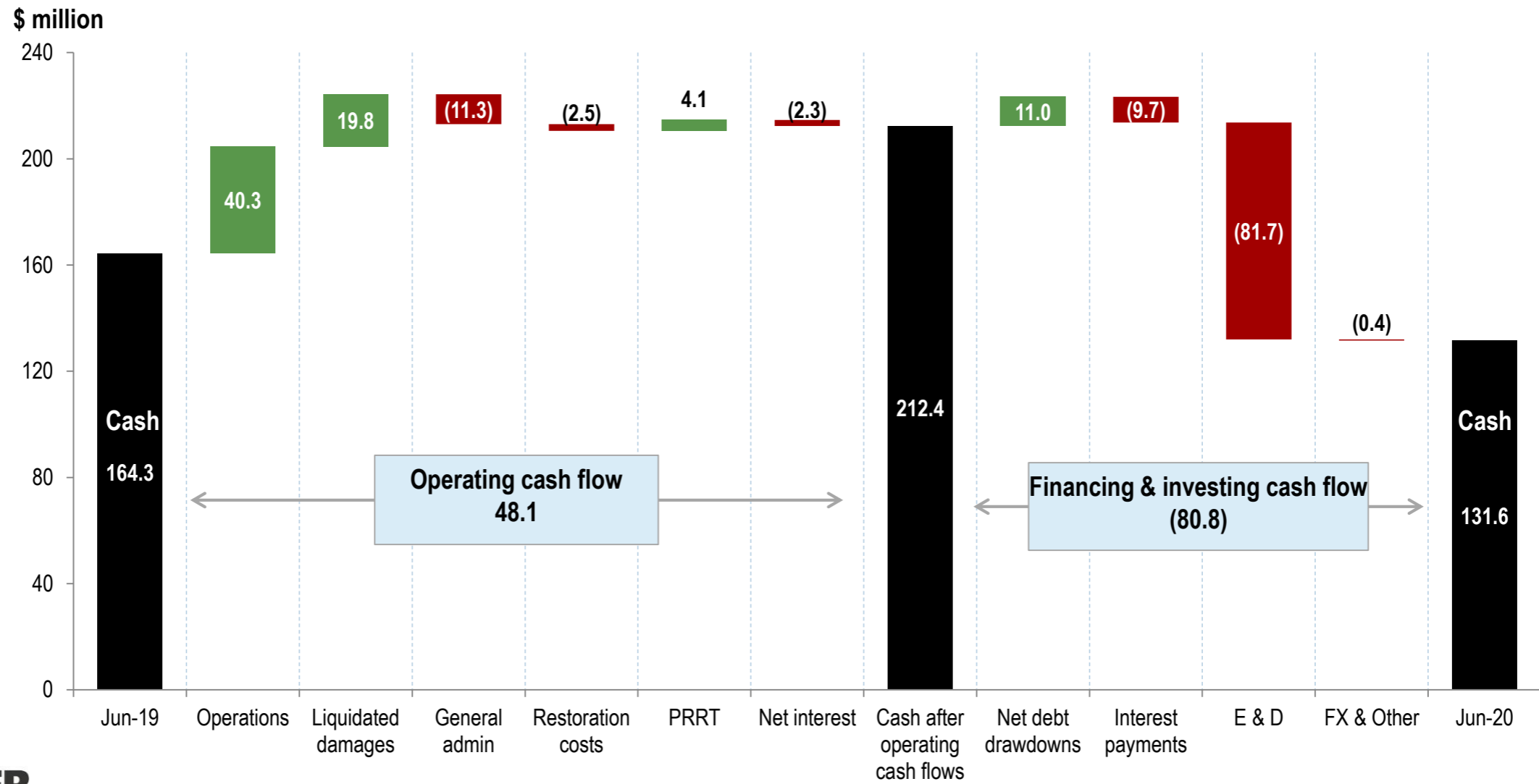
## Increased gas revenue offset by non-cash expenditure



- Cost of sales increased due to higher:
  - non-cash depreciation and amortisation (\$8.5 million higher)
  - higher processing tolls in line with higher volumes from Casino Henry
- Net finance costs: lower interest income, additional interest expense associated with adoption of new lease accounting standard and interest expense on the Reserve Based Lending (RBL) facility
- Higher exploration and evaluation expense attributable to:
  - Cooper Basin
  - costs associated with deferred offshore Otway Basin well (Elanora)

# Movement in cash

Cash \$32.7 million lower after funding \$91.4 million for exploration & development and interest



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# Balance sheet

<i>\$ million</i>	30 June 20	30 June 19	Comments
<b>Assets</b>			
Cash	131.6	164.3	
Working capital	26.9	24.9	
PPE, intangibles and right-of-use assets (leases)	28.0	4.6	Recognition of right-of-use assets per AASB 16 (\$9.7 million), Minerva Gas Plant acquisition (\$8.7 million)
Exploration and evaluation	159.1	152.3	Drilling of Annie-1, Dombey-1 and Cooper Basin wells, re-set of restoration provisions and impairment
Oil and gas assets	616.0	613.2	Sole development and capitalised interest, and impairment
Other	68.3	42.5	Higher deferred tax asset
<b>Total assets</b>	<b>1,029.9</b>	<b>1,001.8</b>	
<b>Liabilities</b>			
Working capital	21.2	44.5	
Provisions	394.6	287.9	Re-set of restoration provisions
Interest bearing liabilities	229.4	213.7	
Lease liabilities	13.0	-	Recognition of lease liabilities per AASB 16
Other	20.6	22.0	
<b>Total liabilities</b>	<b>678.8</b>	<b>568.1</b>	
<b>Net assets</b>	<b>351.1</b>	<b>433.7</b>	

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## Operations



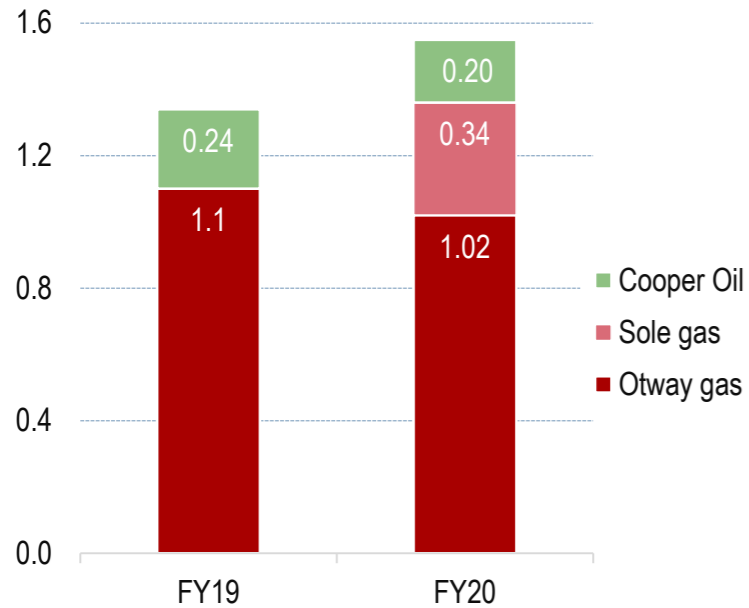
# Production and sales revenue

## Higher gas production and prices drove sales revenue increase

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### Production

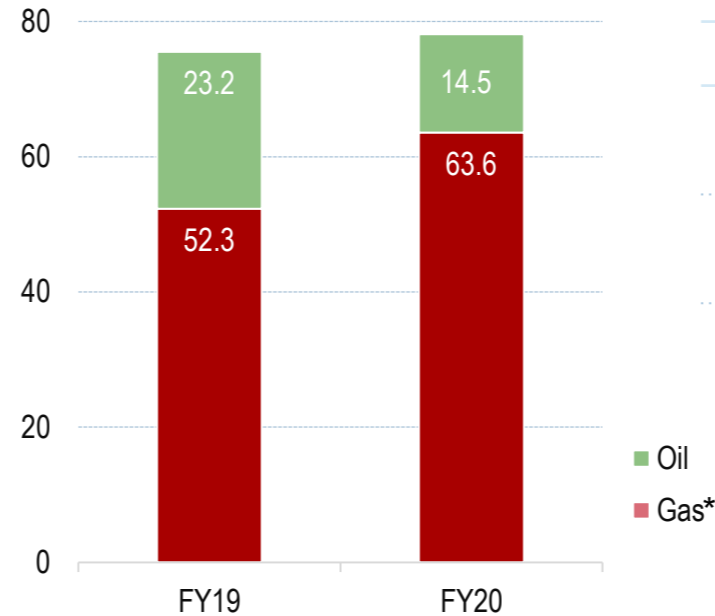
MMboe



- Total production up from 1.31 MMboe to 1.56 MMboe
  - Sole commissioning sales
  - Minerva ceased production September 2019
  - Casino Henry higher
- Oil: Cooper Basin natural decline

### Sales revenue

\$ million



- Gas revenue up 22%:
  - increased sales volume
- Oil revenue down 38%:
  - lower sales volume and prices

Average prices	FY20	FY19	Change
<b>Gas</b> A\$/GJ	<b>8.99</b>	7.92	+ 14%
<b>Crude oil</b> A\$/bbl	<b>83.75</b>	102.52	-18%

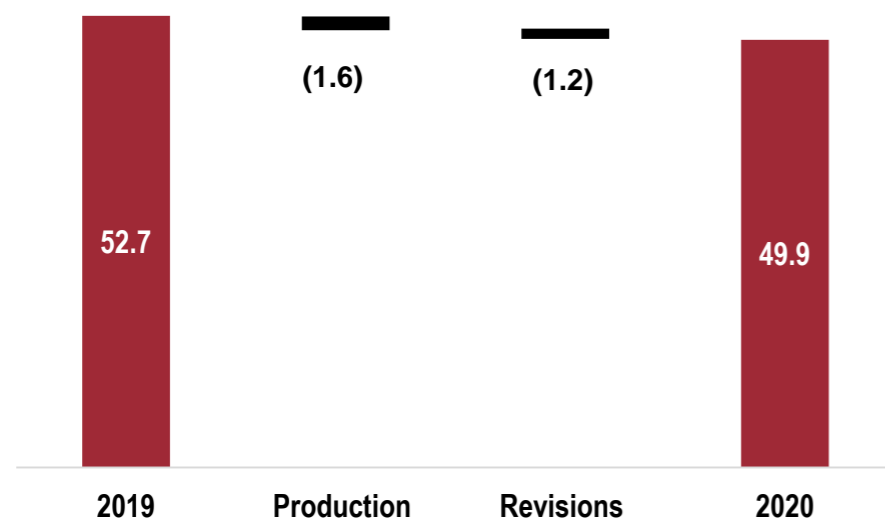
- FY20 average gas price affected by spot price for Sole gas (term contracts not commenced)

# Reserves and Contingent Resources

Proved and Probable Reserves 5% lower, Contingent Resources (2C) of gas up 33%

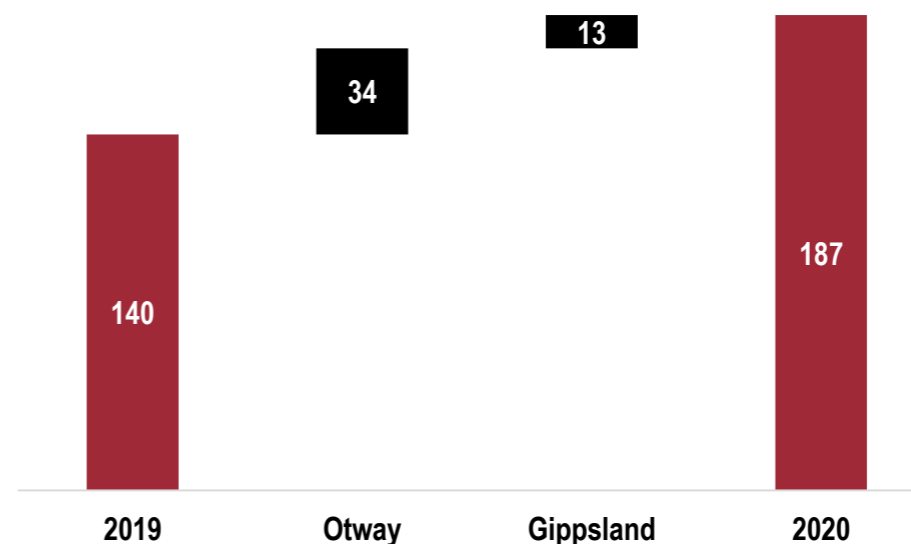
## Movement in 2P Reserves<sup>1</sup> at 30 June 2020

MMboe



- Total 2P Reserves at 30 June 2019 of 49.9 Mmboe (97% gas, 3% oil)
- Revisions include:
  - Sole: incorporation of actual plant fuel usage and heating value in production
  - Otway: revised fuel usage estimates for Athena Gas Plant

## Movement in 2C gas Contingent Resources<sup>1</sup> at 30 June 2020 PJ



- Gas Contingent Resources 2C up 33%
- Otway increased from 18 PJ to 52 PJ primarily due to Annie gas discovery
- Gippsland up from 121 PJ to 135 PJ: Patricia Baleen

<sup>1</sup> Reserves and Contingent Resources at 30 June 2020 were announced to the ASX on 31 August 2020 and should be read in conjunction with the information provided in the Notes on calculation of Reserves and Contingent Resources in the appendices. All Reserves and Contingent Resources figures in this document are net to Cooper Energy unless otherwise stated. Totals may not exactly reflect arithmetic addition due to rounding.

# Sole Gas Project

Offshore completed. Onshore commissioning ongoing. COE and APA agree to unite to accelerate firm sales and complete plant.

Offshore project: Cooper Energy



- 2 production wells, subsea tie-back
- 65 km pipeline & umbilicals + HDD shore crossing
- Completed July 2019
- Zero LTI
- 561,362 hours worked including marine, subsea and onshore
- Commissioned and completed
- Capital cost \$335 m vs budget \$355 m

Onshore project: APA



- Construction completed Feb 20
- Construction and bushfire delays
- Commissioning ongoing; foaming issue has impaired capacity
- Established steady state production 40 – 45 TJ/day vs completion rate of 68 TJ/day
- Transition Agreement with APA
- Root cause analysis of foaming ongoing
- Gas sales at spot prices to date

# Orbost: the path to completion

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Phase 2 and other works to achieve practical completion. Commencement of term gas sales.

