Hartleys

**PCL.asx**
**Speculative Buy**

# PANCONTINENTAL OIL & GAS NL (PCL)

## Cormorant only part of the developing Namibian story

Namibia is fast regaining its pre-2014 reputation as an emerging industry exploration hot spot. In the latest news, ExxonMobil has announced another deal offshore Namibia, acquiring a 30% interest in PEL 44, which is on trend to the south of PCL's PEL 37 block. Chariot Oil & Gas have also confirmed they have secured the Ocean Rig Poseidon to drill Prospect S in PEL 71 (again on the same trend just below PEL 44) straight after PCL's Cormorant-1 well. Chariot in their recent Corporate Presentations outlined that in their view all petroleum play elements have been proven by nearby drilling.

The Cormorant-1 well (PCL 20% and free carried (uncapped)) is due to spud in mid-September and will take about 4 weeks to complete. Cormorant itself is only one of four large Submarine multiple Cretaceous-aged fans with anomalously soft amplitudes identified by 3D in PEL 37. The reinvigoration of industry interest in offshore Namibia however does not rely solely on success at Cormorant-1. We expect the uptick in activity and news flow to continue regardless of this individual well result. Relevant to PCL, this could include the release of the initial resource potential for PEL 87 in the southern Orange Basin (PCL 75%). Industry giants, Shell and Total, have both secured acreage to the south of this license, so any positive progress from either of them over the next year would also likely have a positive read through for PEL 87. Chariot are continuing their attempts to farm down the Prospect S well, which is due to spud in the fourth quarter. Success at Prospect S would also likely re-rate the value of PEL 37. Exxon are also likely to start field work post their recent acquisition of PEL 82 and PEL 44, again activity here by Exxon would have a direct read through to PEL 37 which adjoins just to the north.

## We continue to rate PCL a Speculative Buy

The recent good performance of PCL's share price obviously makes the investment call a little harder. At the current share price, it would seem the market is currently risking the Cormorant-1 well at around 10%. While we do not expect the Australian market to align itself with the 30% GPOS, by using our recent experience of CVN pre-result and using that as a comparison we expect the market to eventually risk the well in the high teens, implying the share price could hit 1.25c per share pre-result. While deriving a pre-result estimate is as much art as science, based on the very recent experience of CVN, we see this as justifiable given the equally high-quality nature of the Cormorant-1 well.

In the event of success at Cormorant-1 in line with pre-drill expectations a PCL valuation close to $400m (circa 7.5cps on the current issued share capital) could be achieved, given the de-risking of follow up targets. In the event of a failure we do not view this as game over for Namibia or PEL 37. News flow from other operators or progress at PEL 87 could still provide some support to the share price. However, in the event of failure (and before any further news from Namibia) we would expect the stock price to retrace towards 3.5c per share. We set our near term (pre-result) target price at 1.25c per share (up from 0.7c per share based on recent CVN performance as a benchmark) therefore at current levels we rate PCL a Speculative Buy.

Oil & Gas: Explorer

| | 24 Aug 2018 |
|---|---|
| **Share Price:** | $0.0090 |
| **12mth Price Target:** | $0.0125 |

**Hartleys Brief Investment Conclusion**
The PEL 37 JV recently voted to drill the Cormorant prospect in September 2018. This should mean that PCL participates in a very high impact offshore exploration well in 2018. In California, approvals are being sought for testing of the Alvares prospect.

**Key Personnel**

| | |
|---|---|
| David Kennedy | Non-Executive Chairman |
| John Begg | Executive Director & CEO |
| Ernest Myers | Non-Executive Director |
| Barry Rushworth | Non-Executive Director |
| Marie Malaxos | Non-Executive Director |

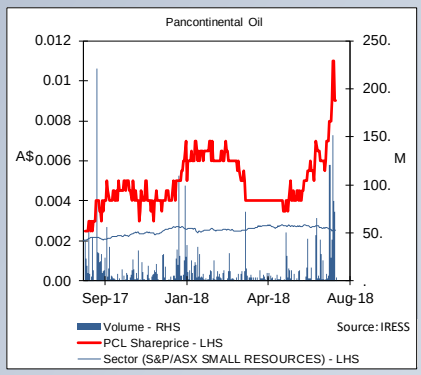
**Top Shareholders**

| | |
|---|---|
| Sundowner International | 7.8% |

**Company Address:**
Level One, 10 Ord Street
West Perth, WA, 6005

| | |
|---|---|
| **Target Price:** | $0.013 |
| **Issued Capital:** | 5261.8m |
| - fully diluted | 5828.9m |
| **Market Cap:** | $47.4m |
| - fully diluted | $52.5m |
| **Current Cash (end June)** | $0.8m |
| **Current Debt (Con Notes)** | $1.6m |

Source: Hartleys Research





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Hartleys has assisted in the completion of a capital raising in the past 12 months for Pancontinental Oil & Gas NL ("Pancontinental") for which it has earned fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to Pancontinental Oil & Gas NL, for which it has earned fees and continues to earn fees. Hartleys (and associates) has a beneficial interest in 257.8 million unlisted Pancontinental options and 293.4 million shares.

# SUMMARY MODEL

**Pancontinental Oil & Gas PCL** — **Share Price $0.009**

**24 Aug 18**
**Speculative Buy**

## Key Market Information

| | |
|---|---|
| **Share Price** | **$0.009** |
| Market Capitalisation | $47m |
| Net Cash (End June: Cash - Con Notes) | -$0.8m |
| Issued Capital | 5261.8m |
| ITM options | 0.0m |
| Options | 567.1m |
| Issued Capital (fully diluted ITM options) | 5261.8m |
| Issued Capital (fully diluted all options) | 5828.9m |
| **EV** | $48.2m |
| **Valuation*** | **$0.0125** |
| **12Mth Price Target** | **$0.0125** |

* Valuation is based on a risked value for Cormorant-1 and implied Nambian acreage (pre-result estimate).

## Directors / Company Details

| Directors | Company Details |
|---|---|
| David Kennedy | Non-Executive Chairman |
| John Begg | Executive Director & CEO |
| Ernest Myers | Non-Executive Director |
| Barry Rushworth | Non-Executive Director |
| Marie Malaxos | Non-Executive Director |

## Top Shareholders

| Top Shareholders | m shs | % |
|---|---|---|
| Sundowner International | 411.8 | 7.8% |

## Unpaid Capital

| Unpaid Capital | No (m) | $ (m) | Ave Pr | % Ord |
|---|---|---|---|---|
| 21-Apr-20 | 100.0 | 0.5 | 0.01 | 1.9% |
| Various | 467.1 | | | 8.9% |

## Valuation Summary

| Asset | Valuation A$m | Valuation cps |
|---|---|---|
| Namibia | 66 | 1.25 |
| California and Corporate | - | 0.00 |
| Total | 66 | 1.25 |

## Investment Summary

The PEL 37 JV recently voted to drill the Cormorant prospect in September 2018. This should mean that PCL participates in a very high impact offshore exploration well in 2018. In California, approvals are being sought for testing of the Alvares prospect.

