![Northington Partners]

New Zealand Oil & Gas Limited

Independent Adviser's Report Prepared in Relation to the Proposed Scheme of Arrangement with O.G. Oil & Gas (Singapore) Pte. Ltd.

September 2019

Statement of Independence

Northington Partners Limited confirms that it:

- Has no conflict of interest that could affect its ability to provide an unbiased report; and
- Has no direct or indirect pecuniary or other interest in the Scheme considered in this report, including any success or contingency fee or remuneration, other than to receive the cash fee for providing this report.

Northington Partners Limited has satisfied the Takeovers Panel, on the basis of the material provided to the Panel, that it is independent under the Takeovers Code and the Panel's requirements for schemes of arrangement involving Code companies for the purposes of preparing this report.

Northington Partners Limited has engaged RISC Advisory Pty Limited to provide valuation services in connection with this report. RISC Advisory Pty Limited has been approved by the Panel in relation to the services provided by them in relation to this report.

Table of Contents

Abbreviations and Definitions

$m	Currency denoted in one million dollars
2P	Proved plus probable reserves with a 50% probability of oil/gas recovery exceeding the P50 estimate
A$	Currency denoted in Australian dollars
ASX	Australian Securities Exchange
bbl	Barrels, a unit volume of oil
Beach Energy	Beach Energy Limited
Boe	Barrel of oil equivalent, a measure of energy equivalent to one barrel of oil
Bohorok Sale Agreement	The agreement and terms surrounding the divestment of NZO's interest in Bohorok PSC
BP	BP Developments Australia Pty Limited
Clipper	Exploration permit Clipper PEP 52717
Companies Act	Companies Act 1993
Code	The Takeovers Code set out in the Takeovers Regulations 2000
Cue	Cue Energy Resources Limited
DCF	Discounted cash flows
ESOP	NZO’s Employee Share Ownership Plan
EV	Enterprise Value
Expiry Date	The date at which a Participant’s interest in a PPS is forfeited under the ESOP if the PPS is not fully paid up
FY	Financial year ending 30 June
GJ	Gigajoules (one billion joules)
IAR	This Independent Adviser's Report prepared by Northington Partners
Ironbark Prospect	Exploration permit WA-359-P and WA-409-P
Ironbark Transaction	NZO's acquisition of a 15% interest in the Ironbark Prospect from Cue Energy
Issue Price	Issue price of a PPS
Kisaran Option Agreement	An agreement for the grant of an option to acquire the entire issued share capital of NZOG Asia Pty Limited dated 18 March 2019
kt	Kilotonnes (1,000 tonnes)
Kupe	Petroleum Mining Lease PML 38146
mmBoe	Million Boe
Mungaroo Formation	The Mungaroo formation is a petroleum resource prospect located across the north-western margin of Australia
NZ$	Currency denoted in New Zealand dollars
NZO or the Company	New Zealand Oil & Gas Limited
NZX	NZX Limited
NZX Main Board	The main board equity securities market operated by NZX
OGOG	O.G. Oil & Gas (Singapore) Pte. Ltd., a wholly owned subsidiary of O.G. Oil and Gas Limited
Participants	Nominated employees participating in the ESOP
PJ	Petajoules (1 million GJ)
PPS	Partly paid shares in NZO
PPS Offer Prices	$0.01 for Tranche 1 of the PPS and $0.09 for Tranche 2 of the PPS
PSC	Production Sharing Contract
RISC	RISC Advisory Pty Limited
Scheme	A scheme of arrangement under Part 15 of the Companies Act under which OGOG intends to acquire all of the NZO shares that it does not already own in accordance with the SIA
Scheme Booklet	The notice of meeting and accompanying materials including this IAR sent to NZO shareholders
Scheme Price	NZ$0.62 per ordinary fully paid share
SIA	The scheme implementation agreement dated 9 July 2019 between NZO and OGOG
SRK	SRK Consulting (Australasia) Pty Ltd
Toroa	Exploration permit Toroa PEP55794
Trustee	NZOG Services Limited in its capacity as trustee of the ESOP
US$	Currency denoted in United States dollars

VWAP	Volume Weighted Average Price

1.0 Overview of the Scheme

1.1. Introduction

New Zealand Oil & Gas Limited (**"NZO"** or the "**Company**") is a New Zealand based oil and gas exploration and production company. The company's assets primarily consist of four components:

- An adjusted cash balance of approximately NZ$74 million[1];
- A 4.0% interest in the Kupe gas and light oil / condensate production field in offshore Taranaki, New Zealand;
- Exploration assets in New Zealand and Australia; and
- A 50.04% shareholding in Australian Securities Exchange ("**ASX**") listed Cue Energy Resources Limited (**"Cue"**).

NZO is listed on the NZX Main Board, being the main board equity securities market operated by NZX Limited ("**NZX**"). The Company has approximately 164 million fully paid ordinary shares on issue as well as just over 3.4 million partly paid shares ("**PPS**") that were issued pursuant to an employee share ownership plan (**"ESOP"**).