## 1. The issue & consequences

Unexplained foaming and build up of sulphur in absorbers is impairing the capacity of the plant, preventing achievement of performance standards and 68/TJ day

- Plant has not yet reached practical completion preventing commencement of:
  - processing agreement and firm supply
  - term gas contracts
  - bank completion test

## 2. Status

- Root cause analysis ongoing
- Transition Agreement: APA and Cooper Energy to
  - share revenue & costs to start firm gas sales in advance of practical completion
  - take plant to practical completion combining resources and capability
- Firm gas sales: agreed deferral with customers
- Finance: agreed timing of bank completion test to be rescheduled
- Shutdown currently in progress to remove sulphur build-up in absorbers and install new components to improve reliability and reduce foaming.

## 3. Clear path forward

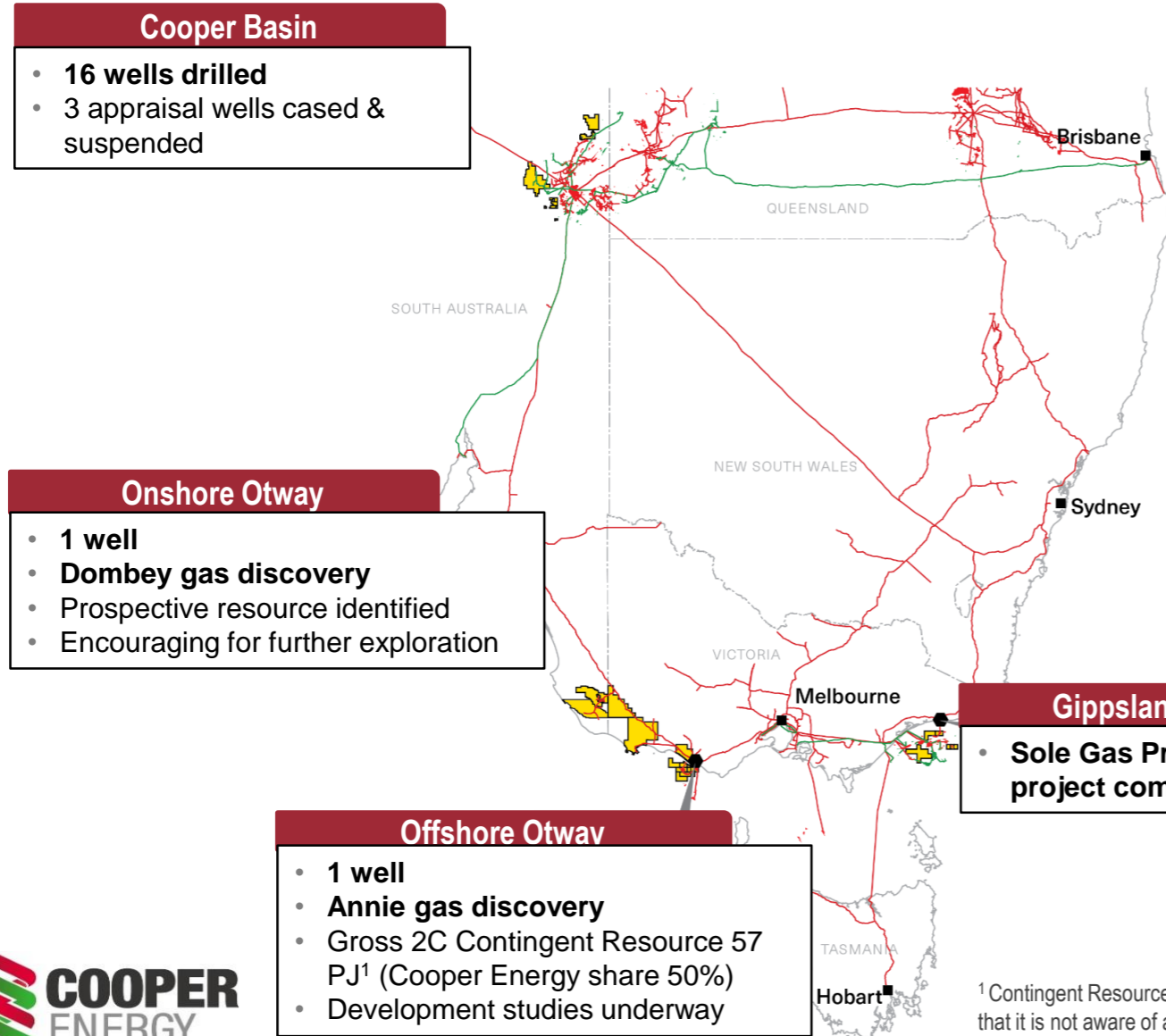
- Return from shutdown and run plant in single absorber mode to finalise Phase 2 plant modification scope
- Complete root cause testing and analysis, including trialling of alternative pre-treatment technologies
- Commence engineering and planning to implement identified solution(s) to remedy foaming root cause.
- Execute Phase 2 modifications to improve plant performance.
- Phase 2 Plant works, December quarter 2020.
- Commencement of firm supply at agreed rate to Cooper Energy term gas customers
- Achieve incremental improvement in plant throughput following Phase 2 works and root cause analysis and testing outcomes.



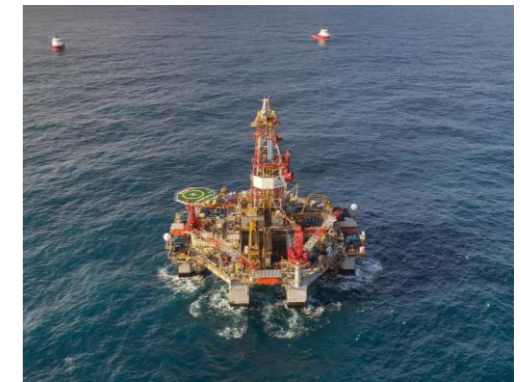
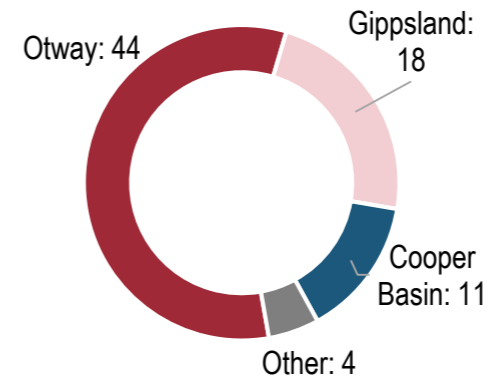
# FY20 Exploration & development program

Annie & Dombey gas discoveries, Athena Gas Plant secured and Sole offshore completed

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Capital expenditure by region  
\$ million



Annie-1 discovery well, offshore Otway



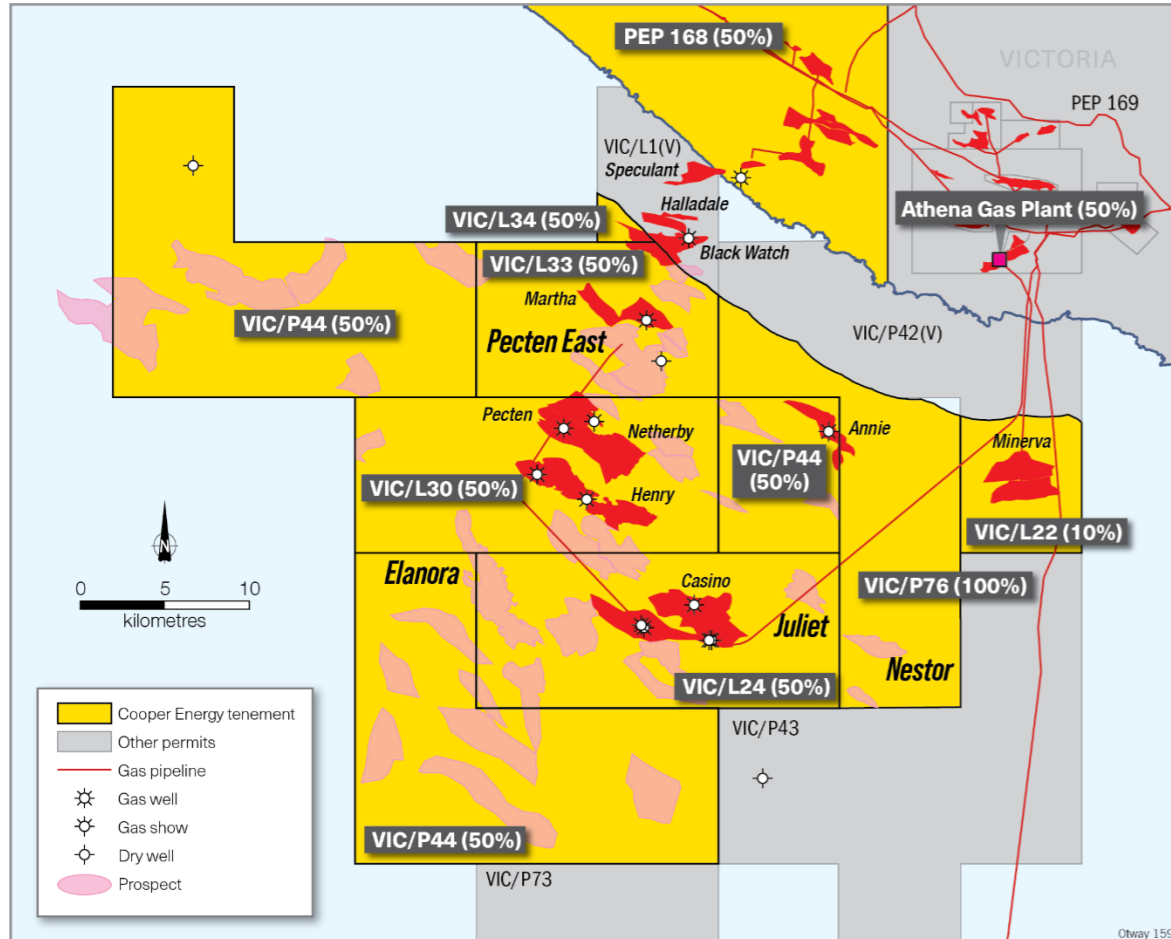
Athena Gas Plant, Onshore Otway



<sup>1</sup> Contingent Resource for the Annie gas resource was announced to ASX on 24 February and updated on 31 August 2020. Cooper Energy confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

# Annie gas discovery and offshore Otway exploration

## Annie discovery extends offshore Otway exploration success and encourages further drilling



- Annie-1 gas discovery supported by seismic amplitude
- High quality gas reservoir in the Waarre C formation, analogous to Casino & Minerva
- 57 PJ 2C Contingent Resource<sup>1</sup> (Cooper Energy net share 50%)
- Maintains high offshore Otway exploration success rate, 11 discoveries from 12 wells drilled on amplitude
- Annie development being evaluated as part of OP3D project
- Multiple exploration prospects under for review for inclusion the FY23 drilling campaign
- Elanora in VIC/P44 was deferred in FY20
- Pecten East, Juliet and Nestor other exploration possibilities

# Environment, Sustainability and Legacy

## Operate with care for people, communities and the environment

- **Environment and Climate:**
  - zero reportable incidents
  - commitment to TCFD basis reporting in inaugural 2019 Sustainability Report
  - conscious of emissions position and actively pursuing mitigation options
- **Communities:**
  - involvement with local communities in our areas of operation; Otway, Gippsland, Perth and Adelaide
  - financial support for local, healthcare, well-being, sporting and historical organisations
  - working with and supporting RFDS in East Gippsland on COVID-19 and mental health services
  - bushfire affected community support:
    - cash and in kind support for bushfire affected communities
    - collaboration with GKR, Stoitse for livestock support in East Gippsland (pictured)
  - positive working relationships with local industry groups: Seafood Industry Victoria, SETFIA<sup>1</sup>
  - Cooper Energy Legacy Foundation established to coordinate activities



Donated hay bale collection Otway and Gippsland



Delivery to remote bushfire affected cattle East Gippsland

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Gas



Pipeline spooling, Crib Pt

# Gas business model: core principles

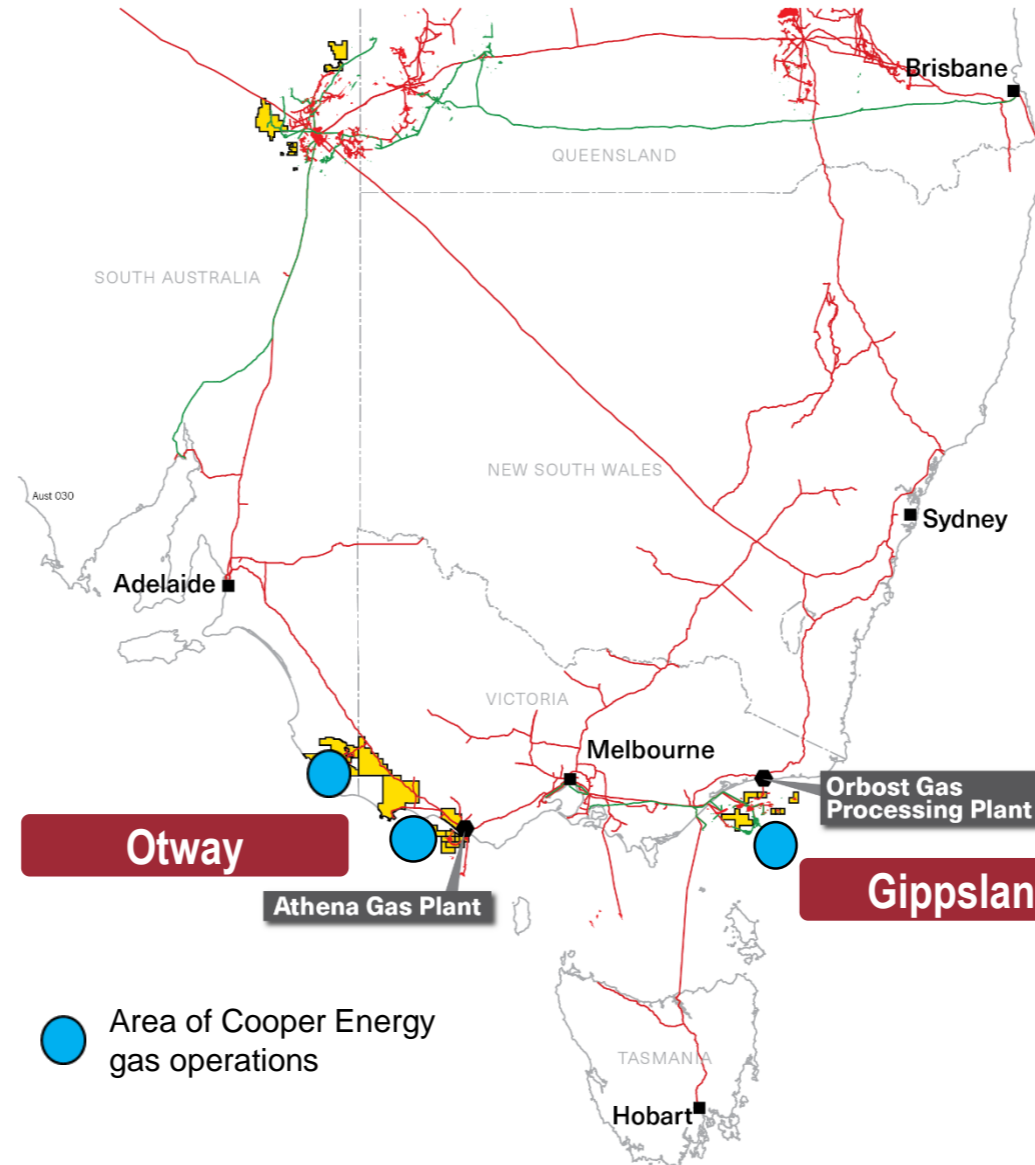
Portfolio gas business built to address gas supply opportunities foreseen in south-east Australia