## Key Permits / Prospects

| Sacramento Basin | Net Interest | Unrisked NPV10** |
|---|---|---|
| Dempsey | 10% | A$1m |
| Tulainyo | 0% | n/a |
| Alvares | 15% | A$4m |
| **Namibia** | | |
| PEL 37 | 20% | A$1282m |
| PEL 87 | 75% | |

** Full success case based on Company/Hartleys prospective resource estimates'

## Expected News flow

| Expected News flow | | Project |
|---|---|---|
| 2H CY17 | Bombora Acquisition | Completed |
| **Sep-18** | **Cormorant Drilling** | **Namibia** |
| 2H18 | Resource potential of PEL 87 | Namibia |
| 2H18 | Potential Prospect S farm out | Namibia |
| 4Q18 | Prospect S (Chariot) Drilling | Namibia |
| 2019 | Potential Shell Well | Namibia |
| 2019 | Exxon work on PEL 82 / PEL 44 | Namibia |
| 2H18-19 | Alvares Appraisal | California |
| CY19 | Walyering 3D Seismic | Perth Basin |
| CY19 | Potential PEL 87 farm out | Namibia |

Analyst: Aiden Bradley
Phone: 08 9268 2876

Last Updated: 24/08/2018

*Sources: IRESS, Company Information, Hartleys Research*

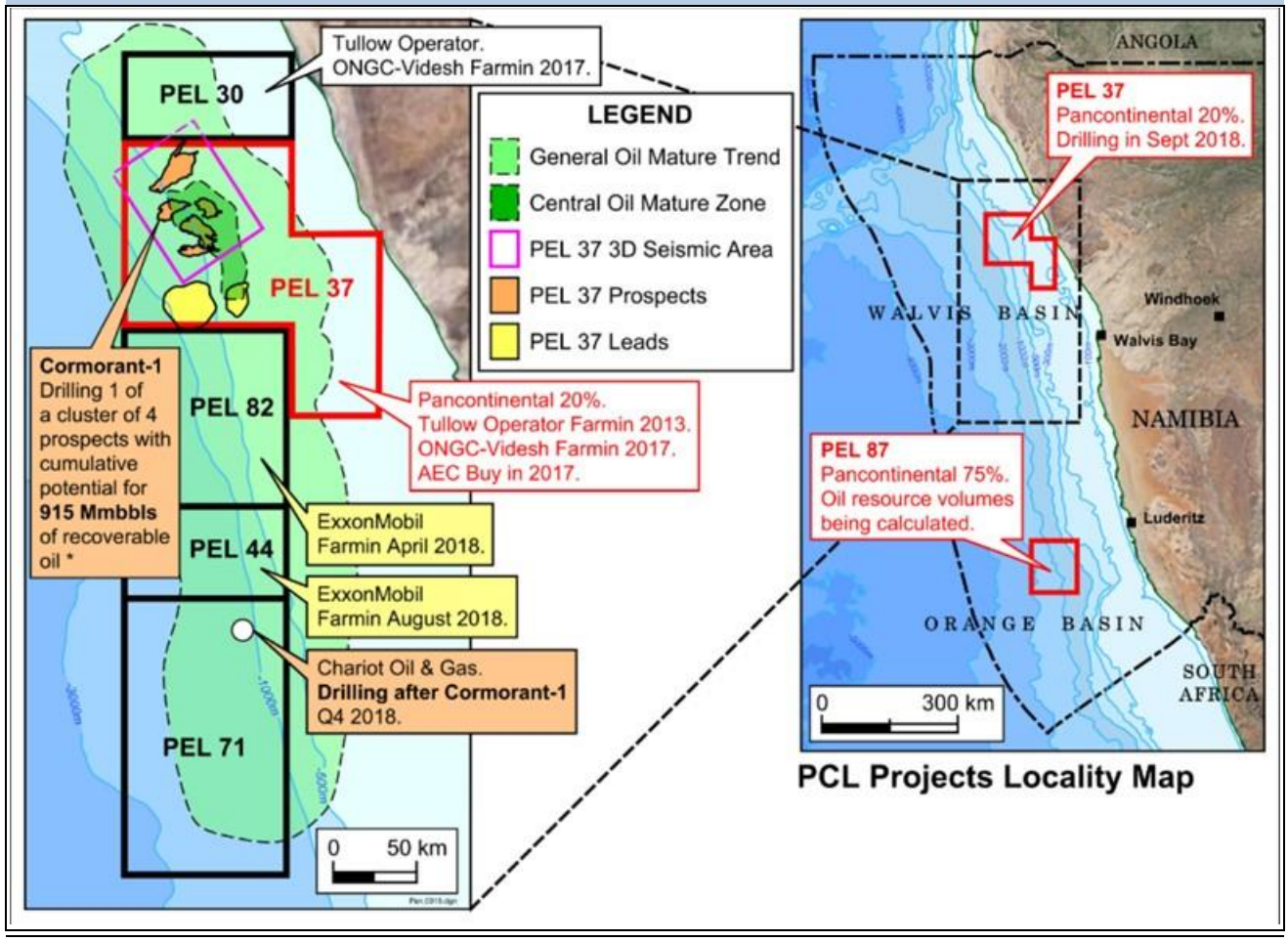
# HIGHLIGHTS

Namibia is fast regaining its pre-2014 reputation as an emerging industry exploration hot spot. In the latest news, ExxonMobil has announced another deal offshore Namibia. This industry leading company is acquiring a 30% interest in PEL 44 from Azinam. PEL 44 is on trend to the south of PCL's PEL 37 block. This is the second deal Exxon has announced on this trend this year, after farming into Galp's PEL 82 in January, PEL 82 adjoins directly to the south of PEL 37.

https://www.petroleumafrica.com/exxonmobil-entering-namibia/

https://www.petroleumafrica.com/exxonmobil-joins-azinam-offshore-namibia/

*Fig. 1: PEL 44 and Exxon, ONGC and Energy Africa farm in's*

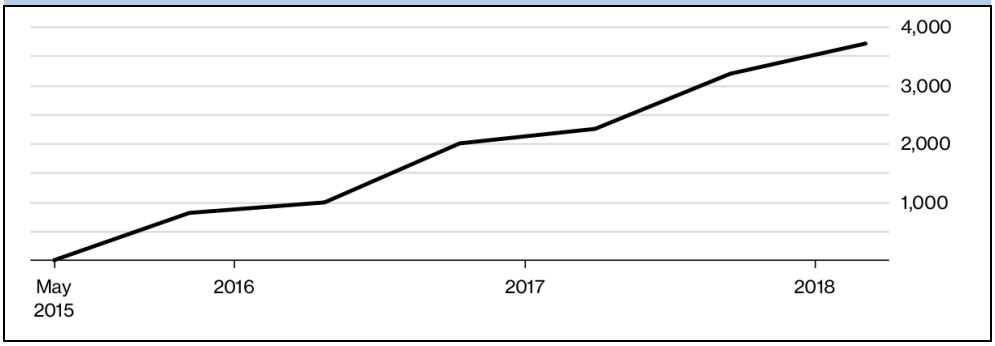



*Source: PCL*

Given Exxon's excellent reputation in the industry and their recent success in Guyana, this is incredibly positive news for PEL 37, PCL and Offshore Namibia overall. ExxonMobil have been instrumental in opening up another Atlantic Margin play with success in Guyana in the past four years. From a standing start in 2015, post eight successful wells, the estimated recoverable resource offshore Guyana now stands at 4bn barrels of oil equivalent.

https://news.exxonmobil.com/press-release/exxonmobil-announces-eighth-discovery-offshore-guyana