1.2. Summary of the Scheme

On 10 July 2019, NZO announced that it had entered into a scheme implementation agreement (**"SIA"**) with O.G. Oil & Gas (Singapore) Pte. Ltd. ("**OGOG**") under which OGOG seeks to acquire all of the fully paid ordinary shares of NZO that it does not already own for cash consideration of NZ$0.62 per share ("**Scheme Price**"). The Scheme would also involve OGOG acquiring Tranche 1[2] of the partly paid shares ("**PPS**") at NZ$0.01 per PPS and Tranche 2 at NZ$0.09 per PPS ("**PPS Offer Price**"). Pursuant to the SIA, all of the fully paid ordinary shares (not already held by OGOG) and all the PPS would be acquired by OGOG through a scheme of arrangement ("**Scheme**") under the Companies Act 1993 ("**Companies Act**").

The Scheme is subject to a number conditions before it will become binding, the full details of which are set out in the Scheme Booklet to be sent to NZO shareholders. A summary of the key conditions is as follows:

- NZO's shareholders must approve the Scheme at a special meeting of shareholders. The voting thresholds under the Companies Act for approval of the Scheme are:
  - a simple majority of the votes of all NZO shareholders entitled to vote on the Scheme resolution; and
  - a majority of at least 75% of the total votes cast by shareholders in each interest class entitled to vote and voting on the Scheme resolution.
- Overseas Investment Office consent; and
- High Court approval of the Scheme which will make the Scheme binding on NZO and NZO shareholders.

For the purposes of voting on the Scheme, we highlight that OGOG's shares are treated as a separate interest class to both NZO's remaining fully paid ordinary shares and the PPS. This means that in order for the Scheme to be approved, 75% of the votes of non-OGOG shareholders who vote on the Scheme must be in favour of the Scheme resolution. Realistically, not all shareholders will cast their votes at a meeting or by proxy. Therefore, the threshold to approve the Scheme is likely to be less than 75% of votes of non-OGOG shareholders and the outcome of the Scheme resolution will be heavily influenced by the number of shareholders who vote.

[1] See Section 3.7 for how adjusted net cash was calculated.
[2] See Section 3.8 for a description of the PPS tranches.

The Scheme also incorporates a range of termination rights and representations and warranties that are standard for this type of transaction.

1.3. Proposed Transaction Timetable

Table 1 provides a summary of the key events for the Scheme implementation.

Table 1: Transaction Timetable

Event	Date
Date for determining eligibility to vote	14 October 2019
Shareholder Scheme meeting	16 October 2019
Last day for objections to the Scheme to be filed in court	21 October 2019
Anticipated receipt of final court orders	31 October 2019
Last date on which NZO shares will trade on the NZX Main Board	5 November 2019
Scheme Record Date	7 November 2019
Implementation Date	14 November 2019

Source: NZO. All dates in the table above are indicative only and subject to change and the satisfaction of various approvals and conditions under the Scheme.

1.4. Requirements of the Takeovers Code

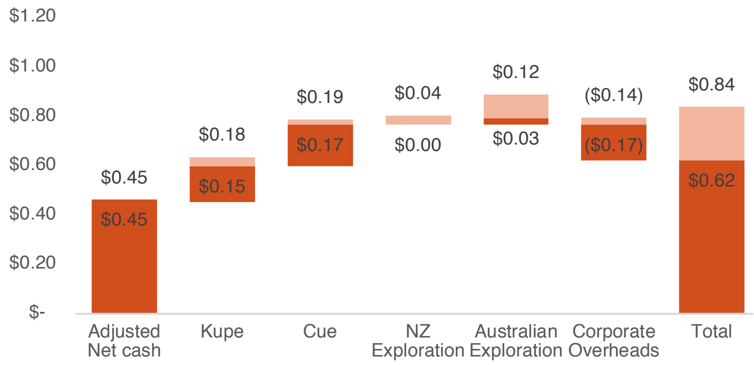
As a listed company, NZO is subject to the Takeovers Code ("**Code**"). While there is no legal requirement under the Code for an independent adviser's report in relation to a scheme arrangement, the practice of the Takeovers Panel is to require an independent adviser's report before it will consider issuing a no-objection statement to the Court as part of the Court's process of considering whether to approve the Scheme. It is also customary practice in New Zealand for an independent adviser's report to be provided to shareholders when considering a transaction of the nature of the Scheme.

Accordingly, NZO requested Northington Partners Limited ("**Northington Partners**") to prepare this IAR setting out our view of the merits of the Scheme. Further details on the regulatory requirements and scope of this report are set out in Appendix 1.

This report will accompany the Notice of Meeting to be sent to all NZO shareholders and sets out our opinion on the merits of the Scheme. This report will also be provided to the Court considering the Scheme. This report should not be used for any other purpose and should be read in conjunction with the declarations, qualifications and consents set out in Appendix 2.