## Asset quality

- ✓ **Competitive:** among most competitive delivered gas to south-east Australia
- ✓ **Production or Development likely:** decision foreseeable within 5 years
- ✓ **Value accretive:** to shareholder returns by Cooper Energy involvement

## Care

- ✓ **Customer relationships**
- ✓ **Safety**
- ✓ **Community**
- ✓ **Environment**



## Gas contracts

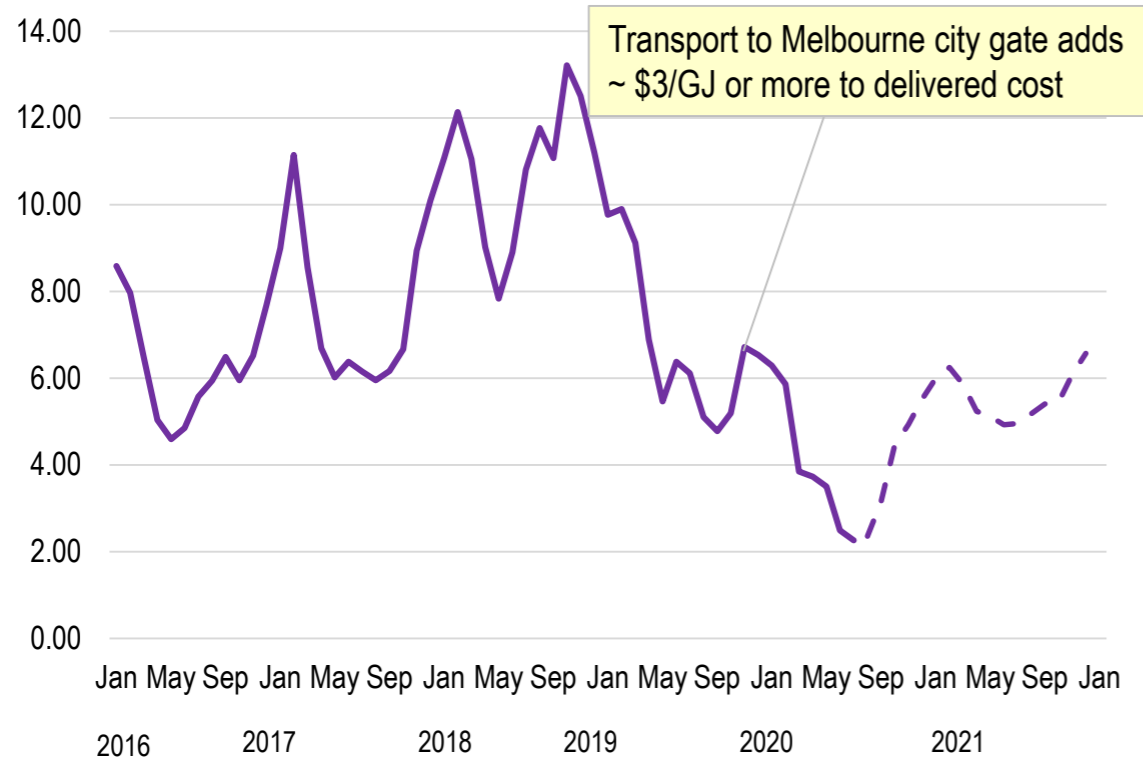
- ✓ **Customer quality:** blend of blue-chip utility and industrial customers
- ✓ **Optimisation:** of delivery point and gas source
- ✓ **Long-term focus:** Prioritisation of long-term stable supply and load factor over short term price



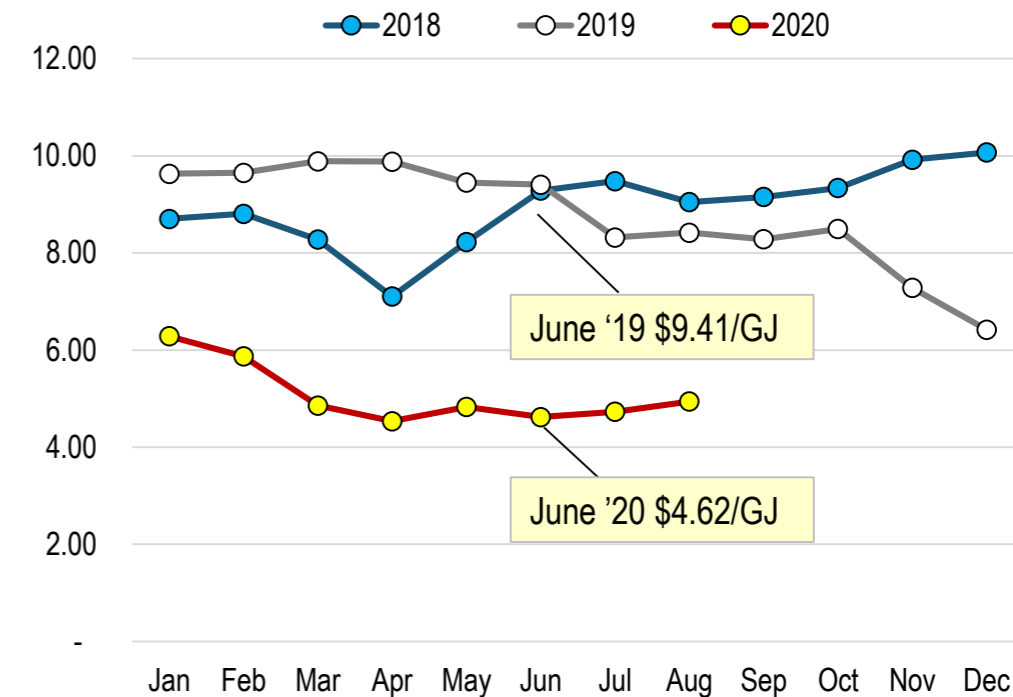
# Recent spot gas prices and LNG netback

Led by LNG prices, CY20 spot prices have trended lower, improvement expected from FY21

ACCC<sup>1</sup> LNG netback to Wallumbilla  
\$/GJ



Vic. Average Daily Wholesale Gas Price (spot price)<sup>1</sup>  
by month by year \$/GJ



- LNG netback shows domestic price LNG producers could expect ex-Wallumbilla
- Availability for domestic market has flowed to lower LNG netbacks and lower spot gas price
- Improvement expected from July 20.

<sup>1</sup> Source: ACCC Gas Inquiry 2017 – 2025

# Gas market outlook and expectations

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## 2020 – 2021: LNG surplus supply ... which leads to...

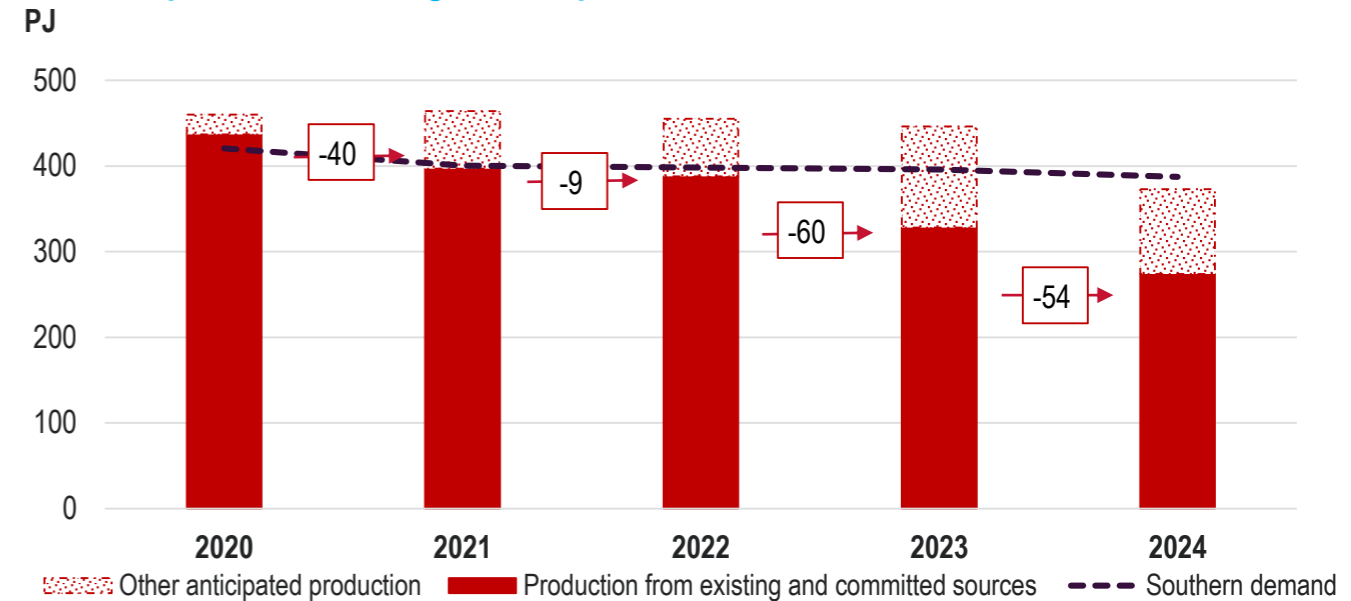
- Low domestic spot prices
- Term price > Spot price; buyer reluctance to commit to term agreements
- Cutbacks to Exploration & Development capex

## From 2022 to 2023: supply to tighten as output declines

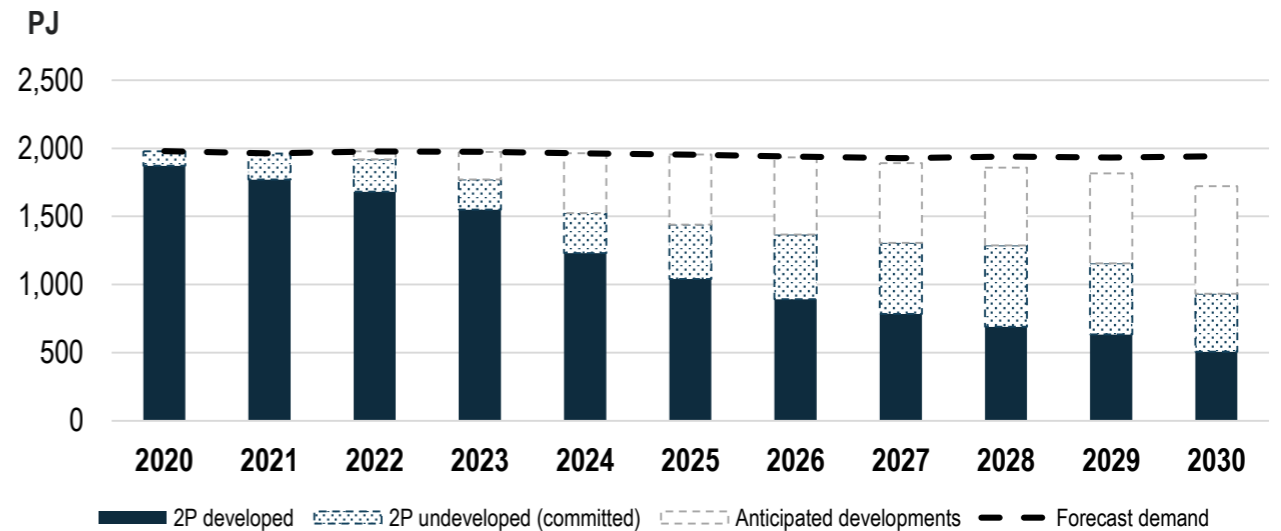
- Significant natural decline in south-east Australian output
- Pipeline capacity a potential issue in southern gas flows
- Contingent Resources needed to meet total eastern demand
- 2020-21 Exploration & Development cutbacks will impact supply replacement
- Tight supply outlook forecast to re-emerge

*“Even if gas users in the southern states are able to rely on gas production from Queensland... our examination shows the South West Queensland Pipeline (SWQP) and Moomba to Adelaide pipeline (MAPS) are contractually congested...Further investment in both is therefore likely to be required to bring more gas south...”ACCC Gas Inquiry Interim Report July 2020.*

## Southern production moving from surplus to shortfall local demand<sup>1</sup>



## Total eastern supply dependent on development of Contingent Resources from 2023



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Outlook



# August 2020 status and outlook

Clear program for Sole/Orbost. Solid gas book. Athena a key project for FY21. Production rising with Sole.