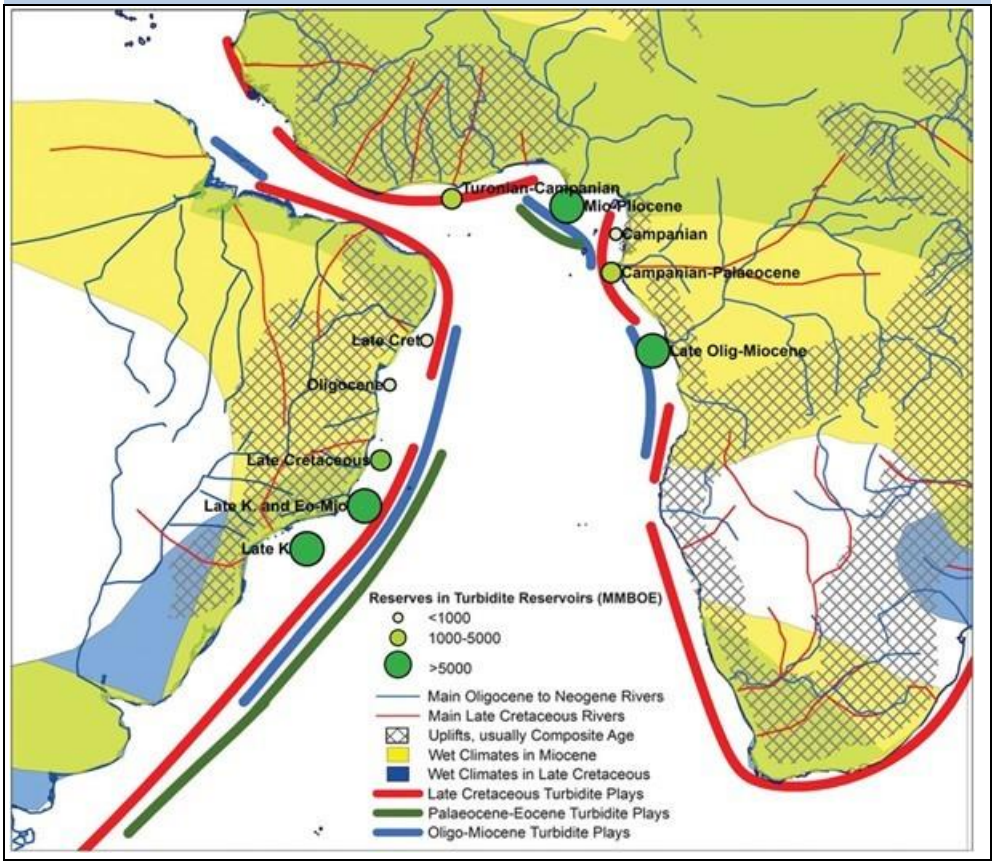
*Fig. 2: Guyana – Minimum Recoverable Resource (mmboe)*




*Source: Bloomberg, ExxonMobil, Guyana's Ministry of Finance*

Given Exxon's recent success in Guyana and their entry along trend with PCL, this has to be perceived as a vote of confidence in the Walvis Basin and its potential to become the next Atlantic Margin success story.

*Fig. 3: Late Cretaceous-Cenozoic sediment and turbidite reservoir supply to South Atlantic margins*




*Source: The Geological Society of London 2013*

Chariot Oil & Gas have also confirmed they have secured the Ocean Rig Poseidon to drill Prospect S in PEL 71 (again on the same trend just below PEL 44) straight after PCL's Cormorant-1 well.

Chariot is the operator of the Central Blocks license offshore Namibia (Chariot 65%, AziNam 20%, NAMCOR 10% and Ignitus 5%). Prospect S has been independently estimated by Netherland Sewell Associated Inc. to host a gross mean prospective resource of 459mmbbl and a probability of geologic success of 29%. It is is one of five dip-closed structural traps, totalling 1,758mmbbl gross mean prospective

resources, that have been identified by Chariot in the Upper Cretaceous turbidite clastic play fairway. A further two higher risk-reward stratigraphic traps, totalling 885mmbbl gross mean prospective resources, have also been identified.

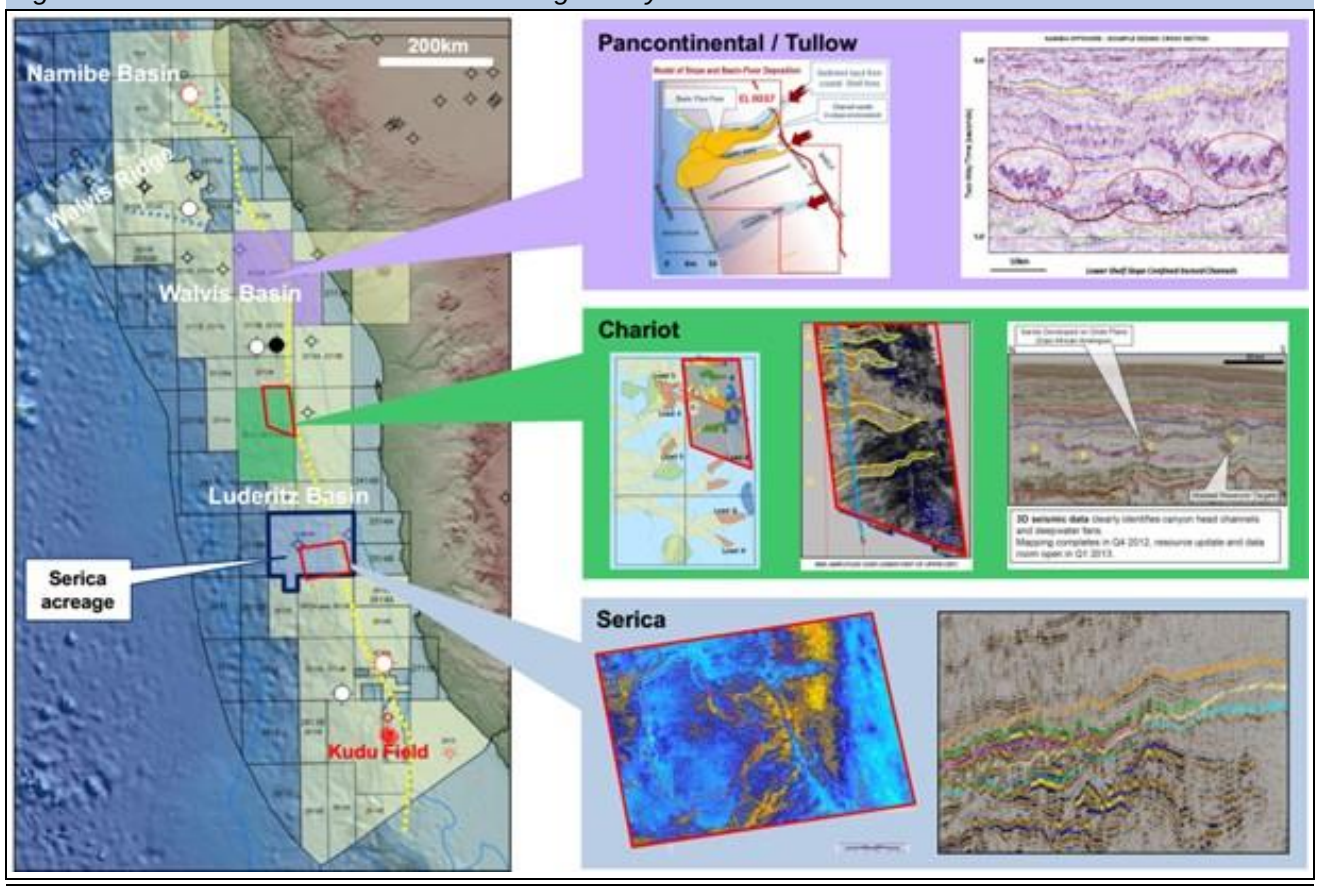
*Fig. 4: Ocean Rig Poseidon – confirmed wells*

| Drilling Unit | Type | Built | Operator | 2018 J A S O N D | 2019 J F M A M J |
|---|---|---|---|---|---|
| Leiv Eiriksson | Semi-Sub | 2001 | Lundin | $150k/day [3] | |
| Ocean Rig Corcovado | Drillship | 2011 | n/a | Las Palmas | |
| Ocean Rig Poseidon | Drillship | 2011 | Tullow/Chariot/Major Oil Company | Walvis Bay, Tullow, Chariot, Major Oil Company | |
| Ocean Rig Mykonos | Drillship | 2011 | n/a | Las Palmas | |
| Ocean Rig Skyros | Drillship | 2013 | Total | $573k/day[4] | |