1.5. Summary of our Assessment of the Scheme

Item	Key Conclusions	Further Information
Comparison of the Scheme Price to the Underlying Value of Ordinary Shares	▪ We have valued 100% of the equity in NZO in a range between \$102 and \$138 million, which corresponds to a value of \$0.62 to \$0.84 per share. **NZO Sum of the Parts Valuation Range (NZ\$ per Share)[1]**	**Section 4.1**



[1] *See Section 3.0 for how each component value was derived including the adjustments made to NZO's 30 June 2019 cash balance.*

- As summarised above, our valuation of NZO is based on a sum-of-the-parts approach which is predominantly made up of adjusted cash ($0.45 per NZO share), the 4% interest in Kupe and its Cue shareholding. The low end of our value range attributes no value to NZO's exploration interests other than the value of the consideration effectively paid by NZO for its recently acquired 15% Ironbark Prospect interest.
- The OGOG Scheme Price of $0.62 per share is at the bottom end of our assessed value range of $0.62 to $0.84 and we therefore characterise the offer price as reasonable, but not overly compelling. However, as discussed further below and in Section 4.2, there are a range of other key factors that should be considered in conjunction with the price comparison.

Assessment of the fairness of the PPS Offer Price	▪ NZO has two tranches of PPS on issue with various expiry dates and issue prices. We have valued Tranche 1 at $0.01 per PPS and Tranche 2 at $0.07 to $0.11 per PPS. As OGOG is offering $0.01 per PPS for Tranche 1 and $0.09 for Tranche 2, we conclude that the prices offered for the PPS are fair and reasonable compared to the Scheme Price and are fair and reasonable as between each tranche of PPS.	**Section 4.1.2**
Potential for Alternative Offers or Higher Scheme Price	▪ We suggest that there is a low likelihood of an alternative offer emerging for NZO. This view reflects that OGOG already owns approximately 70% of the NZO shares and that any competing offer would therefore need OGOG's support to be successful. ▪ It is difficult to assess whether OGOG would increase the Scheme Price or make a new offer for NZO if the current proposal was not approved. However, we note that the NZO independent directors have recommended the Scheme. In the absence of a competing offer, it therefore appears unlikely that OGOG would be compelled to increase the Scheme Price or make a new offer for NZO.	**Section 4.3**
Prospects of the Company under the Status Quo	▪ If the Scheme is unsuccessful, NZO will continue to manage its current assets and obligations. This includes Kupe, evaluation of the Ironbark Prospect and continuing to assess farmout opportunities for its New Zealand exploration interests. However, the New Zealand Government's recent ban on new permits for offshore oil and gas exploration creates greater uncertainty in attracting investment partners for existing exploration interests and future exploration investment activity in New Zealand. Consequently, NZO's future strategy is uncertain, given that its ability to grow in New Zealand by pursuing new investment and exploration opportunities is likely to be limited. ▪ As NZO is now committed to the Ironbark Prospect and has near-term drill or abandon targets for its New Zealand exploration interests, its current exploration risks are more acute. We would suggest that, given the current environment, NZO is more likely to reconsider its future strategy depending on the conclusion of the Ironbark Prospect appraisal. We consider this may include further international investment or the winding-up of its operations. ▪ NZO has a total near term commitment to the Ironbark Prospect of approximately NZ$24 million (excluding Cue's share of costs). Although the Ironbark Prospect has attracted interest from major oil companies including BP and Beach Energy, the chance of technical success is currently	**Section 4.2.2**

	considered to be low. While a successful discovery would result in considerable upside value for NZO, a failed exploration could effectively see NZO losing NZ$24 million (approximately $0.15 per NZO share, excluding the impact on Cue's cash balance). ▪ While an investment in an oil and gas exploration business such as NZO is inherently risky, shareholders may wish to consider their risk appetite for the Ironbark Prospect and NZO's current and possible future exploration activities in evaluating the merits of the Scheme. While the Scheme Price of $0.62 is at the bottom end of our valuation range of $0.62 to $0.84, it does provide shareholders with the opportunity to crystallise some value for NZO's exploration activities today without taking on the risks associated with exploration.	
Potential Outcomes of the Scheme	▪ Assuming all other conditions of the Scheme are met, including Overseas Investment Office consent and court approval, the Scheme will proceed if approved by: i. More than 75% of the votes cast in each interest class on the relevant resolution; and ii. A simple majority of the votes of all NZO shares on issue. ▪ While OGOG already owns 70% of the fully paid ordinary shares on issue, support from 75% of the votes of non-OGOG shareholders who vote is required in order for the Scheme to proceed (due to OGOG voting as a separate class). ▪ As some shareholders may not decide to cast their votes, approval of the Scheme by a relatively low proportion of the remaining shareholders may be sufficient for the Scheme to proceed.	**Section 4.2**
Other Merits of the OGOG Offer	▪ While we note that the OGOG Scheme Price of $0.62 is at the at the bottom end of the underlying value range for the NZO shares of $0.62 to $0.84, some shareholders may see the Scheme as an opportunity to sell their shareholding at a guaranteed price (without brokerage costs) and without incurring the immediate and significant investment risk attached to NZO's Ironbark Prospect. ▪ If shareholders wish to retain an exposure to the Ironbark Prospect, accepting the OGOG Scheme and investing part of the proceeds directly in ASX listed Cue or Beach Energy (which also has interests in Kupe and Clipper) would provide a continued exposure to the Ironbark Prospect while realising the value of NZO's other assets. ▪ We also suggest that given the market price of NZO shares is currently trading near the Scheme Price, the market views the likelihood of the Scheme proceeding as high. NZO shares are likely to trade at a value lower than $0.62 if the Scheme is not approved.	

