The resource estimates outlined in this report have been prepared by the Company’s Chief Operating Officer, Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga has over 25 years’ experience in petroleum exploration and engineering. Mr Huizenga holds a Bachelor Degree in Engineering, a Masters Degree in Petroleum Engineering and is a member of the society of Petroleum Engineers. Mr Huizenga is qualified in accordance with ASX Listing Rules and has consented to the form and context in which this statement appears.

All contingent and prospective resources presented in this report are prepared as at 28 August 2017, 23 April 2018, 20 August 2018 and 15 October 2018 per the Company’s announcement released to the 28 August 2017, 23 April 2018, 20 August 2018 and 15 October 2018. The estimates of contingent and prospective resources included in this announcement have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS. Carnarvon is not aware of any new information or data that materially affects the information included in this presentation and that all material assumptions and technical parameters underpinning the estimates in this presentation continue to apply and have not materially changed. Carnarvon used deterministic and probabilistic methods to prepare the estimates of these contingent resources. These contingent resources have been aggregated by arithmetic summation and hence the aggregate 1C may be a very conservative estimate and the 3C may be a very optimistic estimate due to the portfolio effects of arithmetic summation.

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas reserve engineering and resource assessment must be recognised as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way. These prospective resource estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

This presentation contains forward looking statements which involve subjective judgment and analysis and are subject to significant uncertainties, risks and contingencies including those risk factors associated with the oil and gas industry, many of which are outside the control of and may be unknown to Carnarvon Petroleum Limited.

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Given these uncertainties, readers are cautioned not to place undue reliance on such forward looking statements, and should rely on their own independent enquiries, investigations and advice regarding information contained in this presentation. Any reliance by a reader on the information contained in this presentation is wholly at the readers own risk.

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This presentation has been prepared by Carnarvon. No party other than Carnarvon has authorised or caused the issue of this document, or takes responsibility for, or makes any statements, representations or undertakings in this presentation.
Investment summary

OIL & GAS DISCOVERED
Over 100mmboe discovered net to CVN

PRIME LOCATION
Ideal for development in shallow water West Australia

CONVENTIONAL RESERVOIRS
Of high quality with similar prospects nearby

APPRAISE TO DEVELOP
Early oil development focus ahead of gas development

PREMIER PARTNER
Australia’s 2nd largest O&G company Santos is 80% partner on Dorado

INVESTOR INTEREST
Increasing institutional investor interest in Carnarvon

CORPORATE GOVERNANCE
Experienced Board and management team in place

FOCUS ON VALUE
Value per share focus underpinned by fiscal discipline

1. Refer resource information contained in slides 30 & 31
Capital overview & 52 week share price

Ordinary shares on issue  m  1,191
Share price as at 30 Jan 2019  A$/sh  0.38
Market capitalisation  A$’m  452
Debt (as at 31 Dec 2018)  A$’m  -
Cash (as at 31 Dec 2018)  A$’m  48
Enterprise value  A$’m  404
Core business streams

DORADO

Exciting appraisal well program and field development planning scheduled for 2019. Program to build on the existing value in the light oil & gas discovery. Final Investment Decision in 2020 for field development.

BUFFALO

Drill first well in late 2019 / early 2020 after key milestones completed. First well to confirm the oil volumes and then progress into the development phase in 2020. First oil production targeted for 2022.

EXPLORE

Continue to build a quality portfolio of highly attractive drill ready prospects using knowledge and data focused on the North West Shelf. The Labyrinth project is well advanced in its farm-out process.

FINANCIAL

Increasing per share value is the principal financial objective of the Company, whilst maintaining strong financial discipline. Carnarvon’s success to date has been self generated through new discoveries of oil and gas.
Portfolio map & CVN’s interests

1. Buffalo oil
   WA-523-P 100%

2. Eagle Project
   AC/P63 100%

3. Condor Project
   AC/P62 100%

4. Labyrinth Project
   WA-521-P 100%

5. Dorado oil & gas
   WA-435-P & WA-437-P 20%
   WA-436-P & WA-438-P 30%

6. Maracas Project
   WA-524-P 100%

7. Outtrim Project
   WA-155-P 28.5%
# 2019 Investment Activities

<table>
<thead>
<tr>
<th></th>
<th>Development Focus</th>
<th>Growth Focus</th>
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<tbody>
<tr>
<td>Dorado-2 Appraisal Well</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dorado-3 Appraisal Well</td>
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<td>✓</td>
</tr>
<tr>
<td>Dorado Development Preparation</td>
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<td></td>
</tr>
<tr>
<td>Roc South-1 Exploration Well</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Buffalo Well</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Investment opportunity

UNIQUE
Exposure to Australia’s most exciting exploration province

VALUE
Proposition enhanced with more than 100 mmboe in discovered resources

CATALYSTS
Multiple share-price catalysts over the next 12 to 18 months

RISK PROFILE
Attractive given the quality of the resources, jurisdiction and partner

FUNDING
Range of funding options to drive growth potential with A$48m cash

FOCUS
Board and management team focused on value per share
Our strategic framework

**DISCOVER**
Unlock the oil and gas assets strategically located within close-proximity to existing infrastructure and in the shallow water of Timor and the renowned North West Shelf of Western Australia: Dorado; Buffalo; Phoenix; Roc; Labyrinth; Condor & Eagle; Outtrim; and Maracas.