*Source: Ocean Rig*

Prospect S is only one of a number of Upper Cretaceous, draped fan and channel prospects identified offshore Namibia across multiple basins, so success at Cormorant-1 or Prospect S will likely re-rate the value of acreage all along the coast.

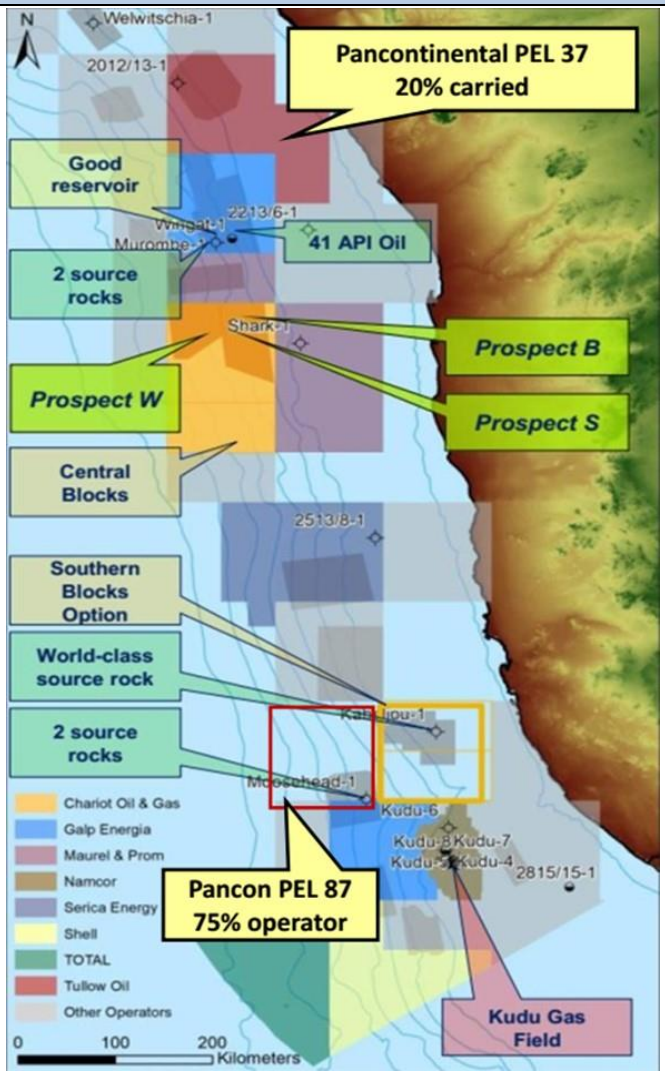
*Fig. 5: Turbidite Channel and Shelf Edge Plays*




*Source: Serica Energy*

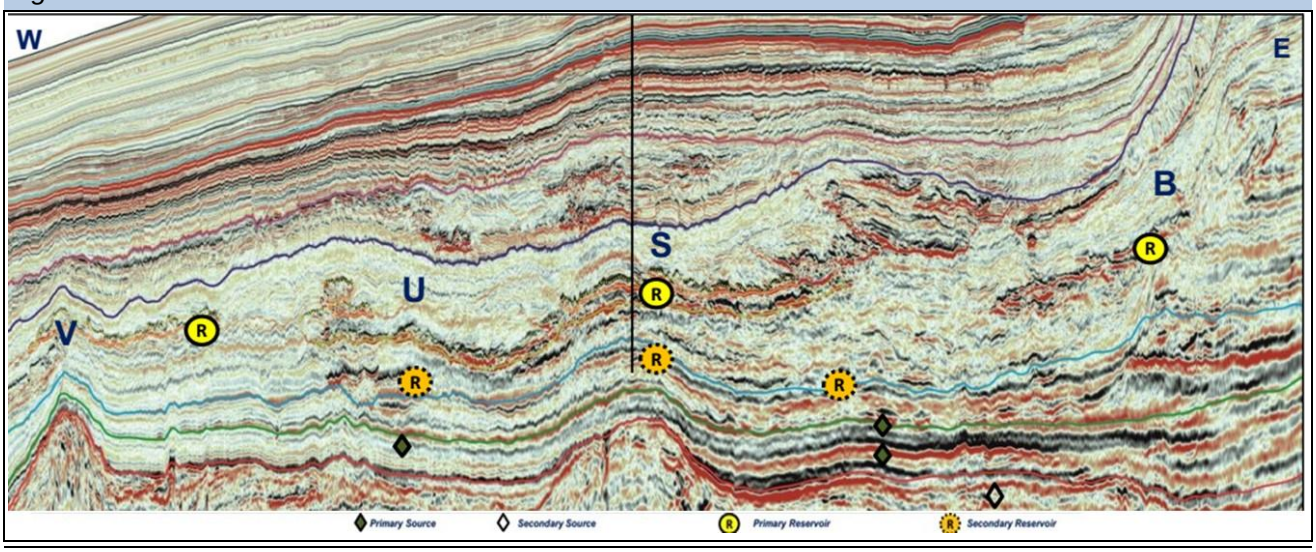
Chariot in their recent Corporate Presentations outlined that in their view all petroleum play elements have been proven by nearby drilling. Wells adjacent to the Chariot acreage encountered excellent quality, oil-prone source rocks. Light oil (41° API) was recovered adjacent to the Central Blocks in reservoirs of the same age as Chariot's target prospects. Excellent quality Upper Cretaceous turbidite reservoir rocks have been encountered in Namibian deepwater wells, with a nearby well having good porosity and permeability at a similar depth as Chariot's targets.