## Sole

Transition Agreement: clear pathway to term supply & full production



- Determine stable FY21 production uplift
- Aiming for material step-up by mid-year

## Gas contract book

Solid long-term contract book, take-or-pay with no oil linkage



- Sole term contract capacity committed to 2025
- Casino Henry partially contracted for FY21
- Portfolio flexibility advantageous

## New projects

FY21: Athena execution plus planning for 2022/23 drilling

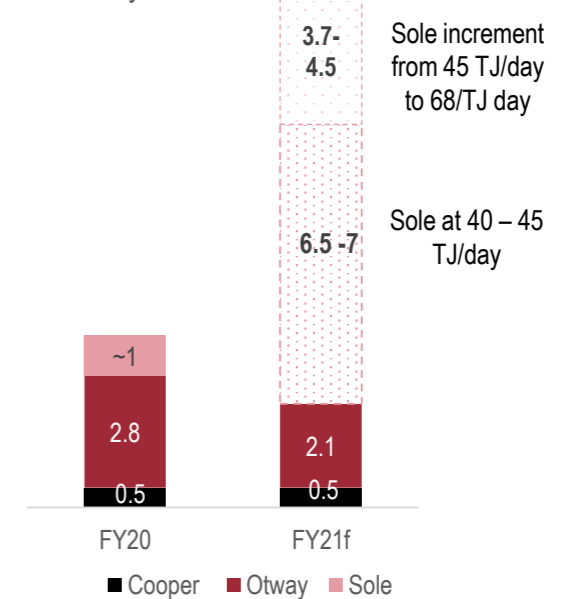


- Athena Gas Plant Project underway for FY 22 benefit
- OP3D 100+ PJ gas from 2023 (gross joint venture volume)
- Manta appraisal planning
- Gas exploration planning in proven gas provinces offshore and onshore

Balance sheet at 30 June 2020	\$ million
Cash	131.6
Unused facilities	17.1
Net debt	97.8
Total borrowings	229.4

## Production outlook

Kboe/day



# FY21 Activities program

E & D spend expected to be ~29% lower. Delivery of Athena Gas Plant Project the major item

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**Cooper Basin**

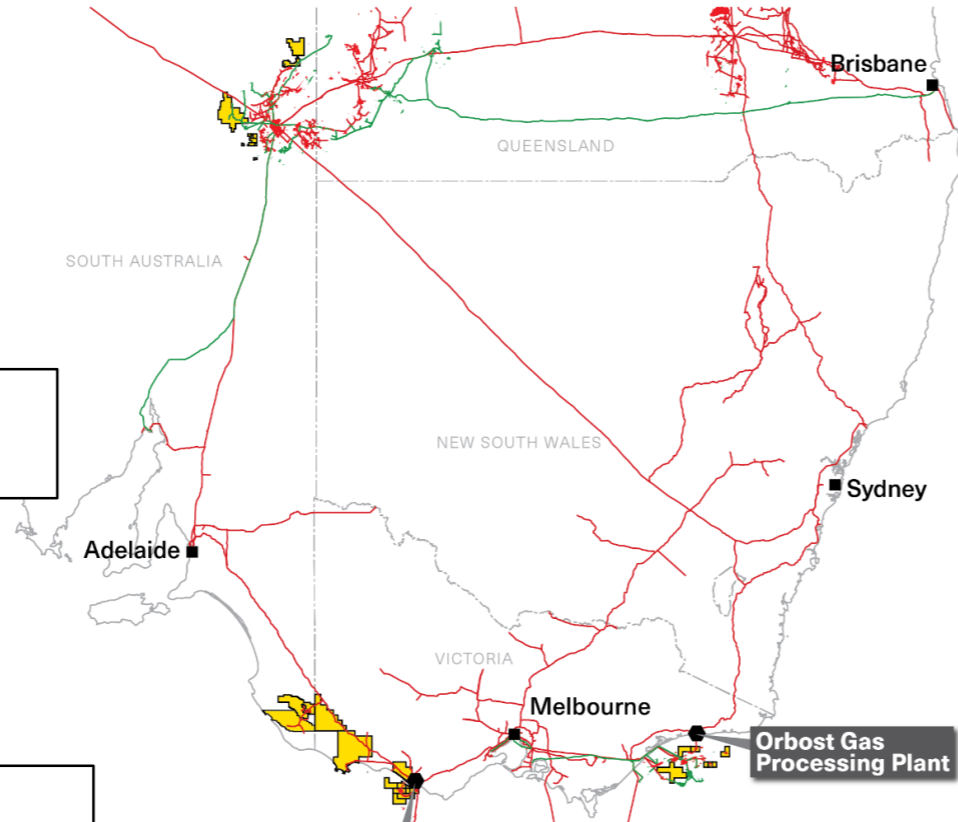
- 2 development wells
- Stay-in-business capex

**Onshore Otway**

- Preparation for 3D seismic around Dombey
- Subsurface studies

**Offshore Otway**

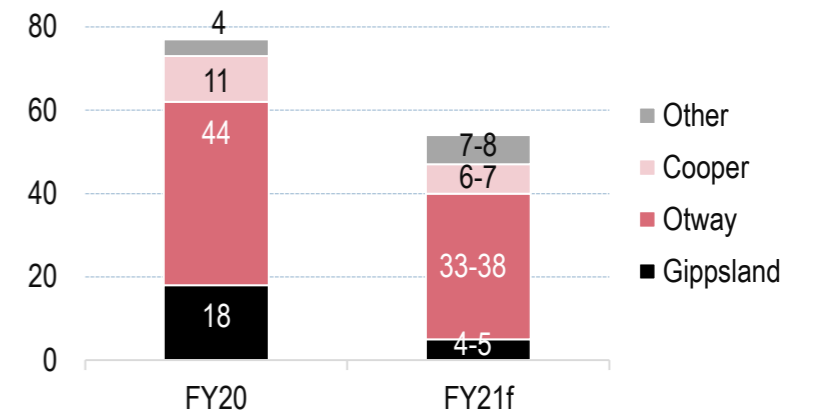
- Deliver Athena Gas Plant Project
- Maintenance capex Casino Henry
- OP3D through Select gate, moving towards FID in FY22
- Exploration targets for FY23 drilling



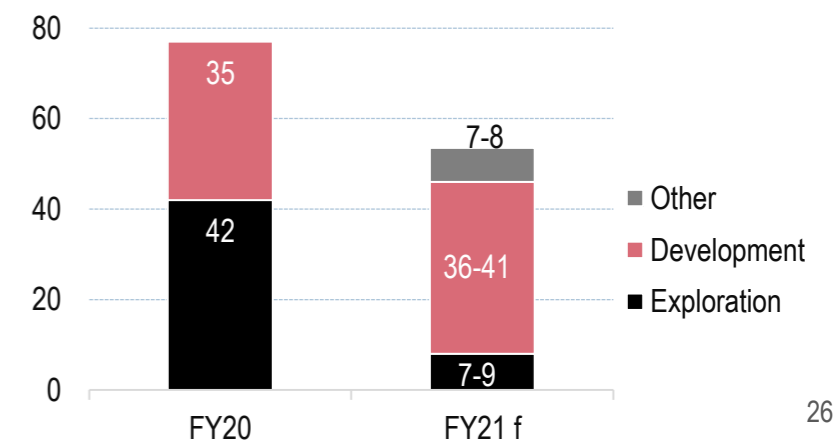
**Gippsland Basin**

- OGPP: commence firm gas sales
- OGPP to practical completion
- Manta-3 through Select gate moving to FID in FY22
- Exploration studies for FY23
- BMG abandonment preparation

**Capital expenditure<sup>1</sup> by region**  
 Otway to account for ~ 65% of forecast  
 \$ million



**Capital expenditure<sup>1</sup> by activity**  
 Development the main activity  
 \$ million



<sup>1</sup>Excludes expenditure that may arise from Transition Agreement

# Wrap-up

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1. FY20 financial results show impact of COVID-19 energy prices and delays from Orbost.
2. FY20 operations results affirm capability in core business and expansion of gas assets and opportunity set.  
Sole offshore project delivery, gas contract book, Annie and Dombey gas discoveries, Athena Gas Plant.
3. Expect clarity on OGPP-delayed matters within H1 FY21: term gas commencement; financing dates, Phase 2 commitment and execution.
4. Our gas portfolio in south-east Australia is ideally positioned for the years from 2022-on when local supply declines and domestic prices increase.
5. Expect a substantial uplift in gas production, revenue and cash flow in FY21

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**Appendices**

## Profit and loss items

Asset	FY20	FY19	Change	
Sales revenue	78.1	75.5	2.6	Cessation of production from Minerva, commencement from Sole. Higher average gas price (\$8.99/GJ vs \$7.92/GJ).
Cost of sales	(54.5)	(43.6)	(10.9)	Higher Casino Henry tolling. Higher fixed costs from CHN and Sole. Amortisation increased due to Sole commencement, Minerva cessation, higher development costs at producing fields.
Other income	19.8	0.8	19.0	Liquidated damages relating to Orbest Gas Processing Plant.
Other expenses	(147.5)	(44.4)	(103.1)	Impairments of \$108 m. Lower restoration expense. G & A of \$15m vs \$13m.
Net finance costs	(5.9)	(1.6)	(4.3)	Lower interest income. Cessation of capitalised interest on Sole in March 2020.
Tax benefit	23.9	1.2	22.7	Tax benefit of accounting loss. Lower PRRT.
<b>Total</b>	<b>(86.0)</b>	<b>(12.1)</b>	<b>(73.9)</b>	

# Non-cash impairments

Revision to asset carrying values chiefly driven by impact of lower post-COVID gas prices and cost discovery

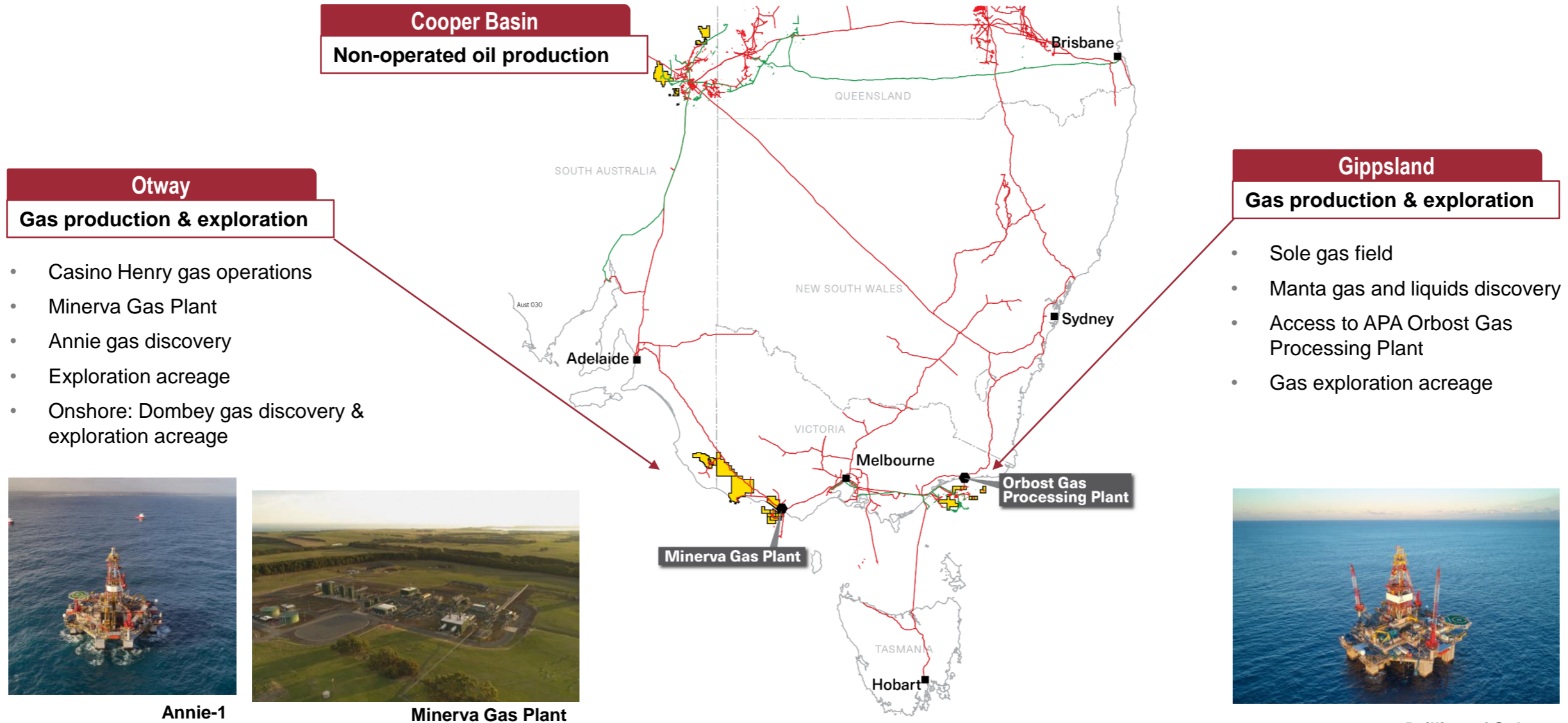
Asset	Statutory pre-tax	Statutory post-tax	Factors & comment
Casino Henry	28	20	<i>Uncontracted gas price assumptions Development &amp; abandonment cost update</i>
VIC/P44	29	20	<i>Uncontracted gas price assumptions Development &amp; abandonment cost update</i>
VIC/RL 13, 14 -15	42	29	<i>Development &amp; abandonment cost update Uncontracted gas prices assumptions</i>
Cooper Basin exploration	8	6	<i>No substantive exploration budgeted</i>
Onshore Otway (PEP 150)	1	1	<i>Redefinition of area of interest</i>
<b>Total</b>	<b>108</b>	<b>76</b>	<i>No FY20 cash impact No substantive exploration budgeted</i>

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# Operating assets and interests

Gas supply to south-east Australia from two hubs and some of the most competitive sources of supply