**DEVELOP**
Using knowledge and data focused on the North West Shelf, commercialise the world class discovery at Dorado-1 and Buffalo. Further appraise the feasibility of the remaining assets on the North West Shelf.

**PRODUCE**
Establish Carnarvon as a mid-tier producer with a sustainable production model capitalizing on the hydrocarbons of Dorado-1, Buffalo and the remaining nearby portfolio assets.
## Business activities over next 12 - 18 months

<table>
<thead>
<tr>
<th>Well Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorado-2 appraisal well</td>
<td>This 2019 well is seeking to confirm the extent of the oil in the Caley sand (down dip well location). Penetrating the Baxter and Milne sands will also enable an assessment of the resources at this location. New data is expected to result in a re-assessment of the volume estimates within the Dorado structure.</td>
</tr>
<tr>
<td>Dorado-3 appraisal well</td>
<td>This 2019 well will collect more information on reservoir and hydrocarbon properties in the Caley sand. Penetrating the Baxter &amp; Milne sands will also provide additional information on the sands at this location. The appraisal program is expected to include coring and flow testing activities in this up dip well location.</td>
</tr>
<tr>
<td>Dorado oil field development</td>
<td>Work is underway on development plans for producing oil from the Caley sand. With shallow water, jack up drilled wells expected to be tied back to an FPSO. Compiling resource and economic data for the purpose of achieving the Final Investment Decision.</td>
</tr>
<tr>
<td>Roc South-1 exploration well</td>
<td>2019 exploration well targeting a quality prospect located between the Dorado and Roc discoveries. This is a high chance of success well with the potential to surprise if hydrocarbons connect to Dorado. The objective is to increase the volume of oil and gas for development planning purposes.</td>
</tr>
<tr>
<td>Buffalo well</td>
<td>The well will confirm the attic and therefore the quantum of producible oil. The well is expected to be retained as the first of three production wells. Reporting on the Final Investment Decision and progress to development and production phase.</td>
</tr>
</tbody>
</table>
Dorado & Roc South wells rig contracted

NOBLE TOM PROSSER JACK UP DRILLING RIG UNDER CONTRACT FOR DORADO APPRAISAL WELLS COMMENCING APRIL 2019
Board of Directors

INDEPENDENT CHAIRMAN
PETER LEONHARDT

MANAGING DIRECTOR
ADRIAN COOK

INDEPENDENT NED
WILLIAM (BILL) FOSTER

INDEPENDENT NED
DR PETER MOORE

INDEPENDENT NED
GAVIN RYAN
Management team

CEO

ADRIAN COOK
- 25+ years experience in finance, primarily in the petroleum industry
- Former Managing Director of ASX Listed O&G explorer, Buru Energy Limited and Fellow of the Australian Institute of Company Directors

COO

PHILIP HUIZENGA
- 25+ years experience in O&G industry as petroleum engineer
- Member of: Society of Petroleum Engineers, Industry Advisory Council to the Dept of Petroleum Engineering at Curtin University

CFO

THOMSON NAUDE
- Chartered Accountant with 10+ years experience in financial management
- Experience in commercial transactions including the divestment of Carnarvon’s Thailand production assets

HEAD OF EXPLORATION

STEPHEN MOLYNEUX
- PhD in Geology and Geophysics from Imperial College London
- 25+ years of experience in O&G exploration, discovered over 5 billion barrels of recoverable oil
DORADO & ROC INFORMATION
Dorado discovery
world class

Largest offshore discoveries between 2015 & Q3, 2018

- Oil Discoveries
- Gas Discoveries

Mid-case recoverable volumes from company reporting where available, otherwise estimated by Westwood.
Near Dorado
Roc discovered & appraised

Photo of the Roc-2 well flowing at commercial rates on test in late 2016. Flow rates of 53 mmscf/d and 3,000 barrels of condensate per day were at maximum test equipment capacity.
Dorado & Roc aggregation with more prospective potential

Contingent resources (2C, discovered)\(^1\)
Carnarvon 20%

Prospective resources near Dorado (P50, undrilled)\(^1\)
Carnarvon 20%-30%

Million barrels of oil equivalent (mmboe, Gross)