*Fig. 6: Location of Prospect S*




*Source: Chariot Oil & Gas, PCL, Hartleys*

*Fig. 7:* Cross Section of the Central Blocks




*Source: Chariot Oil & Gas*

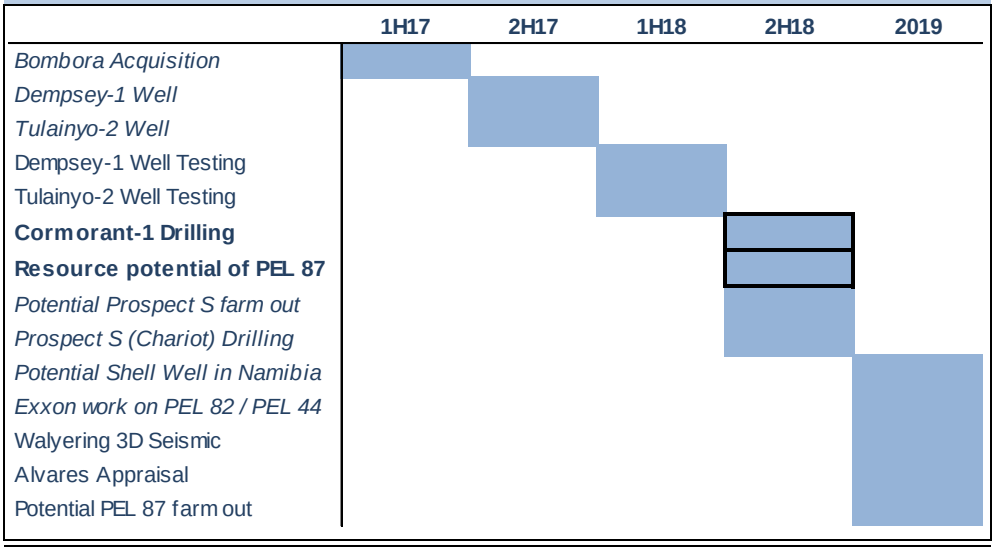
For further reading on the oil potential offshore Namibia we suggest the following summaries.

https://www.iongeo.com/content/documents/Resource%20Center/Articles/FP_FromBasaltToSkeletons_151201.PDF

https://www.pgs.com/globalassets/technical-library/tech-lib-pdfs/offshore_coolekoch_april2014_offshorenamibia.pdf

So, positive news flow regarding offshore Namibia will likely continue to come thick and fast.

*Fig. 8: Potential Newsflow*




*Source: Hartleys*

Potentially the first cab off the rank will be PCL's Cormorant-1 well (PCL 20% and free carried (uncapped)) which is due to spud in mid-September and will take about 4 weeks to complete. PCL estimate that the Cormorant-1 well has a Probability of Geologic Success around 30%, which is roughly similar to what Chariot has disclosed for Prospect S.

*Fig. 9: Central Block Prospects*

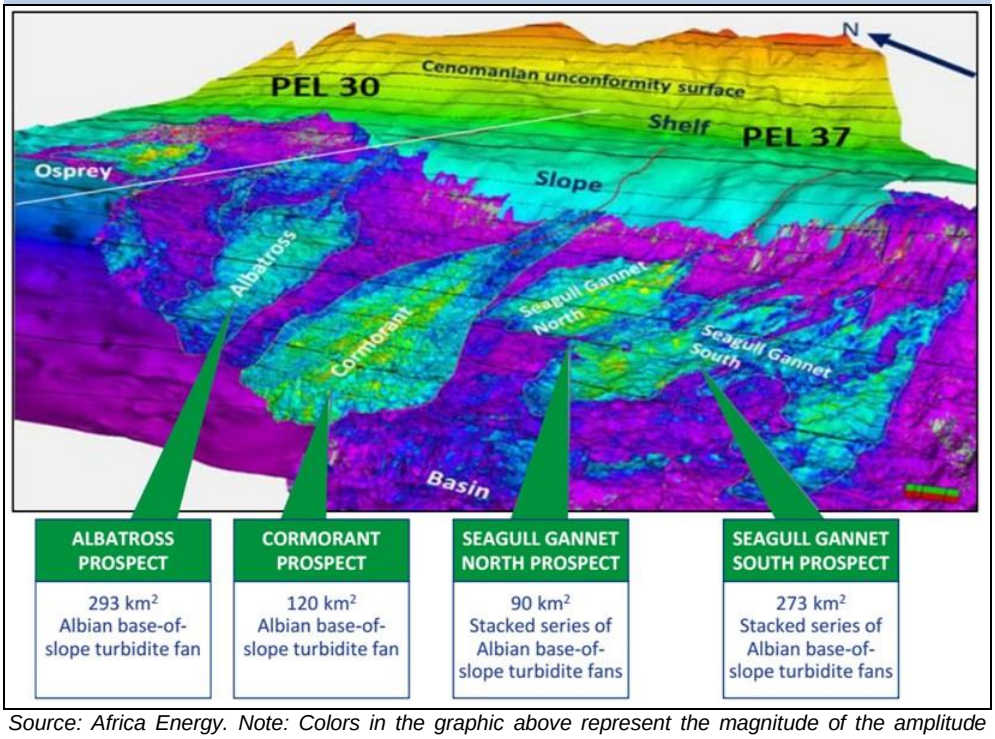
| Block / Licence | Play | Prospect / Lead | Unrisked Gross (100 percent) Prospective Oil resources (MMBBLS) | | | | Probability of Geologic Success (Pg) |
|---|---|---|---|---|---|---|---|
| | | | Low Estimate | Best Estimate | High Estimate | Mean | |
| Central Blocks | Upr Cret slope fan prospects | Prospect B | 203 | 450 | 818 | 469 | 22% |
| | | Prospect D | 186 | 399 | 718 | 416 | 19% |
| | Upr Cret draped fan and channel prospects in 4-way dip closures | Prospect S | 97 | 401 | 1019 | 459 | 29% |
| | | Prospect T | 74 | 254 | 594 | 283 | 22% |
| | | Prospect U | 85 | 344 | 871 | 393 | 24% |
| | | Prospect V | 86 | 302 | 716 | 339 | 24% |
| | | Prospect W | 75 | 252 | 601 | 284 | 25% |

*Source: Chariot Oil & Gas*

Cormorant is one of four large Submarine multiple Cretaceous-aged fans with anomalously soft amplitudes identified by 3D in PEL 37. The amplitude events overlay the proven mature Albo/Aptian source rock in the basin's depo-centre. The

fans have been deposited in a westerly direction and are all stratigraphically trapped against the basin slope. Given the similarities, success at Cormorant would obviously de-risk significantly the follow up targets.

*Fig. 10: Net State Take & Participation by Country*




*Source: Africa Energy. Note: Colors in the graphic above represent the magnitude of the amplitude response rather than scale of prospect.*