1.6. Acceptance or Rejection of the Scheme

This report represents one source of information that NZO shareholders may wish to consider when forming their own view on whether to approve the Scheme. It is not possible to contemplate all shareholders' personal circumstances or investment objectives and our assessment is therefore general in nature. The appropriate course of action for each shareholder is dependent on their own unique situation. Shareholders should read the Scheme Booklet and, if appropriate, consult their own professional adviser(s).

2.0 Company Overview

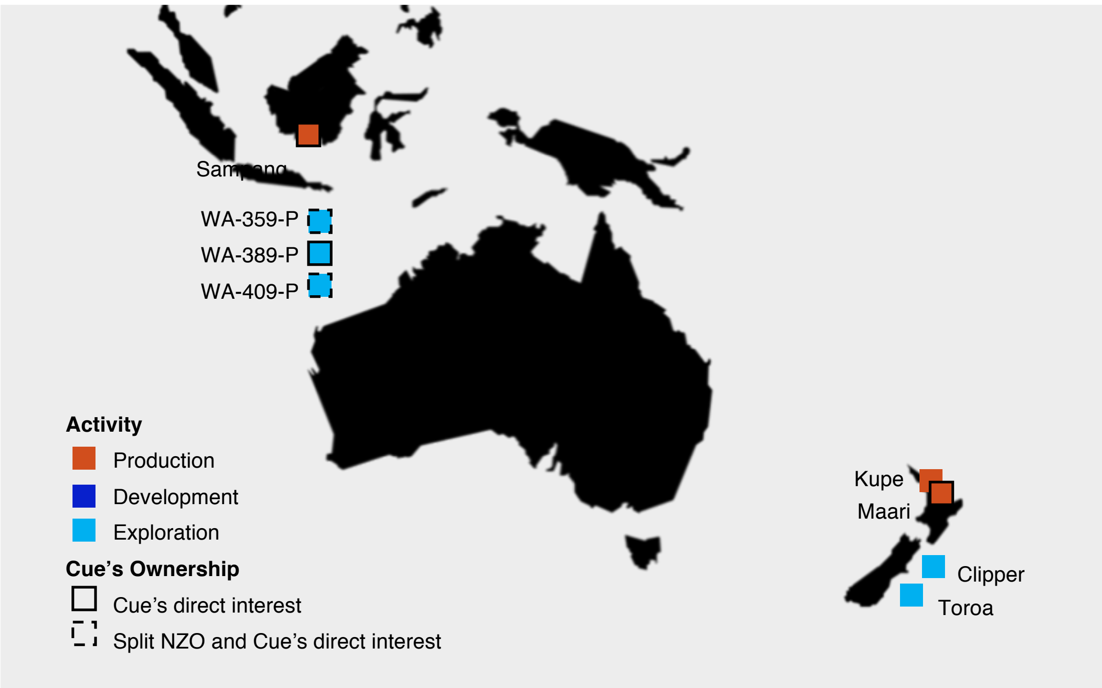
2.1. Company Overview

NZO is an upstream oil and gas exploration and production business with assets in New Zealand and Australia. Following their effective divestment, NZO no longer has any production or exploration interests in Indonesia although it does retain some exposure under certain conditions of their sale being met. NZO's primary assets include:

- 4.0% interest in the Kupe gas and light oil / condensate production field in offshore Taranaki, New Zealand;
- 50% interest in the Clipper (PEP 52717) oil and gas exploration field in the Canterbury Basin;
- 100% interest in the Toroa (PEP 55794) oil and gas exploration field in the Great Southern Basin;
- 15.0% direct interest in the WA-359-P permit in the Carnavon Basin in North Western Australia and an option for a 5.36% interest in WA-409-P (together the Ironbark Prospect);
- 50.04% interest in Cue which also has producing fields in New Zealand (Maari and Manaia in offshore Taranaki) and Indonesia (Sampang PSC), exploration interests in Australia including a 21.5% interest in WA-359-P, a 20.0% interest in WA-409-P and other Australian and Indonesian exploration interests.

Figure 1 below details the locations of the various oil and gas interests of NZO, including those indirectly owned through Cue.

Figure 1: NZO Oil and Gas Interests



Note: not to scale

2.2. History

Key events in NZO's history are summarised below in Table 2.