- Dorado
- Roc
- Roc South
- Pavo
- Apus

\(\text{Oil & condensate (mmbbls)}\)
\(\text{Gas (mmboe)}\)

\(^1\) Refer resource information contained in slides 30 & 31
Dorado & Roc with Roc South to be drilled in 2019

ROC SOUTH IS SITUATED BETWEEN THE DORADO & ROC DISCOVERIES AND IS STRUCTURALLY SIMILAR TO DORADO
Dorado & Roc
& targets within tie back distance

1. Roc South
   - Dorado-1 discovery
2. Roc South East
   - Roc-1 discovery
3. Pavo
4. Apus
5. Roc Satellites
6. Bewdy & Bottler

3D & 2D seismic data at Top Caley interval
Dorado & Roc confirm new hydrocarbon basin

Four exploration permits cover the basin

Carnarvon interests in each permit:
- WA-435-P 20%
- WA-436-P 30%
- WA-437-P 20%
- WA-439-P 30%

Multiple targets exist across a number of intervals providing extensive future exploration potential.
Dorado & Roc commercial play openers

- Oil field development first generate cash for full field development
- Long life asset expected on 362 mmboe gross 2C (including Roc)¹
- Competitive cost per boe expected due to shallow water, near gas infrastructure & support services
- De-risked play type with similar play types nearby being progressed
- Production hub at Dorado expected to enable tie back of other resources over time

1. Refer resources information contained in slides 30 & 31
## Buffalo oil field highlights

### Proven oil field
- 50,000 barrels of oil per day (bopd) flowed from the first two wells in 1999 (BHP operator).
- 20 million barrels were produced from four wells between 1999 and 2004.
- 4,000 bopd were still flowing when production stopped in 2004.

### Low risk
- Carnarvon’s planned wells will re-enter the former producing area of the oil field.
- Additional oil is expected from newly mapped attic within the field.
- The greatest risk is expected to be the quantum (not presence) of oil.

### Field re-development
- 31 million barrels of recoverable oil is remaining on a best estimate basis\(^1\).
- 40,000 bopd initial flow rate modelled from three wells.
- A conventional well head platform development with flowlines supplying a leased FPSO.

### Low cost
- Capital cost estimate is US$150m (low due to shallow 25m water depths)\(^2\).
- Operating cost estimate is US$80m to $100m per annum\(^2\).
- A leased FPSO is planned in order to keep upfront capital to a minimum.

### Forward plan
- Execute Production Sharing Contract as permit transitions to Timor-Leste.
- Complete planning & approvals to drill the first well in late 2019 / early 2020.
- Investigate partnering to assist with financing the drilling and development activities.

---

1. Refer resource information contained in slides 29 & 31.
2. Based on Carnarvon’s pre-field development plan & independent studies commissioned by Carnarvon Petroleum.
Buffalo oil field development (CVN 100%)

Buffalo-5 well produced ~8.5mmbbls as part of a field that produced 20mmbbls from 1999 to 2004.

Reprocessed seismic image showing reservoir section.
Buffalo oil field images from BHP’s operations

WELL HEAD PLATFORM

FLOATING PRODUCTION STORAGE & OFFLOADING VESSEL (FPSO)
LABYRINTH PROJECT INFORMATION
Labyrinth project farm out process underway

- Project secured low oil price environment for very minimal work commitments
- Technical work drew on proprietary knowledge from Roc & Dorado wells
- High quality Ivory prospect identified
- The plan is to acquire additional 3D seismic data over the Ivory prospect
- Followed by drilling the Ivory prospect with a partner (farm down from 100%)
## Gross Resources (100% basis)

<table>
<thead>
<tr>
<th></th>
<th>Light Oil</th>
<th>Natural Gas</th>
<th>Condensate</th>
<th>Barrels of Oil Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MMbbl</td>
<td>BCF</td>
<td>MMbbl</td>
<td>MMboe</td>
</tr>
<tr>
<td>Dorado</td>
<td>82</td>
<td>229</td>
<td>6</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>171</td>
<td>552</td>
<td>16</td>
<td>283</td>
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<tr>
<td></td>
<td>320</td>
<td>1,197</td>
<td>36</td>
<td>566</td>
</tr>
<tr>
<td>Roc</td>
<td>-</td>
<td>205</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>Phoenix South</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Phoenix</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Phoenix Project</td>
<td>91</td>
<td>434</td>
<td>18</td>
<td>185</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>195</td>
<td>884</td>
<td>36</td>
<td>385</td>
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<tr>
<td>Buffalo</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>