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Annie-1



Minerva Gas Plant



Drilling of Sole-3

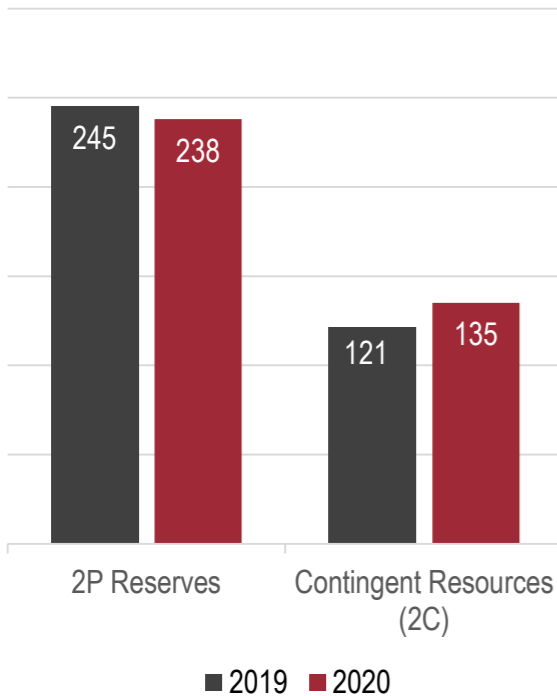


# Gas reserves and resources

## Contracted and uncontracted 2P Reserves, development opportunities and production upside

### Gippsland Basin

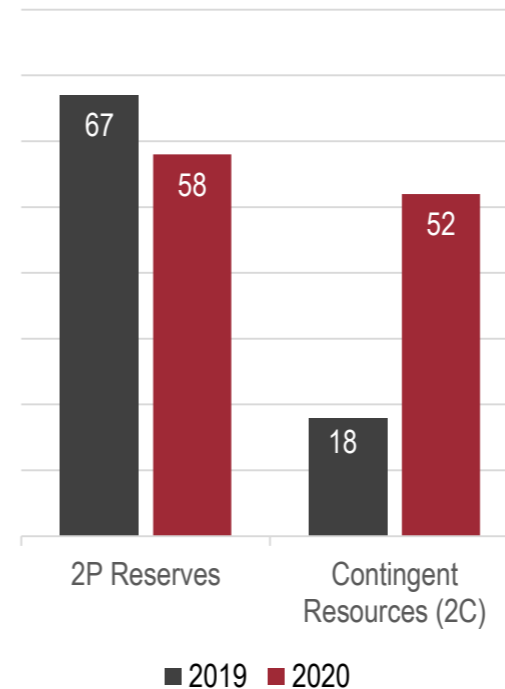
2P Reserves and 2C Contingent Resource<sup>1</sup>  
PJ



- 2P Reserves movement inclusive of production and revisions for OGPP usage
- Contingent Resources (2C) increase attributable to Patricia Baleen

### Otway Basin

2P Reserves and 2C Contingent Resource<sup>1</sup>  
PJ



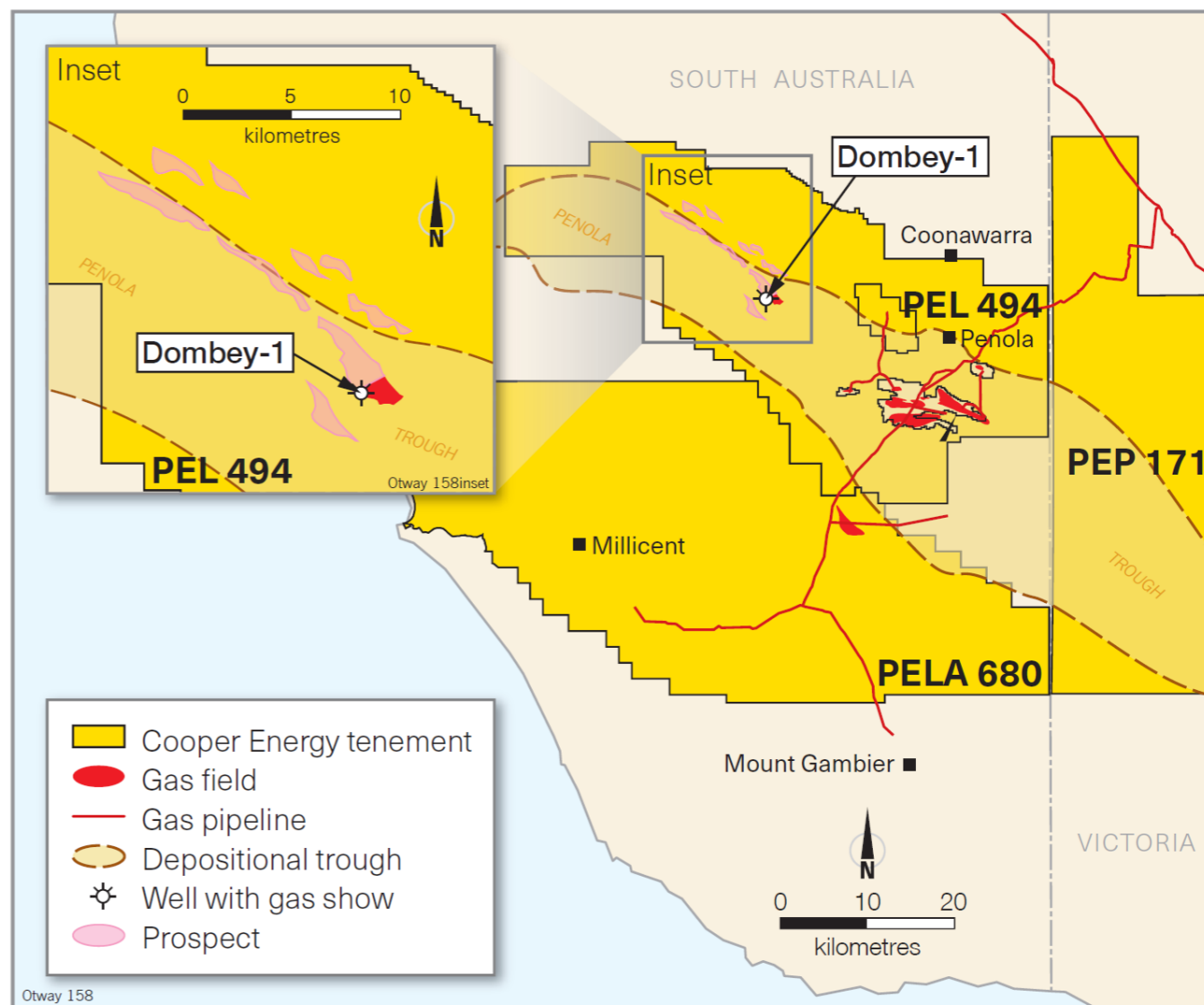
- 2P Reserves movement inclusive of production and revisions for Athena Gas Plant usage
- Contingent Resources (2C) increased on drilling results, principally Annie



# Penola Trough, onshore Otway Basin

## Dombey-1 gas discovery confirms potential. Further investigation required

- Dombey-1 discovery:
  - confirms a new Pretty Hill Formation play fairway within the Penola Trough
  - production test result indicates a small gas pool connected to a larger accumulation
  - requires future drilling to confirm field size
  - highlights potential of additional prospects on trend from Dombey-1
  - 3D seismic acquisition planning underway to improve subsurface imaging and field size definition
- PELA 680 awarded 30 June 2020 (30% interest; balance held by Operator Beach Energy)
  - located south of Penola Trough gas fields
  - promising structures identified requiring work to mature
- Victorian onshore acreage: activity in suspension due to Vic state government moratorium on gas exploration
  - moratorium to cease 30 June 2021

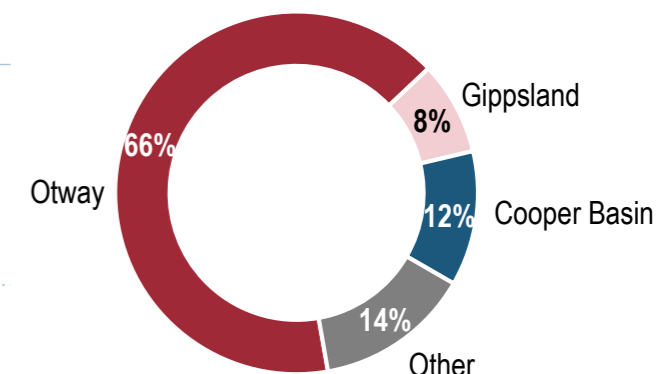


# FY21 Outlook

## FY20 actual and FY21 guidance

\$ million incurred	FY20 Actual			FY21 Guidance <sup>1</sup>			
	Exploration	Development	Total	Exploration	Development	Total	
<b>Otway</b>	29.8	14.5	<b>44.3</b>	~3	30-35	<b>33-38</b>	<ul style="list-style-type: none"> <li>Athena Gas Project</li> <li>OP3D Select process</li> <li>Exploration well planning</li> <li>Casino Henry maintenance capex</li> </ul>
<b>Gippsland</b>	5.3	12.4	<b>17.7</b>	~4	>1	<b>4-5</b>	<ul style="list-style-type: none"> <li>Manta-3 planning to Select phase</li> <li>VIC/P72 7 VIC/P76 studies</li> </ul>
<b>Cooper</b>	6.6	4.1	<b>10.7</b>	~1	~5	<b>6-7</b>	<ul style="list-style-type: none"> <li>2 development wells</li> <li>Exploration studies</li> </ul>
<b>Other non-classified</b>	-	4.0	<b>4.0</b>			<b>7-8</b>	<ul style="list-style-type: none"> <li>PEL 92 field optimisation projects</li> </ul>
<b>Total</b>	41.7	35.0	<b>76.7</b>	7-9	36-41	<b>50-58</b>	

Capital expenditure by region  
% share of guidance



- Otway Basin is the principal focus of FY21 capital expenditure plans:
  - Athena Gas Plant
  - Maintenance capex including upgraded master control system, flying leads
  - OP3D to Select gate

Note: BMG abandonment not included in capital expenditure

# Gippsland FY20 overview

## Production from Sole. Analysis underway for future drilling targets

### Sole

- First gas to plant March '20
- Commissioning still underway
- Offshore project completed July 2019 for \$335 million vs budget \$355 million

### Manta

- Planning for Manta-3

### VIC/P72

- Seismic inversion study conducted
- Analysis to identify preferred drilling candidates
- Commitment of 1 exploration well, possibly to be drilled in FY23 campaign

### VIC/P75

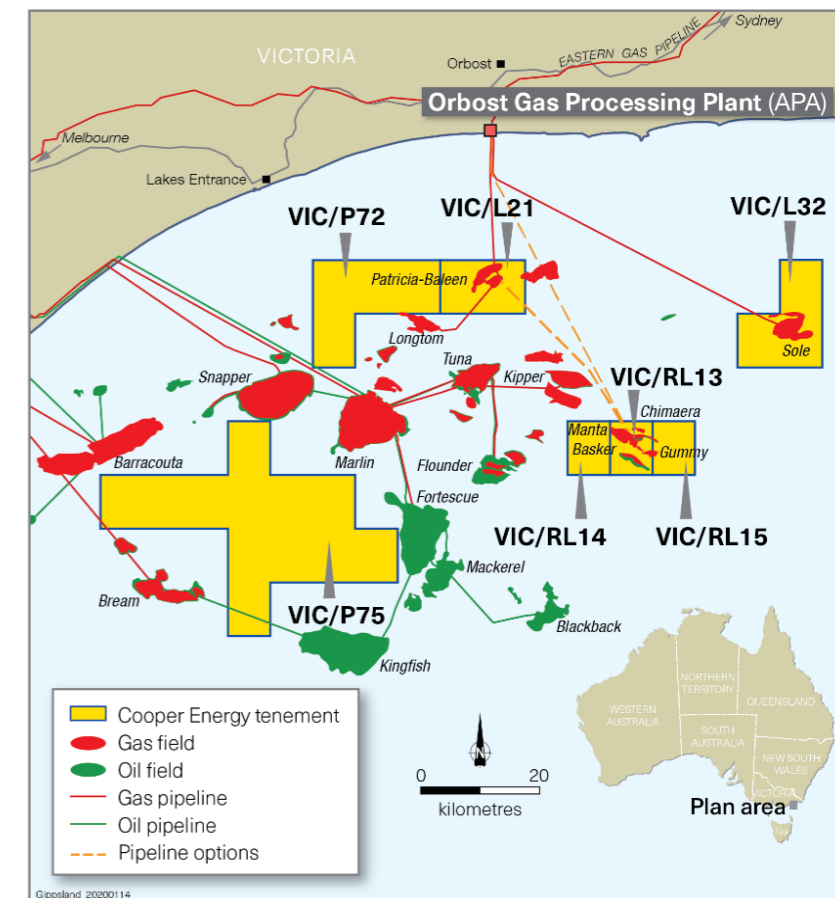
- Commitment to conduct seismic reprocessing and studies
- Modern seismic processing to be applied for greater clarity to subsurface definition of additional prospectivity
- Interpretation of 3D data underway

Production	FY20	FY19
Sales gas PJ	2.1	-
Total MMboe	0.34	-

2P Reserves	FY20	FY19
Sales gas PJ	238	245
Total MMboe	38.8	40.0

Contingent Resource (2C)	FY20	FY19
Sales gas PJ	135	121
Total MMboe	22.0	19.8

Capital expenditure	FY20	FY19
Exploration	5.3	4.7
Development	12.4	171.0
Total	17.7	175.7



<sup>1</sup> Reserves and Contingent Resources at 30 June 2020 were announced to the ASX on 31 August 2020. The resources information displayed should be read in conjunction with the information provided on the calculation of Reserves and Contingent Resources provided in the appendices to this document.