Table 2: Historical Milestones

Date	Event
1981	NZO founded.
1986	Kupe gas and oil field discovered.
1988	NZO acquires Pike River Mine.
1991	Ngatoro oil field discovered and developed.
2003	Tui oil field discovered.
Jun-06	Development of Kupe started. NZO held a 15% stake in the field at the time.
Jul-07	Tui commences production.
2007	NZO retains approximately 30% shareholding in Pike River Mine post its IPO.
Mar-10	Kupe enters permanent production.
Nov-10	Pike River Mine disaster.
Oct-13	NZO acquires an additional 15% stake in the Tui area oil fields.
Dec-14	NZO acquires a 19.9% stake in Cue.
Feb-15	NZO returns $63.2m through a 1 for 5 share cancellation at $0.75 per share.
Mar-15	NZO acquires an additional 28.12% stake in Cue.
May-16	NZO delists from the ASX.
Sep-16	NZO returns $9.2m through a share buyback at $0.55 per share.
Jan-17	NZO sells its 15% stake in Kupe to Genesis Energy for $168m, with an effective transaction date of January 2017.
Jan-17	NZO increases its stake in ASX-listed Cue from 48.11% to 50.01%.
Feb-17	NZO sells its 27.5% stake in the Tui area oil fields for US$0.75m, with an effective transaction date of 1 January 2017.
May-17	NZO returns $100m of capital to shareholders through a scheme of arrangement, buying back and cancelling half of its outstanding shares at $0.627 per share.
May-17	NZO announces it has agreed to purchase Mitsui E&P Australia's 4% stake in Kupe for NZ$35m. The transaction has an effective date of 1 January 2017.
Aug-17	Zeta issues a partial takeover of NZO.
Aug-17	NZO agrees to sell its Indonesian interests in MNK Kisaran PSC and MNK Palmerah PSC to Bukit Energy Asia Energy Asia Pte. Limited.
Sep-17	OGOG issues partial takeover of NZO.
Dec-17	NZO completes acquisition of its 4% stake in Kupe for $35m, with an effective transaction date of 1 January 2017.
Jan-18	OGOG's partial takeover offer becomes unconditional.
Jun-18	NZO sells interest in Bohorok and Palmerah Baru to Bow Energy International Holdings Inc. subject to regulatory approval.
Oct-18	NZO announces conditional farm in agreement to Ironbark Prospect.
Nov-18	Kohatukai exploration well plugged and abandoned.
Dec-18	NZO reaches conditional agreement to dispose of cost obligations in their directly held Indonesian Exploration interests.
Jan-19	Cue Shareholders approve Ironbark Prospect farm in.
Jun-19	Ironbark Prospect farm in completes.

Source: NZO announcements.

2.3. Kupe

NZO has a long historic association with the Kupe field. The Company discovered Kupe in 1986 and has held an interest in the field since commercial production commenced in December 2009. Cumulative production at Kupe since first production is estimated to total approximately 49.5 million Boe to 30 June 2019. Remaining 2P reserves at Kupe (net to NZO at 4%) as of 30 June 2019 total 9.0PJ gas, 0.27 million bbl and 37.5kt of LPG (representing cumulative reserves of approximately 2.1 mmBoe).

In November 2016, NZO received an offer from Genesis to acquire NZO's then 15% interest in Kupe for $168 million. The sale was subsequently approved by shareholders in December 2016 with the sale becoming effective 1 January 2017. However, in May 2017 NZO announced that it had purchased a separate 4% interest in Kupe from Mitsui for $35 million, with an economic effective transaction date of 1 January 2017. Overseas Investment Office consent was gained in December 2017 and the transaction settled for approximately $30 million (allowing for depletion from 1 January 2017 until settlement).

The remaining interests in the Kupe field and joint venture are held by Beach Energy Limited ("**Beach Energy**") (50%) and Genesis Energy (46%). Beach Energy is the operator of the field.

Based on its 4% interest in Kupe, NZO's proven and probable (2P) oil and gas reserves as of 30 June 2019 are summarised in Table 3 below.

Table 3: NZO Proven and Probable (2P) Oil and Gas Reserves at 30 June 2019

	Oil and Condensate (million bbl)	Natural Gas (PJ)	LPG (kt)	Total Reserves (mmBoe)
Kupe	0.27	9.0	37.5	2.06

Source: NZO. mmBoe has been calculated as the total oil equivalent of the oil, condensate/light oil, natural gas and LPG figures, using conversion factors consistent with the Society of Petroleum Engineers (SPE) guidelines. Conversion factors used are: 163.5 Boe per TJ of natural gas and 8.17 Boe per tonne of LPG.

2.4. New Zealand Exploration Assets

Following OGOG's acquisition of 70% of NZO's ordinary shares, the environment for offshore oil and gas exploration in New Zealand has changed significantly. In April 2018, the New Zealand Government decided it would no longer award new offshore exploration permits. While this does not impact existing permit rights, including NZO's interests in Clipper and Toroa, it has had a significant impact on international interest in New Zealand frontier exploration where the country may be considered as closed for business. This is evident in international companies withdrawing from New Zealand. Given current market and political conditions it also increases the uncertainty for NZO in attracting co-investment for its New Zealand exploration interests, a summary of which is provided below.

2.4.1. Clipper PEP 52717

The Barque prospect is NZO's primary target within the Clipper permit. Barque lies in about 800 metres of water, approximately 60 kilometres off-shore east of Oamaru. The target formations lie between 2,500 and 3,000 metres below mean sea level. NZO is the operator and holds a 50% interest in the permit. The other joint venture party is Beach Energy (50%).

Extensive 2D seismic surveys were conducted in the Canterbury Basin in the 1970s and 1980s before the only existing well in the block, Clipper-1, was drilled by BP in 1984. This drilling activity recovered samples of hydrocarbons. 3D seismic surveys of Barque were completed at the end of 2013 and revealed up to three horizons in the structure. Gross, unrisked prospective resources in liquid (oil or gas condensate) (733 mmBoe (mean) net to NZO). If this resource is considered to be economically recoverable, Barque would be larger than Maui, the largest oil and gas field developed in New Zealand.