# RECOMMENDATION & RISKS

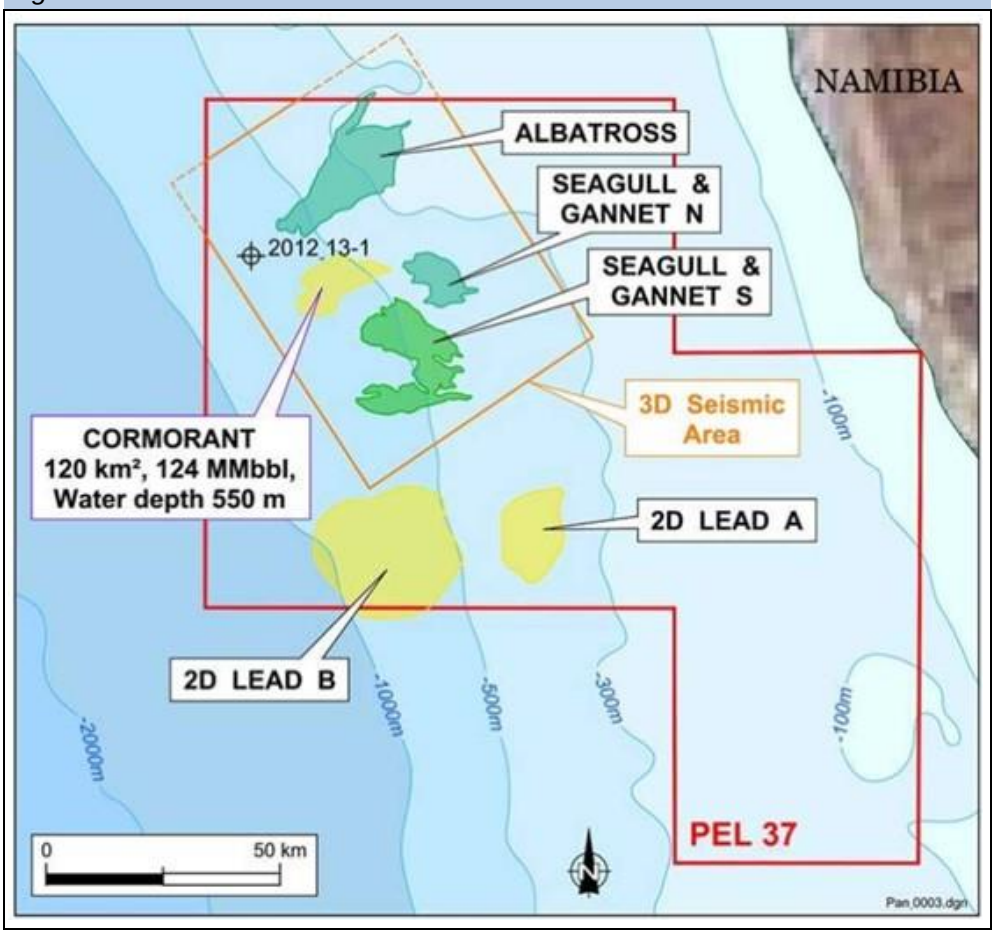
## INVESTMENT THESIS & RECOMMENDATION

So, considering all of the above excitement, how should the market now value PCL ahead of the Cormorant-1 result. The Cormorant-1 well is among the most prospective (if not the most prospective) for 2018 (relative to market capitalisation) in any portfolio across the whole ASX Junior Oil & Gas sector. PCL (with a material 20%) are free carried (uncapped) and the well has been selected by a very high-quality joint venture (Tullow, ONGC and Africa Energy). The recent farm-ins by ExxonMobil directly to the south of PEL 37 even more emphasises its potential. Success at Cormorant would also de-risk the follow up prospects and re-rate the value of acreage up and down the coast. Up to now we have valued PCL's 20% stake on the basis of a transaction value (what we felt the industry would pay directly for it based on back and well costs etc.) at A$36m / 0.62cps. However, with the spud date now firmed up and drilling imminent, any interested industry buyer has surely missed the boat (or would have to pay a higher risked value for the stake).

This valuation compares to Chariot's current market value of circa A$62m. While Chariot have just under US$30m of cash, circa US$19m of this will be required to drill Prospect S (so their current EV is closer to A$50m). Compared to PCL, Chariot also have interests in Morocco and Brazil and a current 65% stake in Prospect S versus just 20% for PCL in Cormorant. However, Cormorant has also secured a number of very high calibre partners (Africa Energy, Tullow and ONGC) hence we

do view Chariot's current EV as a meaningful guide to also value PCL's interests in Namibia.

*Fig. 11: PEL 37*




*Source: PCL*

We have now fully modelled what a success case at Cormorant-1 would look like. Cormorant-1 is targeting a prospective resource of circa 124mmbbl.

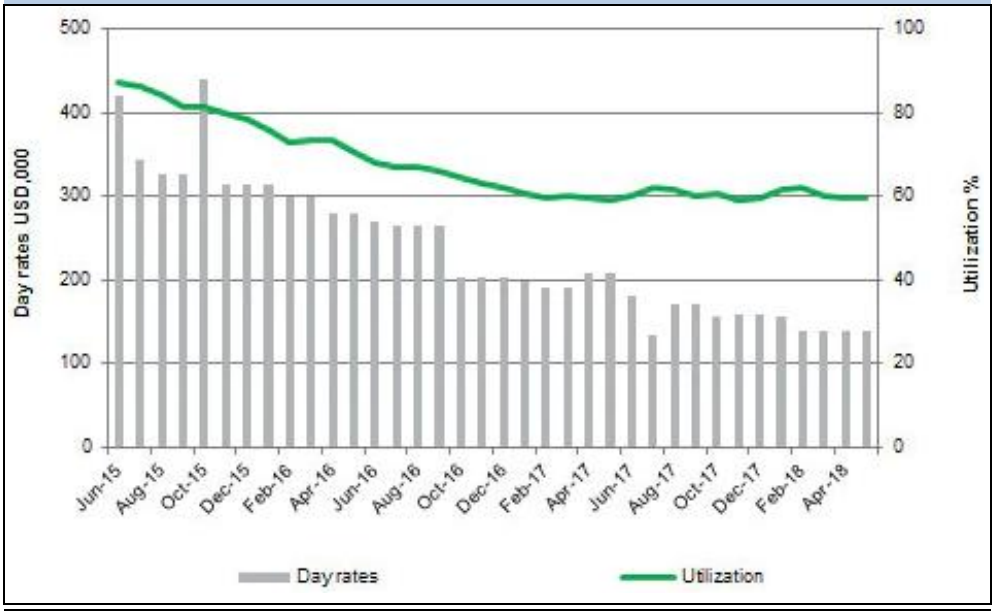
*Fig. 12: PEL 37 Leads and Prospects*

| Prospect Lead | | AREA (Sq Km) | Prospective Resource 100% (MmBbls)* |
|---|---|---|---|
| Albatross | Prospect | 293 | 349 |
| Seagull & Gannet S | Prospect | 273 | 338 |
| Seagull & Gannet N | Prospect | 90 | 104 |
| Cormorant | Prospect | 120 | 124 |
| Upper Fan 2 | Lead | 85 | |
| Lower Fan 3 | Lead | 352 | |
| Lower Fan 4 | Lead | 170 | |
| | TOTAL (Prospects Only) | | 915* |

*Source: PCL*

Drilling costs remain depressed and the Ocean Rig Poseidon was last contracted for a day rate of circa US$175,000 per day, compared to closer to US$470,000 per day at the peak. Hence the cost of Cormorant-1 we expect to be around US$30-35m, which could have been close to double this at the pre-2014 peak.

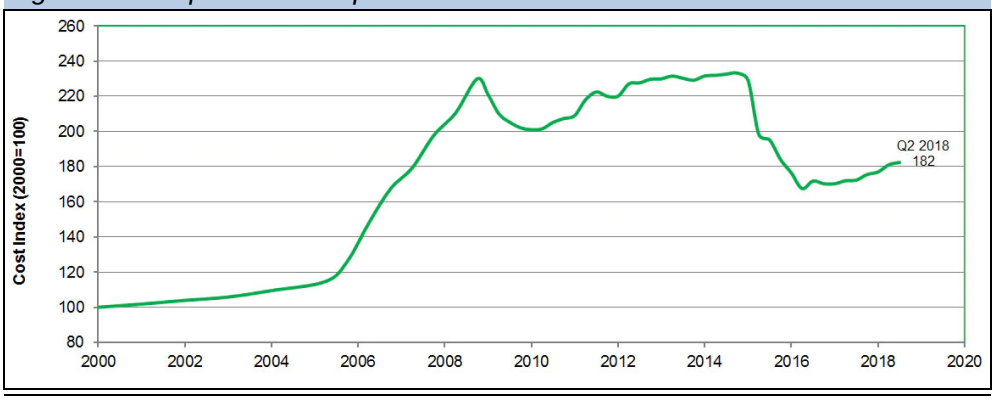
*Fig. 13: Worldwide Drillships >7,500ft*




*Source: IHS Markit*

In the event of success, overall field development costs have also fallen materially since the peak. Cormorant also has the added benefit of being in relatively shallow water (550m). Overall, based on some recent benchmarks, we estimate fully field development capex for Cormorant to be in the US$2.4bn range.