# Offshore Otway Basin FY20 overview

## Secured ingredients for growth: gas discovery, gas plant and well-located exploration permit

- Annie gas discovery
- Minerva Gas Plant acquired- Athena Gas Plant Project taken to FID in July 2020
- VIC/P76 granted. Includes part of Annie gas field and Nestor, an 'Annie look-alike' prospect
- Commenced work on Otway Phase 3 Development (OP3D) project which combines development of Henry 2P Reserves and Annie Resources in one integrated project
- Gas contracting:
  - supplying AGL for CY20
  - contracted 1 PJ pa to O-I for CY21 & 22

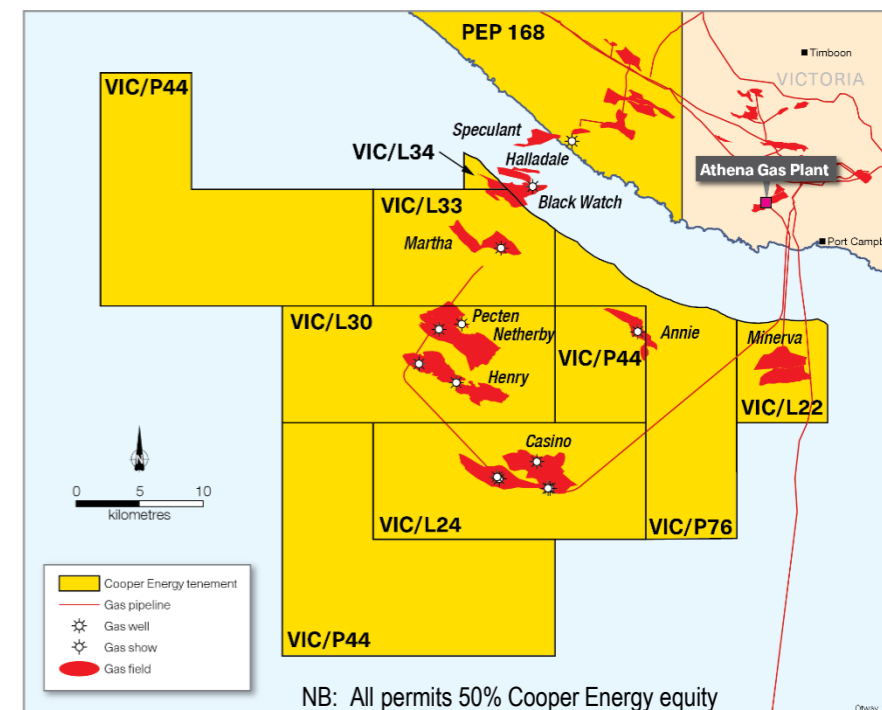
Production	FY20	FY19
Sales gas PJ	6.2	6.6
Condensate kbbl	3.5	4.7
Total MMboe	1.02	1.08

2P Reserves	FY20	FY19
Sales gas PJ	58	67
Total MMboe	9.4	10.9

Contingent Resource (2C)	FY20	FY19
Sales gas PJ	49	18
Total MMboe	8.1	3.0

Capital expenditure	FY20	FY19
Exploration	29.8	7.4
Development	14.5	15.3
Total	44.3	22.7

<sup>1</sup> Reserves and Contingent Resources at 30 June 2020 were announced to the ASX on 31 August 2020 and should be read in conjunction with the information provided in the Notes on calculation of Reserves and Contingent Resources in the appendices. All Reserves and Contingent Resources figures in this document are net to Cooper Energy unless otherwise stated. Totals may not exactly reflect arithmetic addition due to rounding



Ocean Monarch drilling Annie-1

# Cooper Basin FY20 overview

## Appraisal program completed

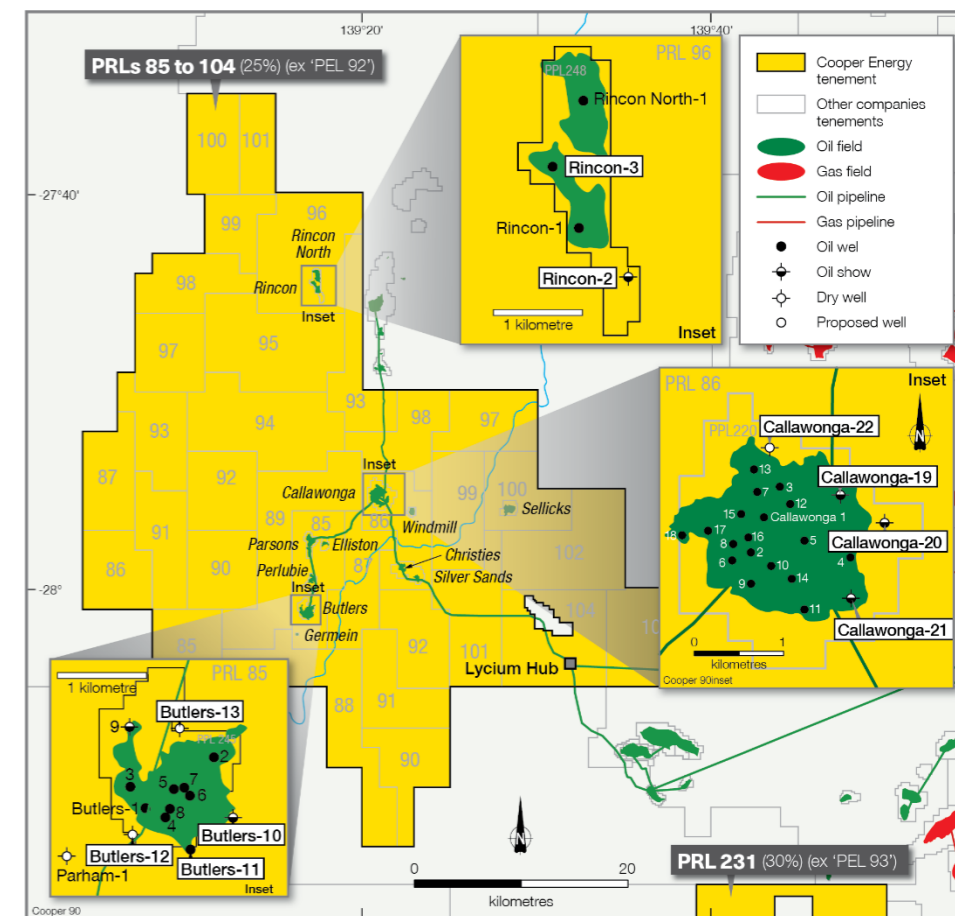
- Escalated drilling program with 13 appraisal wells in aggressive step-out campaign to clarify field boundaries
  - 3 appraisal wells cased and suspended, Butlers-11, Rincon-3 and Parsons-6
  - information to be used to for infill drilling using horizontal wells in FY21
- 1 development and 2 exploration wells drilled and plugged and abandoned
- Reserve movement in line with production

Production	FY20	FY19
Crude oil kbbbl	0.19	0.24
Average oil price A\$/bbl	83.75	102.52
Direct operating cost A\$/bbl	35.17	36.45

2P Reserves	FY20	FY19
Developed	1.3	1.5
Undeveloped	0.3	0.3
Total <sup>1</sup>	1.6	1.8

Capital expenditure	FY20	FY19
Exploration	6.6	1.6
Development	4.1	1.2
Total	10.7	2.8

<sup>1</sup> Reserves and Contingent Resources at 30 June 2020 were announced to the ASX on 31 August 2020 and should be read in conjunction with the information provided in the Notes on calculation of Reserves and Contingent Resources in the appendices. All Reserves and Contingent Resources figures in this document are net to Cooper Energy unless otherwise stated. Totals may not exactly reflect arithmetic addition due to rounding

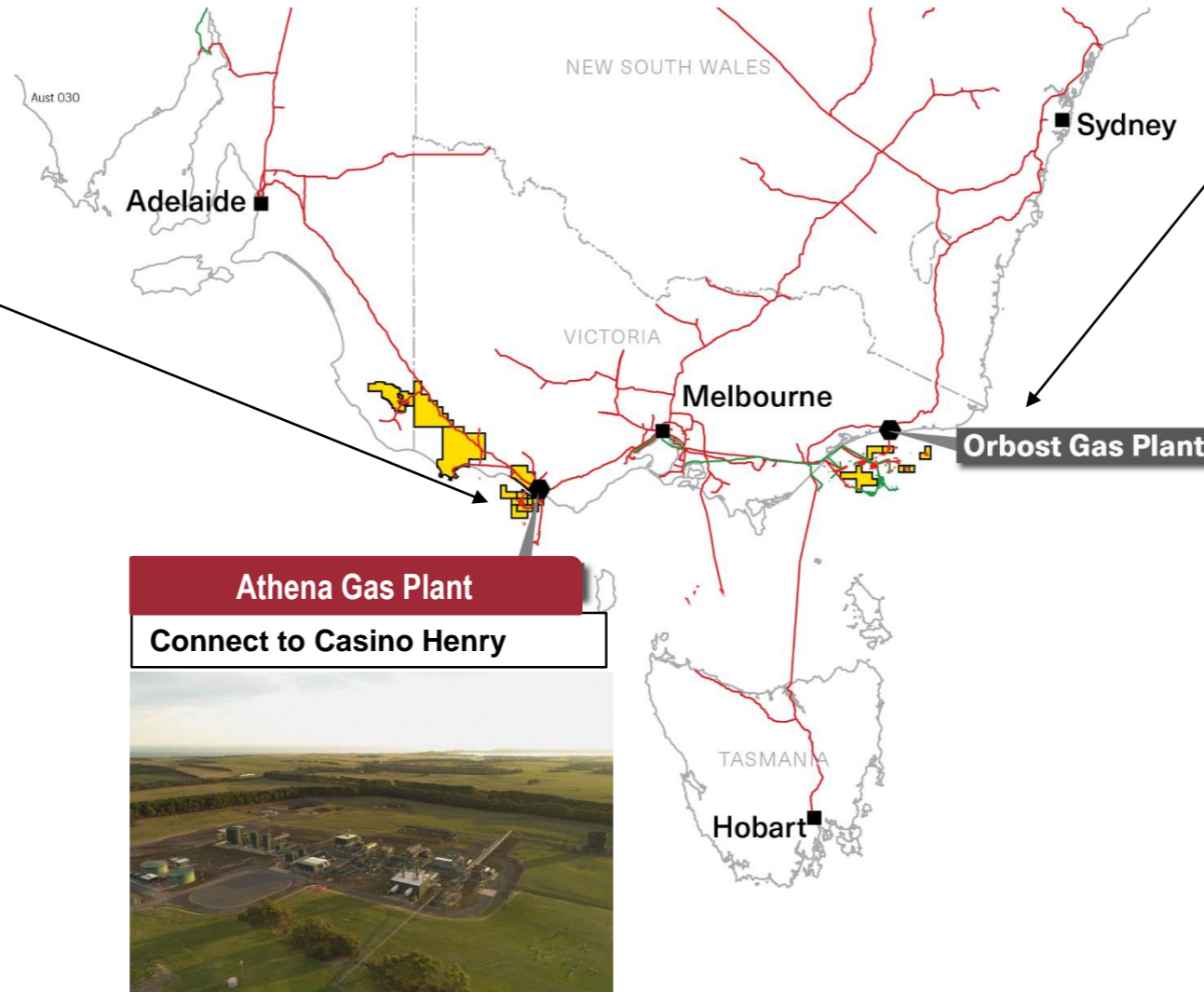


NB: PRL's 85-104 (ex-PEL 92) Cooper Energy 25% equity

# Projects and development options

## Projects under development that can add value and increase gas production

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**OP3D**  
Bring >100 PJ<sup>1</sup> gas to market

- Development wells on Henry and Annie gas fields
- In Concept Select
- FID end-FY21
- First gas CY23<sup>2</sup>

<sup>1</sup> Joint venture gas volume, Cooper Energy share 50%

<sup>2</sup> Subject to rig availability

**Manta gas & liquids**  
Appraise & develop

- Drill Manta-3 and assess
- Contingent Resource of 121 PJ<sup>2</sup> and 3 million barrels of liquids
- Additional Prospective Resource



**Athena Gas Plant**  
Connect to Casino Henry



- FID taken July 20
- First gas to plant Sept Qtr CY21

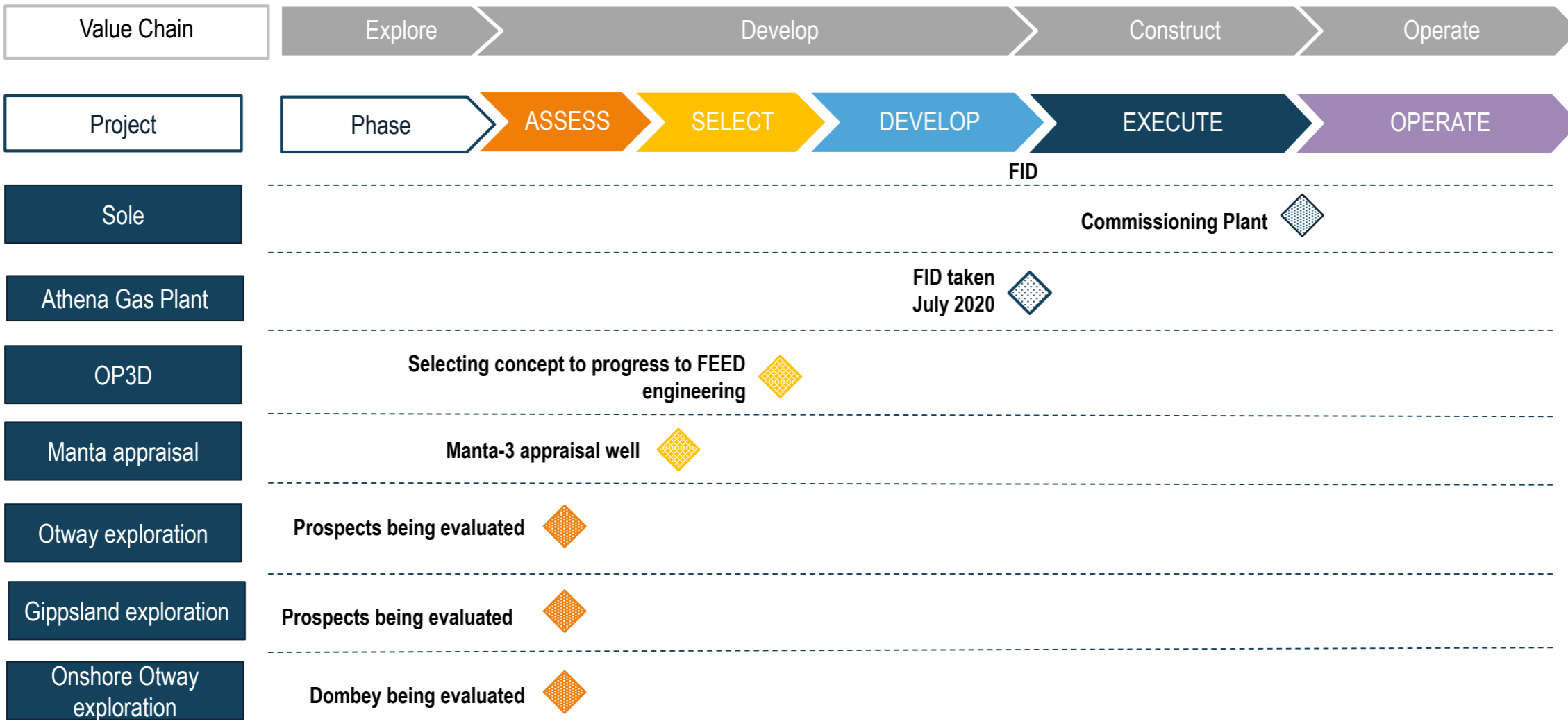
**Exploration**  
Otway offshore & onshore, Gippsland