NZO has undertaken scoping development work on how the Barque prospect may be commercialised and has produced several development concepts. Given the frontier nature of the basin and location, the resource recovery is highly sensitive to the selected development options and approach eventually chosen will largely depend on interest from partners (including industrial energy users) and investors. The development options broadly include either:

- Off-shore field development involving off-shore production of oil for direct export; or
- Gas to shore facilities to enable development of a long term, reliable gas supply for use in methanol manufacture, fertiliser/urea manufacture, industrial thermal generation and other domestic use. Oil and LPG production could also be exported or used domestically.

The decision for whether or not to drill an exploration well in the Clipper permit is an ongoing discussion. A well commitment decision was due to be made by 11 April 2019, the deadline has now been extended to 11 April 2022. This extension will allow a discussion with potential farm-in partners to re-start again. Meanwhile, NZO's current strategy is to keep a close eye on other exploration acreage in the Great South Basin where wells may be drilled ahead of Barque.

2.4.2. Toroa PEP 55794

Toroa is located in the Great South Basin, south east of the South Island of New Zealand with the primary prospect being Kaipatiki. NZO has a 100% interest in Toroa and is the permit operator. Woodside Petroleum relinquished their 70% holding (and permit operation responsibilities) in 2018 for no consideration. The marketing efforts for a farm-in partner are now being combined with NZO's Clipper permit.

A number of wells were drilled in the Great South Basin during the 1970s and 1980s which showed signs of hydrocarbons, including two within the Toroa permit which discovered hydrocarbon resources that were deemed uneconomic at the time. The Kaipatiki prospect lies further south of previous wells with 3D seismic surveys in 2015 indicating a number of stacked potential reservoir sections and a large potential resource.

Committed work obligations in the permit have been concluded and the deadline for a decision on whether to drill an exploration well or relinquish the permit has recently been extended to April 2022 (consistent with Clipper).

2.5. Indonesian Development and Exploration Assets

NZO has effectively exited all its Indonesian interests. However, it does retain some exposure to them under certain conditions of their sale, as summarised below:

- **Kisaran PSC:** The Kisaran block is located in the Barumun trough in the northern part of the Central Sumatra Basin - the most prolific oil producing basin in South East Asia. Two wells were successfully drilled there, in the Parit Minyak prospect, in 2013. The Parit Minyak-2 and Parit Minyak-3 (PM-3) were the first wells New Zealand Oil & Gas was involved in drilling outside New Zealand and presented both gas and condensate during flow testing.
- In March 2019 NZO entered into an agreement (**"Kisaran Option Agreement"**) with Pacific Oil & Gas. While exact terms of the agreement are confidential, it effectively results in removing any ongoing cost obligations to NZO while retaining the opportunity to receive up to US$1.75 million if Pacific Oil & Gas exercises a call option granted to them prior to December 2021 (any exercise of the option is not subject to regulatory approvals).
- **Bohorok PSC:** The Bohorok block covers 5,021 square kilometres, located in the North Sumatra basin, one of the most prolific basins in Southeast Asia. NZO recently reached agreement to dispose of its holding to the operator on terms that will see it receive a cash payment of USD$2 million if the prospect is developed and production commences following the first well, with a further US$1 million if production commences from a second well. The agreement is subject to regulatory approval.
- **Palmerah Baru PSC:** Palmerah Baru is located on-shore within the South Sumatra Basin where NZO had certain commitments. NZO has entered in an agreement to pay $1 and remove all further cost obligations. The agreement is subject to regulatory approval.

2.6. Australian Exploration Assets

NZO holds interests in three licenses located in the Carnarvon Basin off-shore Western Australia, comprising the Ironbark Prospect and the immediately adjacent WA-389-P (indirectly through Cue's interest). These fields are located in an extensive gas region near the operational North West Shelf, Wheatstone and Pluto gas fields which include a number of wells, pipelines and supporting on-shore production and export infrastructure. Figure 2 illustrates the location of the Australian exploration assets directly held by NZO and indirectly through Cue.

Figure 2: a) NZO Directly Held Australian Exploration Asset Locations

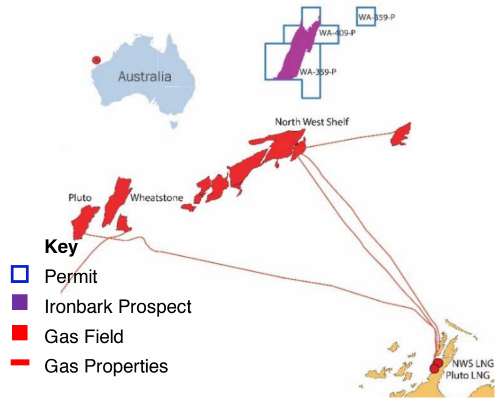
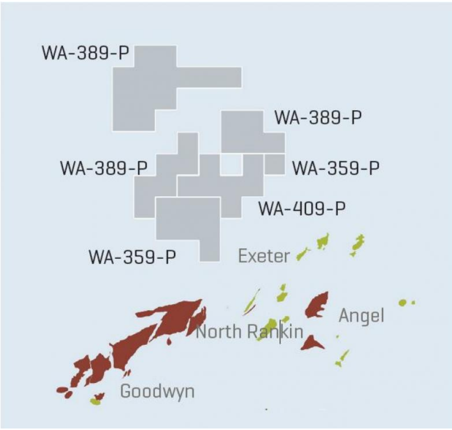