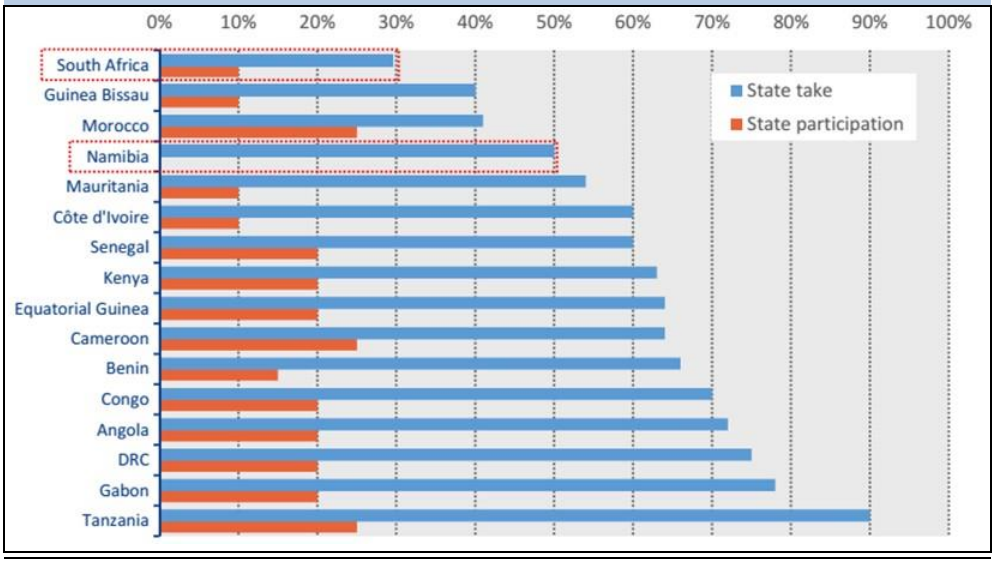
*Fig. 14: Upstream Capital Cost Index*




*Source: IHS Markit*

Namibia continues to have one of the more attractive fiscal regimes in the Atlantic Margin and compared to other comparably prospective offshore regions. There is no direct State participation and the fiscal regime is relatively benign (5% royalty, 35% petroleum tax and a scaled additional petroleum tax that only kicks in when project returns are in the mid-teens and above).

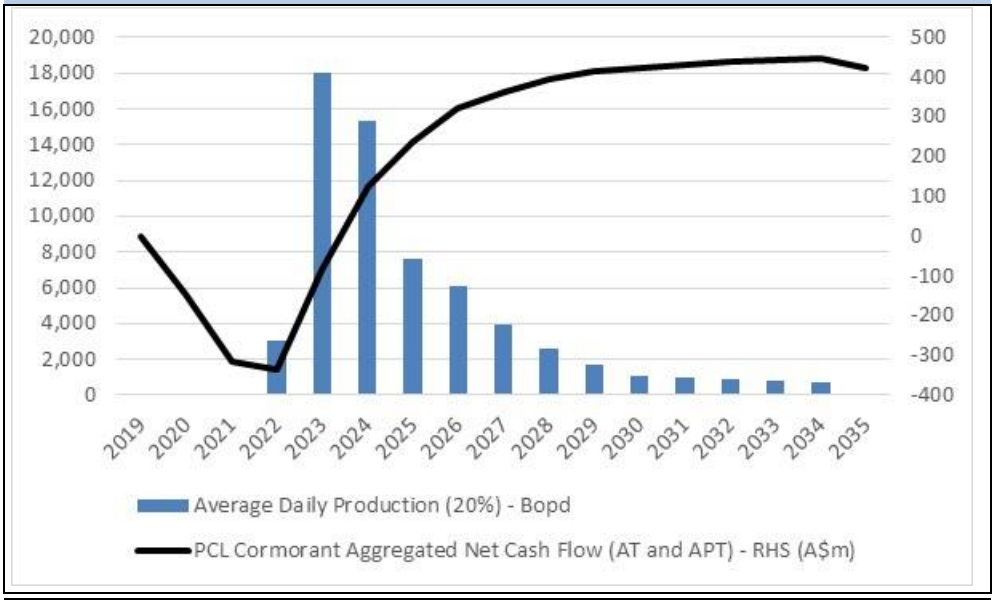
*Fig. 15: Net State Take & Participation by Country*




*Source: Africa Energy*

As a result, the contractors NPV/boe is higher for a similar sized development than many of its (admittedly more proven) neighbours. Based on the current Brent futures curve (US$64/bbl long term) we estimate the NPV10/bbl for the Cormorant development to be US$6.55/bbl, or circa A$200m net (3.4c per share) to PCL for their 20% stake.

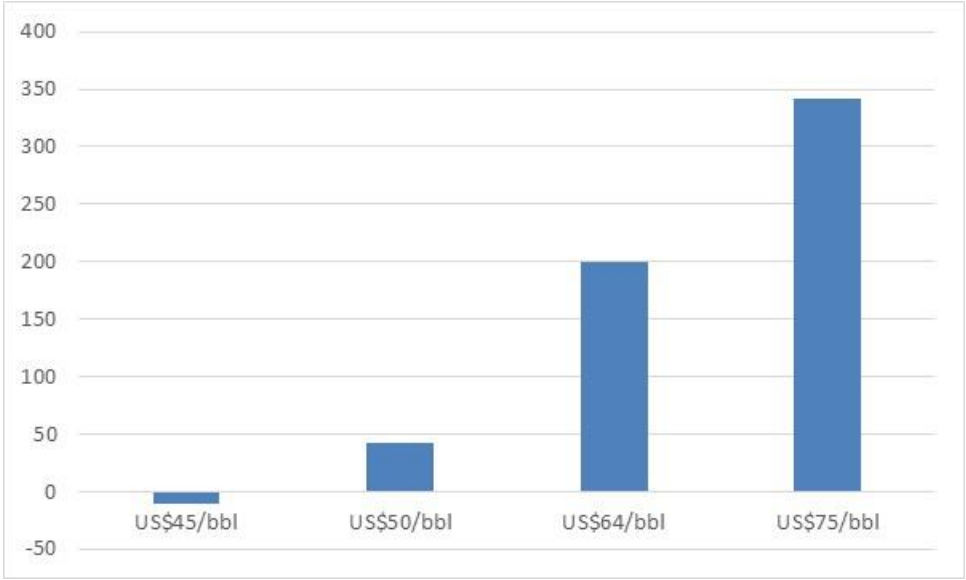
*Fig. 16: Cormorant – Net (20%) Production and Cash Flow*




*Source: Hartleys*

The following chart shows the unrisked NPV10 (net 20%) for Cormorant at differing oil prices. The project looks robust (even on a standalone basis) down to US$45-50/bbl. The fiscal regime in Namibia also allows the contractor to retain a significant share of the profit at higher oil prices, so providing excellent leverage to a stronger oil price over time.