- Prospective gas exploration acreage adjoining producing fields or discoveries
- Assessing candidates for drilling campaign 2022/23

<sup>2</sup> Contingent Resource for the Manta gas and liquids resource was announced to ASX on 12 August 2019. Prospective Resource for the field was announced to the ASX on 4 May 2016. Cooper Energy confirms that it is not aware of any new information or data that materially affects the information included in the announcements of 12 August 2019 or 4 May 2016 and that all the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

# Current growth projects

## Status of gas development and exploration projects under CARP (Cooper Energy Asset Realisation Process)



# Athena Gas Processing Project

A low-cost, processing hub for Casino Henry gas and new discoveries

## The Opportunity

- Integration of low cost processing hub for Casino Henry and new discoveries
- Ownership of processing capacity enables marketing under firm supply terms
- Capacity to support increased daily production rates
- Productivity gains from lower inlet pressure plant

## Develop Phase completed

- FID taken July 2020
- \$37 million project to connect to Casino Henry (Gross joint venture cost, Cooper Energy 50%)
- Plant modifications include compressor & control upgrades
- Pipeline tie-in



## Execute Phase underway

- Commenced July 2020
- Targeting first gas into plant Sept quarter 2021
- Subject to further Covid-19 impacts on supply chain and restrictions

## Status and expected schedule





# Otway Phase-3 Development Project (OP3D)

Project to bring 100+ PJ<sup>1</sup> of gas to market from 2023 onwards, utilising Minerva Gas Plant

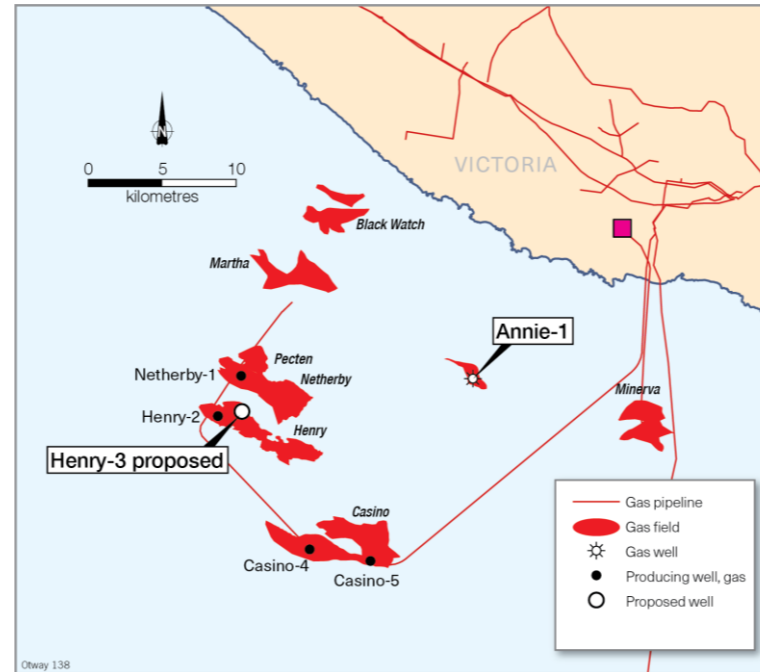
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## The Opportunity

- Development of >100 PJ<sup>1</sup> of gas from Henry and Annie
- Gas to market in CY 2023<sup>2</sup>

## Asses phase completed

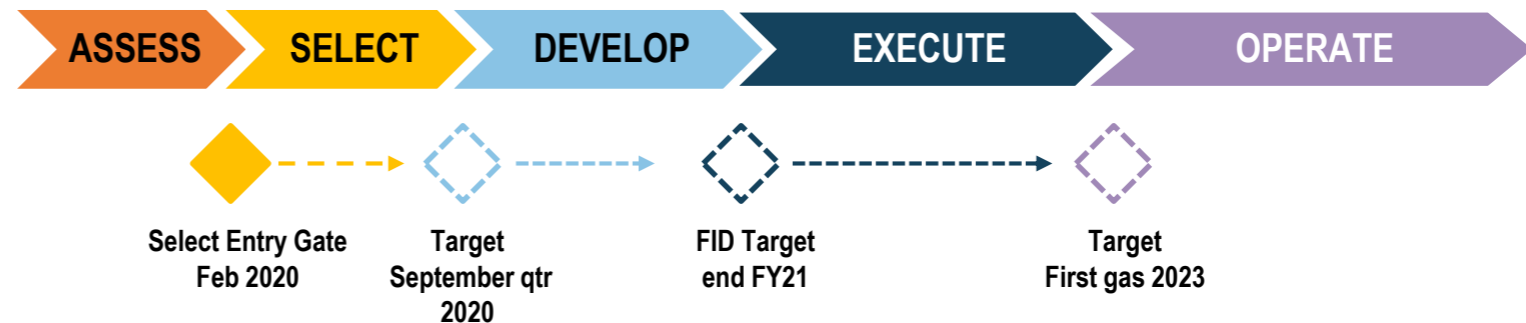
- Sound business case identified to progress Annie and Henry developments through to Select phase
- Multiple development concepts screened can deliver an economic outcome
- All concepts utilise the Minerva Gas Plant



## Select Phase underway

- Commenced February 2020
- Technical and planning work to determine optimal development plan
- Technical work and market engagement for firm capital estimates and schedule for business case
- Targeting entry to Develop phase Sept Qtr 2020

## Status and expected schedule



# Manta

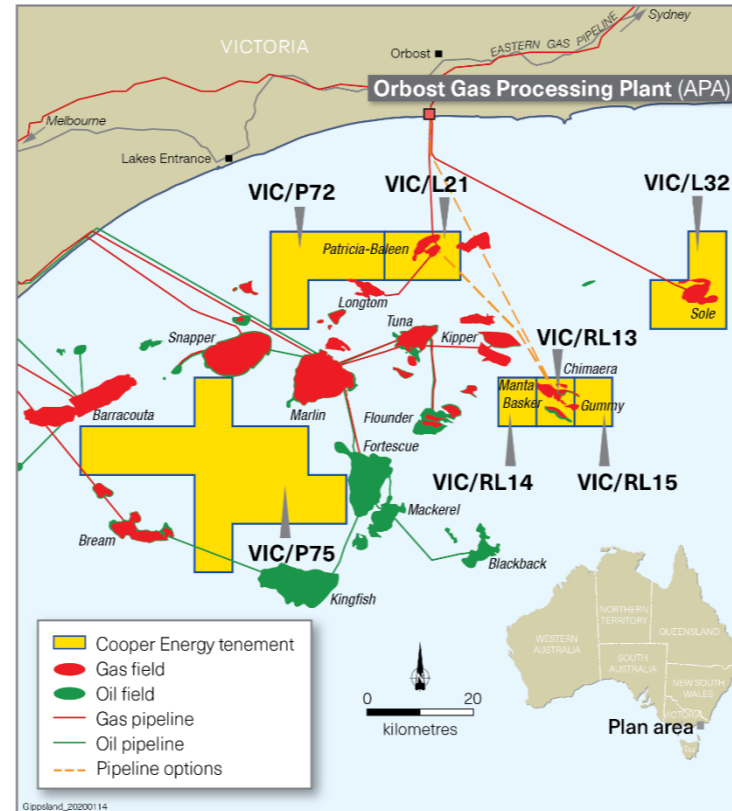
## Next phase of Gippsland development with 121 PJ gas and 3 MMbbl liquids 2C Contingent Resource<sup>1</sup>

### The Opportunity

- Second phase Gippsland gas development
- Additional gas exploration potential in deeper Manta reservoirs

### Assess phase completed

- Contingent Resource (2C) of 121 PJ gas and 3.4 MMbbl condensate<sup>1</sup>
- Business case confirmed economic development
- Prospective Resource<sup>1</sup> of 526 PJ identified in deeper reservoirs (Best P50)
- Opportunities for synergy with Sole & Orbost



### Select phase underway

- Manta-3 well design
- Engagement with rig contractors
- Technical work and market engagement for firm capital estimates and schedule for business case
- Manta-3 FID target end-FY21

### Status and expected schedule



Manta Project on Manta-3 drilling results 2022-23

Manta-3 FID end FY 21\*  
Manta Project FID  
Potential late 2022-23

Potential First gas 2026

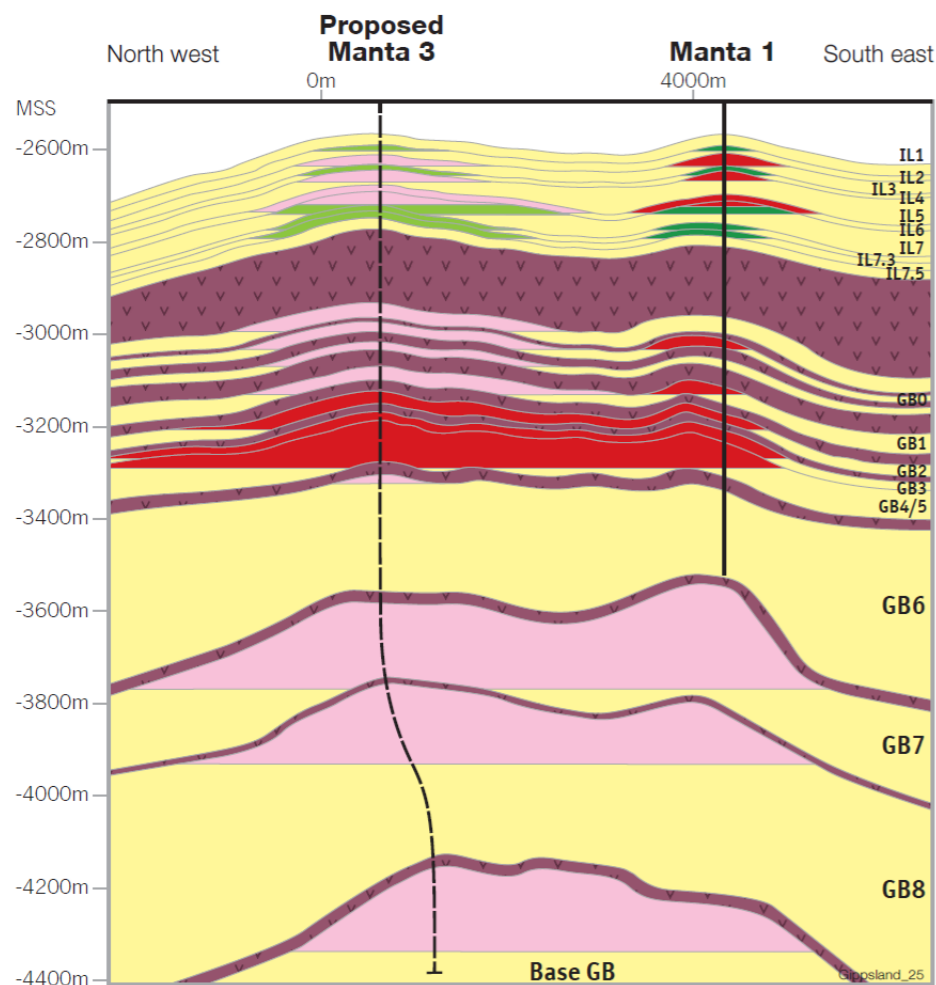
<sup>1</sup> Contingent Resource for the Manta gas and liquids resource was announced to ASX on 12 August 2019. Prospective Resource for the field was announced to the ASX on 4 May 2016. Cooper Energy confirms that it is not aware of any new information or data that materially affects the information included in the announcements of 12 August 2019 or 4 May 2016 and that all the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

\* Subject to rig availability

# Manta gas and liquids resource

## Contingent Resource with exploration potential

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### Manta Contingent Resource<sup>1</sup> estimate

		1C	2C	3C
<b>Condensate</b>	MMbbl	2.2	3.4	5.4
<b>Gas</b>	PJ	78	121	190

### Manta unrisks Prospective Resource<sup>1</sup> estimate

		Low (P90)	Best (P50)	High (P10)
<b>Oil</b>	MMbbl	1.0	1.5	2.3
<b>Condensate</b>	MMbbl	6.8	12.9	25.9
<b>Gas</b>	PJ	276	526	1,054

The estimated quantities of petroleum that may be potentially recovered by the application of future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

<sup>1</sup> Contingent Resource for the Manta gas and liquids resource was announced to ASX on 12 August 2019. Prospective Resource for the field was announced to the ASX on 4 May 2016. Cooper Energy confirms that it is not aware of any new information or data that materially affects the information included in the announcements of 12 August 2019 or 4 May 2016 and that all the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