Figure 2: b) Cue Australian Exploration Asset Locations



Source: NZO NZX Announcements

Cue completed a comprehensive regional study using 15,000km^2 of 3D and 2D seismic data and 17 well sites to map the area and identified the Ironbark Prospect, which straddles WA-359-P and WA-409-P in moderate water depths, as a drillable target. The Ironbark Prospect is a giant Mungaroo Formation prospect that is mapped with an area of up to 400km^2, with a best technical estimate of 15 Trillion cubic feet (approximately 2,500 mmBoe) of prospective recoverable gas resource based on an internal technical assessment performed by Cue. The Ironbark Prospect has been identified as the primary candidate for drilling.

In October 2016, Cue announced BP Developments Australia Pty Ltd (**"BP"**) had been granted an option to acquire a 42.5% interest in WA-359-P. In November 2017, Cue announced Beach Energy had acquired a 21% equity interest in WA-359-P, conditional upon BP exercising their option, which was subsequently exercised. In October 2018, NZO acquired a 15% interest in WA-359-P and an option for a 5.36% interest in WA-409-P (the "**Ironbark Transaction**"), subject to Cue shareholder approval which was obtained on 8 January 2019. At the same time in October 2018 a co-ordination agreement between Cue, BP, Beach Energy and NZO was announced, detailing the work program on the drilling of WA-359-P. Completion of the agreements under the Ironbark Transaction occurred in June 2019 resulting in the formation of the joint venture to drill the Ironbark Prospect and formalising BP as the operator. The Ocean Apex drilling rig was contracted by BP in early 2019 to be used to drill the well, expected to begin in late 2020. The current participating interests for NZO's Australian exploration assets are summarised in Table 4 below.

Table 4: Australian Exploration Asset Participating Interests

Entity	WA-359-P	WA-389-P	WA-409-P
BP	42.5% (operator)	-	80% (operator)
Cue	21.5%	100% (operator)	20%[1]
Beach Energy	21%	-	-
NZO	15%	-	-
Total	**100%**	**100%**	**100%**

Source NZO, NZX Announcements
[1]Assuming NZO does not exercise its option

The total drilling budget for WA-359-P is approximately US$90 million, where NZO will be responsible for costs relating to their 15% interest, another 2.85% of costs capped at US$2.57 million (relating to the free-carry for Cue negotiated through the Ironbark Transaction) and indirect costs held though their ownership of Cue (estimated at US$8 million). As part of Cue's sell down of their participating interest in the Ironbark Prospect, BP and Beach Energy also agreed to carry some of Cue's share of costs. Cash commitments for NZO's interest in the Ironbark Prospect, including the 2.85% of Cue carried costs, are estimated at US$16 million (approximately NZ$24 million, excluding Cue's remaining un-carried costs). The estimated funding share allocation for drilling is detailed in Table 5 below.

Table 5: Ironbark Funding Share Amount and Allocation[1]

Entity	Funding Share (%)		Estimated Share of Costs (US$m)
	Interest	Free-Carry Obligation[2]	
BP	42.5%	14.65%	$43
Cue	21.5%	n/a	$8
Beach Energy	21.0%	4.00%	$22
NZO	15.0%	2.85%	$16
Total	**100%**	**21.5%**	**$90**

Source: Cue Energy ASX releases. Totals may not sum due to rounding.
[1] Estimated share of costs based on NZO and Cue disclosures regarding the Ironbark Prospect.
[2] The free-carry obligations in respect of NZO and Beach Energy are fixed percentages up to capped costs but the BP free-carry dollar cost is capped. The free-carry obligations represent the implied % relative to the current estimate of total costs.

The well spud date was initially planned to be in March 2020 but has now been pushed out by 6 months, with planned duration of the drilling estimated to take 10 weeks. Representatives of the drilling engineering team will visit Perth as required through late 2019 to establish early engagement with local suppliers and government departments which is considered key to successful design and execution of this limited work scope. Following the completion of the drilling, appraisal of the results will take some months. A successful outcome of WA-359-P has the potential to lead to further evaluation of the adjoining permits.

2.7. Cue Energy

2.7.1. Overview

Cue is an oil and gas company with a regional focus on South East Asia and Australasia. Current oil and gas interests are located in Indonesia (East Java basin and Central Sumatra basin), New Zealand (Taranaki Basin) and Australia (Carnavon Basin). Its major shareholder is NZO, holding 50.04% of shares. Cue's production assets comprise the Maari / Manaia field in offshore Taranaki, New Zealand and the Sampang PSC offshore field in East Java, Indonesia. Cue's exploration activities comprise three exploration permits in the Carnavon Basin, north-western Australia and the Jeruk prospect within Sampang PSC, Mahakam Hilir PSC onshore Kalimantan, and Mahato PSC onshore Sumatra within Indonesia. NZO's shared interest assets in Cue's exploration assets are detailed in Section 2.6 while Cue's production assets are detailed below.