*Fig. 17: Cormorant – Net (20%) NPV10 (A$m) at Differing Oil Prices*




*Source: Hartleys*

The net unrisked (success case) NPV10 of all 4 prospects (a net to PCL prospective resource of 174mmbbl) is close to A$1.3bn (or 22c per share!). This excludes any value for PEL 87 which although in a different basin, would obviously undergo a significant uplift in value post any offshore success in Namibia.

*Fig. 18: Projects and Prospects**

| Region | Project or Prospect | Type | Interest | Net Prospective Resource | Unrisked NPV10 (A$m) | Method of estimation |
|---|---|---|---|---|---|---|
| Namibia | *Farm in Value* | *Transaction Comparable* | | | *36* | *Hartleys* |
| (PEL 37) | Albatross | Oil exploration | 20% | 66.3 mmbbl | 478 | Deterministic Best Estimate |
| | Seagull & Gannet Sth | Oil exploration | 20% | 64.2 mmbbl | 463 | Deterministic Best Estimate |
| | Seagull & Gannet Nth | Oil exploration | 20% | 19.7 mmbbl | 142 | Deterministic Best Estimate |
| | Cormorant | Oil exploration | 20% | 23.5 mmbbl | 200 | Deterministic Best Estimate |
| (PEL 87) | ? | Oil exploration | 75% | ? | ? | To be determinded |

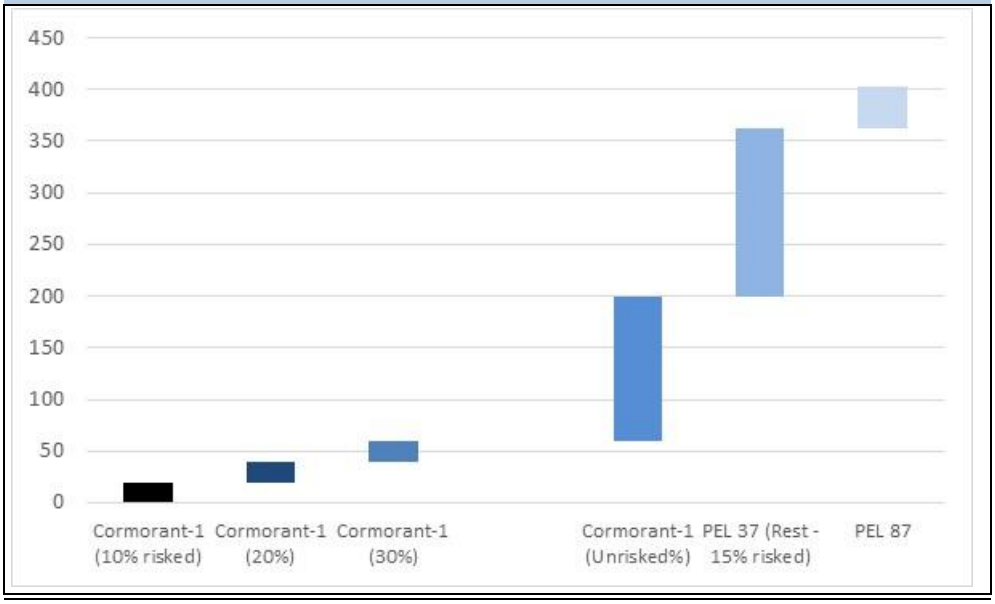
*Source: PCL and Hartleys. * Net Prospective Resources are PCL Estimates excluding Dempsey. NPV10 (unrisked) are Hartleys estimates for the Net Prospective Resource case based on field modelling and comparable comps.*

The following chart shows some risked values (10-30%) for the Cormorant prospect. However, Cormorant cannot be viewed in isolation as success at Cormorant will also de-risk the follow up prospects in PEL 37 and re-rate acreage up and down the coast (including PEL 87 in which PCL has a 75% stake). The chart also shows what we expect the value of PCL could go to in the event the Cormorant-1 delivers the result the JV expects (a circa 120mmbbl discovery).

So, if the upside upon success could be a valuation circa A$400m, what is the downside upon failure? The Company is due a circa $7m payment from partner AEC upon Cormorant-1 spudding. Interest in Namibia and even PEL 37 will also likely not end with a failure at Cormorant-1. As mentioned earlier, the ingredients are in place for Namibia to join the ranks of major oil producers along the Atlantic Margin. We have very high expectations that Cormorant will be a technical success, the risk is that it does not deliver commercially viable quantities of hydrocarbons, it may simply

be the wrong prospect. So, we would still expect a success at the follow up Prospect S to have positive implications for PCL and PEL 37 as there are similar targets to drill. Additionally, any drilling by Exxon in CY19 in the Walvis Basin or Shell and/or Total close to PEL 87 in the Orange Basin (which looks equally as exciting) would also have positive knock on implications for the perceived value of PCL's two licenses.

*Fig. 19: PCL Risked NPV (A$m)*




*Source: Hartleys*

**In conclusion we continue to rate PCL a Speculative Buy**

The recent good performance of PCL's share price obviously makes the investment call a little harder. The share price has surpassed our prior valuation which was based on a transaction value and with the spudding of Cormorant-1 now imminent the market is likely to value PCL on the basis of a perceived risked outcome (until we get the result obviously). At the current share (adjusting for net cash and subscribing little or no value to the Perth Basin and US assets) it would seem the market is currently risking the Cormorant-1 well at around 10%. While we do not expect the Australian market to align itself with the 30% Geological Probability of Success (Namibia remains unproven and still relatively unknown in the Australian market), by using our recent experience of CVN pre-result, using that as a comparison we expect the market to eventually risk the well in the high teens, implying the share price could hit 1.25c per share pre-result.

While deriving a pre-result estimate is as much art as science, based on the very recent experience of CVN, we see this as justifiable given the equally high-quality nature of the Cormorant-1 well. In the event of success in line with pre-drill expectations a valuation close to $400m (circa 7.5c per share on the current issued share capital) could be achieved, given the de-risking of follow up targets. In the event of a failure at Cormorant-1 we do not view this as game over for Namibia or PEL 37 as we outlined earlier. News flow from other operators or progress at PEL 87 could still support the share price. However, in the event of failure (and before any further news from Namibia) we would expect the stock price to retrace towards 3.5c per share.

We set out near term (pre-result) target price at 1.25c per share (up from 0.7c per share based on recent CVN performance as a benchmark) therefore at current levels rate PCL a Speculative Buy.

## RISKS

The key risks for PCL (like most oil & gas exploration and development companies) is making an economic discovery and obtaining the funding for ongoing exploration. Other risks include delays, key person risk, country/sovereign risk, weather, JV partner obligations and cost inflation. Investing in explorers is very risky given the exploration value of the company in essence assumes that the market will recognise a portion of potential value before the results of an exploration program are known, conscious that the ultimate chance of success is low (typically 1%-20%) and that failure is much more likely, in most cases. Other risks are earnings and cash flow disappointments given the industry is volatile and cash flow expectations can disappoint due to cost overruns, project delays, cost inflation, environmental regulations, resource estimate errors and management performance and contract negotiation skills. High financial leverage (if it exists at that time) would add to the problem.

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## Hartleys Recommendation Categories

| | |
|---|---|
| Buy | Share price appreciation anticipated. |
| Accumulate | Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy". |
| Neutral | Take no action. Upside & downside risk/reward is evenly balanced. |
| Reduce / Take profits | It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period. |
| Sell | Significant price depreciation anticipated. |
| No Rating | No recommendation. |
| Speculative Buy | Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk. |

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