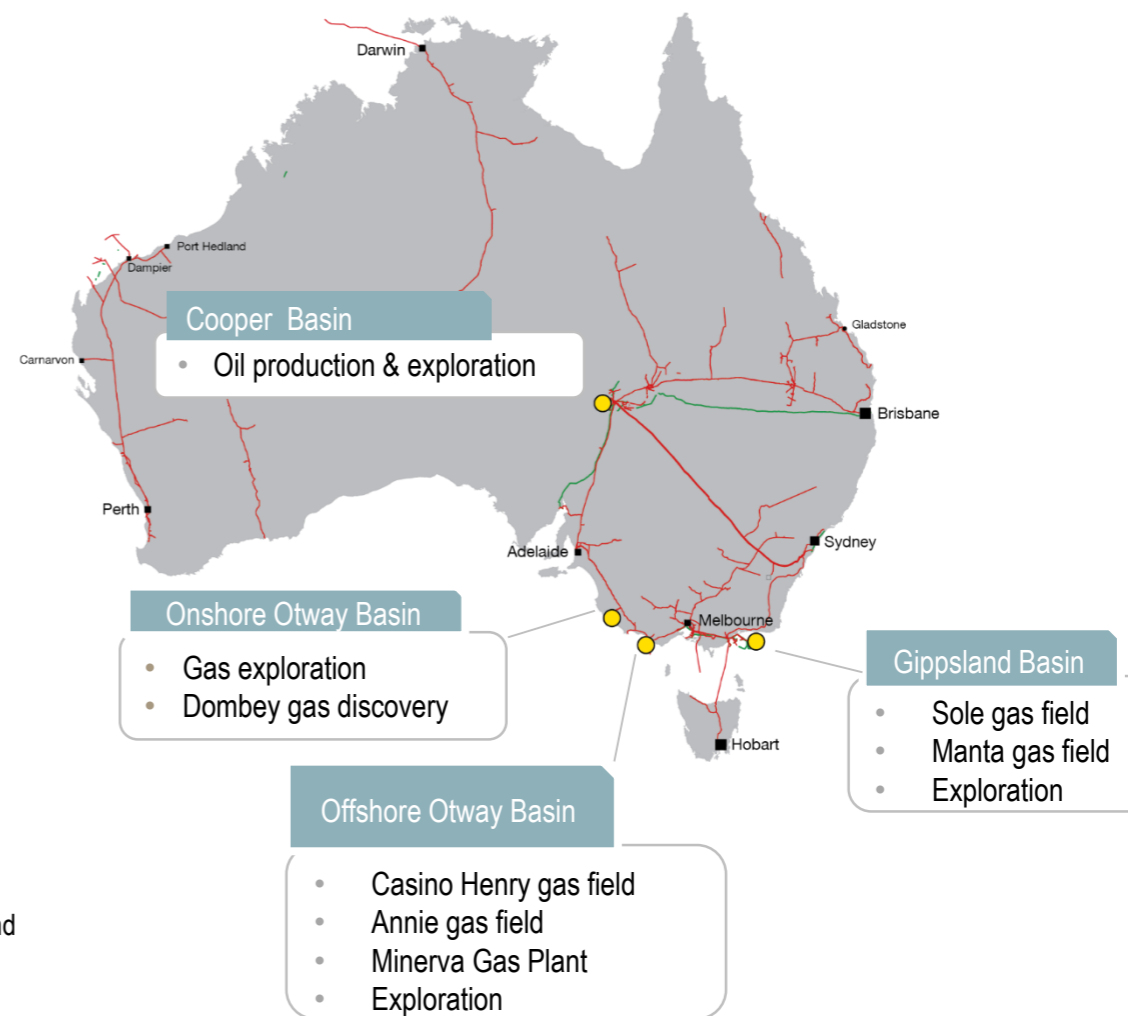
# Cooper Energy

## Snapshot

### Key statistics\*

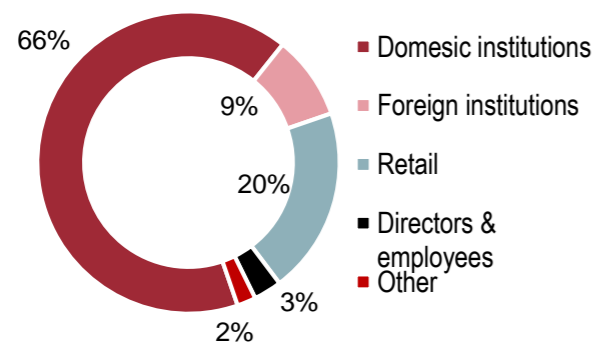
Proved & Probable Reserves	49.9 MMboe
Contingent Resources (2C)	34.9 MMboe
Market capitalisation	\$545 million
Net debt	\$97.8 million
Issued shares (million)	1,626.6

\* As at 30 June 2020; except for market capitalisation and issued shares (as at 28 August 2020)



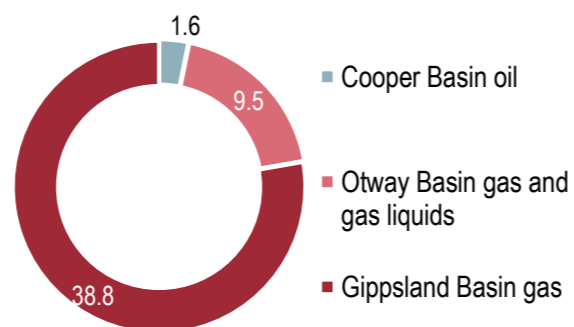
### Register composition

% of issued capital held at 14 August by:



### Proved & Probable Reserves<sup>1</sup>

49.9 MMboe at 30 June 2020



# Reserves and Contingent Resources at 30 June 2020

Reserves	Unit	1P (Proved)				2P (Proved + Probable)				3P (Proved + Probable + Possible)			
		Cooper	Otway	Gippsland	Total <sup>1</sup>	Cooper	Otway	Gippsland	Total <sup>1</sup>	Cooper	Otway	Gippsland	Total <sup>1</sup>
<b>Developed</b>													
Sales gas	PJ	0	9	174	183	0	17	238	255	0	24	320	344
Oil + Cond	MMbbl	0.7	0.0	0.0	0.7	1.3	0.0	0.0	1.3	1.9	0.0	0.0	1.9
<b>Sub-total</b>	<b>MMboe</b>	<b>0.7</b>	<b>1.5</b>	<b>28.5</b>	<b>30.7</b>	<b>1.3</b>	<b>2.8</b>	<b>38.8</b>	<b>42.9</b>	<b>1.9</b>	<b>3.9</b>	<b>52.3</b>	<b>58.0</b>
<b>Undeveloped</b>													
Sales Gas	PJ	0	29	0	29	0	41	0	41	0	50	0.0	50
Oil + Cond	MMbbl	0.1	0.0	0.0	0.1	0.3	0.0	0.0	0.3	0.4	0.0	0.0	0.4
<b>Sub-total</b>	<b>MMboe</b>	<b>0.1</b>	<b>4.7</b>	<b>0.0</b>	<b>4.8</b>	<b>0.3</b>	<b>6.6</b>	<b>0.0</b>	<b>6.9</b>	<b>0.4</b>	<b>8.1</b>	<b>0.0</b>	<b>8.5</b>
<b>Total<sup>1</sup></b>	<b>MMboe</b>	<b>0.8</b>	<b>6.2</b>	<b>28.5</b>	<b>35.5</b>	<b>1.6</b>	<b>9.5</b>	<b>38.8</b>	<b>49.9</b>	<b>2.3</b>	<b>12.0</b>	<b>52.3</b>	<b>66.6</b>

<sup>1</sup> Reserves were announced to the ASX on 31 August 2020. Totals may not reflect arithmetic addition due to rounding. The method of aggregation is by arithmetic sum by category. As a result, the 1P estimates may be conservative and the 3P estimates may be optimistic due to the effects of arithmetic summation. The Reserves exclude Cooper Energy's share of future fuel usage. The conversion factor of 1 PJ = 0.163 million boe has been used to convert from Sales Gas (PJ) to Oil Equivalent (million boe). The Reserves information displayed should be read in conjunction with the information provided in the Notes on calculation of Reserves and Contingent Resources provided in the appendices to this document.

Contingent Resources	1C			2C			3C		
	Gas	Oil	Total <sup>1</sup>	Gas	Oil	Total	Gas	Oil	Total
	PJ	MMbbl	MMboe	PJ	MMbbl	MMboe	PJ	MMbbl	MMboe
Gippsland	84	2.2	15.9	135	3.4	25.5	212	5.4	40.1
Otway	32	0.0	5.3	52	0.1	8.5	64	0.1	10.5
Cooper	0	0.4	0.4	0	0.8	0.8	0	1.4	1.4
<b>Total<sup>1</sup></b>	<b>116</b>	<b>2.6</b>	<b>21.6</b>	<b>187</b>	<b>4.4</b>	<b>34.9</b>	<b>276</b>	<b>6.9</b>	<b>52.0</b>

<sup>1</sup> Contingent Resources were announced to the ASX on 31 August 2020. Totals may not reflect arithmetic addition due to rounding. The method of aggregation is by arithmetic sum by category. As a result, the 1C estimate may be conservative and the 3C estimate may be optimistic due to the effects of arithmetic summation. The conversion factor of 1 PJ = 0.163 million boe has been used to convert from Sales Gas (PJ) to Oil Equivalent (million boe). The Contingent Resources information displayed should be read in conjunction with the information provided in the Notes on calculation of Reserves and Contingent Resources provided in the appendices to this document.

# Executive Leadership Team

## Managing Director David Maxwell

David Maxwell has over 30 years' experience as a senior executive with companies such as BG Group, Woodside and Santos. As Senior Vice President at QGC, a BG Group business, he led BG's entry into Australia, its alliance with and subsequent takeover of QGC. Roles at Woodside included director of gas and marketing and membership of Woodside's executive committee.

## Chief Financial Officer Virginia Suttell

Virginia Suttell is a chartered accountant with more than 25 years' experience, including 20 years in publicly listed entities, principally in group finance and secretarial roles in the resources and media sectors. This has included the role of Chief Financial Officer and Company Secretary for Monax Mining Limited and Marmota Energy Limited. Other previous appointments include Group Financial Controller at Austereo Group Limited.



## General Manager, Exploration & Subsurface Andrew Thomas

Andrew Thomas is a successful geoscientist with over 30 years' experience in oil and gas exploration and development in companies including Geoscience Australia, Santos, Gulf Canada and Newfield Exploration. Prior to joining Cooper Energy he was SE Asia New Ventures Manager and Exploration Manager for offshore Sarawak for Newfield Exploration.

## General Manager, HSEC & Technical Services Iain MacDougall

Iain MacDougall has more than 30 years' experience in the upstream petroleum exploration and production sector. His experience includes senior management positions with independent operators and wide-ranging international experience with Schlumberger. In Australia, Iain's previous roles include Production and Engineering Manager and acting CEO at Stuart Petroleum prior to the takeover by Senex Energy.

## Company Secretary & General Counsel Amelia Jalleh

Amelia Jalleh has more than eighteen years' experience in the international oil and gas industry, including senior corporate, commercial and legal roles in Australia, the Middle East, North America and South-East Asia for Repsol, King & Spalding LLP and Santos.

## General Manager, Projects & Operations Michael Jacobsen

Michael Jacobsen has over 25 years' experience in upstream oil and gas specialising in major capital works projects and field developments. He has worked more than 10 years with engineering and construction contractors and then progressed to managing multi discipline teams on major capital projects for E&P companies.

## General Manager, Commercial & Development Eddy Glavas

Eddy Glavas has more than 20 years' experience in business development, finance, commercial, portfolio management and strategy, including 16 years in oil & gas. Prior to joining Cooper Energy, he was employed by Santos as Manager Corporate Development with responsibility for managing multi-disciplinary teams tasked with mergers, acquisitions, partnerships and divestitures.

# Notes on calculation of Reserves and Contingent Resources

Cooper Energy prepares its petroleum reserves and contingent resources in accordance with the definitions and guidelines in the Society of Petroleum Engineers (SPE) 2018 Petroleum Resources Management System (PRMS).

The estimates of petroleum Reserves and Contingent Resources contained in this reserves statement are as at 30 June 2020.

All Reserves and Contingent Resources figures in this document are net to Cooper Energy unless otherwise stated. The Reserves exclude Cooper Energy's share of future fuel usage.

Cooper Energy has completed its own estimation of Reserves and Contingent Resources for its operated Otway and Gippsland Basin assets. Elsewhere Reserves and Contingent Resources estimation is based on assessment and independent views of information provided by the permit Operators (Beach Energy Ltd for PEL 92 and Senex Ltd for Worrior Field)

Reference points for Cooper Energy's petroleum reserves and contingent resources and production are defined where normal operations cease, and petroleum products are measured under defined conditions prior to custody transfer. Fuel, flare and vent consumed prior to the reference point is excluded.

Petroleum Reserves and Contingent Resources are prepared using deterministic and probabilistic methods. The reserves and resources estimate methodologies incorporate a range of uncertainty relating to each of the key reservoir input parameters to predict the likely range of outcomes.

Project and field totals are aggregated by arithmetic summation by category. Aggregated 1P and 1C estimates may be conservative, and aggregated 3P and 3C estimates may be optimistic due to the effects of arithmetic summation.

Totals may not exactly reflect arithmetic addition due to rounding.

The conversion factor of 1 PJ = 0.163 million boe has been used to convert from Sales Gas (PJ) to Oil Equivalent (million boe).

## Reserves

Under the SPE PRMS 2018, "Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions".

The Otway Basin totals comprise the arithmetically aggregated project fields (Casino-Henry-Netherby and Minerva). The Cooper Basin totals comprise the arithmetically aggregated PEL 92 project fields and the arithmetic summation of the Worrior project Reserves. The Gippsland Basin total comprises Reserves in Sole only.

## Contingent Resources

Under the SPE PRMS 2018, "Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable owing to one or more contingencies".

The Contingent Resources assessment includes resources in the Gippsland, Otway and Cooper Basins. In the Otway Basin, the Contingent Resources assessment at Annie gas field in VIC/P44 reported on 24 February 2020 has been upgraded at 31 August 2020. The change is a result of continued technical studies following the Annie-1 discovery announced 6 September 2019. The update has resulted in an immaterial increase to Annie 2C gas resources from 54.5 PJ to 57.4 PJ (100% gross working interest).

## Qualified Petroleum Reserves and Resources Evaluator Statement

The information contained in this report regarding the Cooper Energy Reserves and Contingent Resources is based on, and fairly represents, information and supporting documentation reviewed by Mr Andrew Thomas who is a full-time employee of Cooper Energy Limited holding the position of General Manager – Exploration & Subsurface, holds a Bachelor of Science (Hons), is a member of the American Association of Petroleum Geologists and the Society of Petroleum Engineers, is qualified in accordance with ASX listing rule 5.41, and has consented to the inclusion of this information in the form and context in which it appears.

# Abbreviations

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\$, A\$	Australian dollars unless specified otherwise
Bbl	barrels of oil
Boe	barrel of oil equivalent
EBITDA	earnings before interest, tax, depreciation and amortisation
FEED	front end engineering and design
kbbbl	thousand barrels
m	metres
MMbbl	million barrels of oil
MMboe	million barrels of oil equivalent
NPAT	net profit after tax
PEL 92	Joint Venture conducting operations in Western Flank Cooper Basin Petroleum Retention Licences 85–104 previously encompassed by the PEL 92 exploration licence
PEL 93	Joint Venture conducting operations in Cooper Basin Petroleum Retention Licences PRL 231-233 and PRL 237 previously encompassed by the PEL 93 exploration licence
TRCFR	Total Recordable Case Frequency Rate. Recordable cases per million hours worked
1P Reserves	Proved Reserves
2P Reserves	Proved and Probable Reserves
3P Reserves	Proved, Probable and Possible Reserves
1C, 2C, 3C	high, medium and low estimates of Contingent Resources