## Net Resources (CVN’s share)

<table>
<thead>
<tr>
<th></th>
<th>Light Oil</th>
<th>Natural Gas</th>
<th>Condensate</th>
<th>Barrels of Oil Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MMbbl</td>
<td>BCF</td>
<td>MMbbl</td>
<td>MMboe</td>
</tr>
<tr>
<td>Dorado</td>
<td>17</td>
<td>46</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>110</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>64</td>
<td>240</td>
<td>7</td>
<td>113</td>
</tr>
<tr>
<td>Roc</td>
<td>-</td>
<td>41</td>
<td>2</td>
<td>10</td>
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<tr>
<td>Phoenix South</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Phoenix</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Phoenix Project</td>
<td>19</td>
<td>87</td>
<td>3</td>
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<tr>
<td>Sub-Total</td>
<td>39</td>
<td>176</td>
<td>7</td>
<td>77</td>
</tr>
<tr>
<td>Buffalo</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>87</td>
<td>3</td>
<td>52</td>
</tr>
</tbody>
</table>

### Barrels of Oil Equivalent in millions

- **Dorado**: 128 MMboe, 283 MMboe, 566 MMboe
- **Roc**: 48 MMboe, 78 MMboe, 137 MMboe
- **Phoenix South**: 7 MMboe, 17 MMboe, 30 MMboe
- **Phoenix**: 2 MMboe, 7 MMboe, 16 MMboe
- **Buffalo**: 15 MMboe, 31 MMboe, 48 MMboe

### Total Barrels of Oil Equivalent

- **Dorado**: 1,197 MMboe
- **Roc**: 580 MMboe
- **Phoenix South**: 36 MMboe
- **Phoenix**: 17 MMboe
- **Buffalo**: 48 MMboe

**Total**: 1,777 MMboe
# Oil & gas volume summary

## Selected prospective resources

### Gross Resources (100% basis)

<table>
<thead>
<tr>
<th></th>
<th>Light Oil</th>
<th></th>
<th>Natural Gas</th>
<th></th>
<th>Barrels of Oil Equivalent</th>
<th></th>
<th>Pg</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>MMbbl</td>
<td></td>
<td>MMboe</td>
<td></td>
<td>Pg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P90</td>
<td>P50</td>
<td>Mean</td>
<td>P10</td>
<td>P90</td>
<td>P50</td>
<td>Mean</td>
</tr>
<tr>
<td>Roc South</td>
<td>9</td>
<td>45</td>
<td>56</td>
<td>118</td>
<td>15</td>
<td>76</td>
<td>100</td>
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<td>Pavo</td>
<td>11</td>
<td>63</td>
<td>82</td>
<td>179</td>
<td>3</td>
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<td>108</td>
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<tr>
<td>Apus Caley(^i)</td>
<td>12</td>
<td>91</td>
<td>125</td>
<td>279</td>
<td>3</td>
<td>44</td>
<td>163</td>
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<tr>
<td>Apus Baxter(^i)</td>
<td>6</td>
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<td>105</td>
<td>278</td>
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<tr>
<td>Apus Crespin(^i)</td>
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<tr>
<td>Apus Milne(^i)</td>
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<td>163</td>
<td>221</td>
<td>483</td>
<td>8</td>
<td>82</td>
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<tr>
<td>Phoenix Project Total</td>
<td>77</td>
<td>517</td>
<td>750</td>
<td>1728</td>
<td>32</td>
<td>308</td>
<td>1013</td>
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</table>

### Net Resources (CVN’s share)

<table>
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<tr>
<th></th>
<th>Light Oil</th>
<th></th>
<th>Natural Gas</th>
<th></th>
<th>Barrels of Oil Equivalent</th>
<th></th>
<th>Pg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MMbbl</td>
<td></td>
<td>MMboe</td>
<td></td>
<td>Pg</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>P90</td>
<td>P50</td>
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<td>P10</td>
<td>P90</td>
<td>P50</td>
<td>Mean</td>
</tr>
<tr>
<td>Roc South</td>
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<td>9</td>
<td>11</td>
<td>24</td>
<td>3</td>
<td>15</td>
<td>20</td>
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<td>Pavo</td>
<td>3</td>
<td>19</td>
<td>25</td>
<td>54</td>
<td>1</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Apus Caley(^i)</td>
<td>2</td>
<td>18</td>
<td>25</td>
<td>56</td>
<td>1</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>Apus Baxter(^i)</td>
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<td>24</td>
<td>63</td>
<td>-</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>Apus Crespin(^i)</td>
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<td>Apus Milne(^i)</td>
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<tr>
<td>Phoenix Project Total</td>
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<td>179</td>
<td>412</td>
<td>7</td>
<td>72</td>
<td>241</td>
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</table>

\(^i\) Note Apus prospect lies across WA-437-P and WA-438-P in which Carnarvon has 20% and 30% equity respectively.