2.7.2. Maari / Manaia PMP38160

Cue holds a 5% interest in the permit which hosts the Maari and Manaia producing oil fields located in the Taranaki basin. The fields are located 80km off-shore the south Taranaki coast in approximately 100 metres of water, sourcing crude oil from several reservoirs hosted by different formations at depths of up to 2,100 metres.

Cue's joint venture partners in the permit are OMV New Zealand Limited (as operator and 69% interest holder), and the ASX listed Horizon Oil Limited (26%). Cue reported 2P reserves for Maari and Manaia of 0.6 mmBoe as of March 2019. First production from the Maari-Manaia fields was in 2009 with Cue's share of production for the last 5 years summarised in Table 6 below.

Table 6: Maari-Manaia Production

Oil and Condensates Produced (mmBoe)	FY2015	FY2016	FY2017	FY2018	FY2019
Cue's interest in Production	0.23	0.23	0.15	0.13	0.12
NZO's shareholding in Cue[1]	48.10%	48.10%	49.60%	50.04%	50.04%
NZO's Economic Interest in Production	**0.11**	**0.11**	**0.08**	**0.07**	**0.06**

Source: NZO and Cue Annual Reports
[1]Average shareholding over the period

2.7.3. Sampang PSC

The Sampang PSC is located in the Madura straight off-shore Madura Island in East Java, Indonesia. It is comprised of two producing fields: Oyong gas field and Wortel gas field. Cue reported 2P reserves for Sampang PSC of 5.45BCF (0.91mmBoe) as of March 2019.

Gas produced from Oyong is transported via a 60km pipeline to the Grati Onshore Gas Facility and sold to PT Indonesia. Oil production from the Oyong field commenced in 2007, followed by gas production in 2009. The oil field ceased production in late 2017 due to the depletion of reserves. Wortel gas production commenced in 2012. Gas is transported through a 7km pipeline to the Oyong platform then piped to on-shore facilities. The last 5 years of production is summarised below in Table 7.

Table 7: Sampang PSC Production

Gas, Oil and Condensates Produced (mmBoe)	FY2015	FY2016	FY2017	FY2018	FY2019
Cue's interest in Production	0.89	0.59	0.47	0.27	0.26
NZO's shareholding in Cue	48.11%	48.11%	49.61%	50.04%	50.04%
NZO's Economic Interest in Production	**0.43**	**0.28**	**0.23**	**0.14**	**0.13**

Source: NZO and Cue Annual Reports
[1]Average shareholding over the period

2.8. Summary Financial Results

2.8.1. Production

A summary of NZO's production for the six year period between FY2014 and FY2019 is set out in Table 8 below, including the consolidation of Cue's production for the fourth quarter of FY15 onwards.

Table 8: NZO Historical Production by Field

Barrels of Oil Equivalent (mmBoE)	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Kupe	0.95	0.96	0.91	0.44	0.30	0.25
Tui	0.30	0.40	0.38	0.14	-	-
Maari (via Cue)	-	0.06	0.23	0.15	0.07	0.06
Sampang PSC (via Cue)	-	0.02	0.59	0.47	0.14	0.13
Pine Mills (via Cue)	-	-	0.02	0.01	-	-
Total Production	1.25	1.40	1.69	0.89	**0.51**	**0.44**

Source: NZO and Cue Annual Reports, NZO and Cue Quarterly Reports

2.8.2. Financial Performance

A summary of NZO's financial performance for the period between FY2014 and FY2019 (including the full consolidation of Cue results from FY2015) is set out in Table 9 below.

Table 9: Historical Financial Performance

Year End 30 June (NZD $m)	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Petroleum sales	**103.6**	**116.2**	**119.0**	**37.1**	**35.8**	**43.3**
Operating costs	(22.0)	(36.9)	(48.3)	(15.9)	(12.6)	(9.3)
Exploration and evaluation expenses	(29.5)	(24.1)	(21.5)	(12.3)	(4.7)	(8.2)
Other expenses	(10.0)	(13.5)	(17.1)	(14.2)	(11.4)	(12.4)
Other income	11.8	2.5	6.6	0.8	0.5	2.5
Operating earnings before depreciation, amortisation and net finance costs	**53.9**	**44.3**	**38.8**	**(4.4)**	**7.7**	**15.9**
Amortisation of production assets	(25.8)	(39.6)	(48.9)	(8.3)	(8.3)	(8.5)
Other depreciation and amortisation	(0.6)	(0.5)	(0.5)	(0.5)	-	-
Operating earnings before net finance costs	**27.5**	**4.2**	**(10.6)**	**(13.2)**	**(0.6)**	**7.4**
Net finance (costs) / income	(2.4)	2.9	(3.8)	1.4	5.8	3.2
Operating earnings after net finance costs	**25.1**	**7.1**	**(14.4)**	**(11.8)**	**5.2**	**10.6**
Asset impairments	-	(36.3)	(26.6)	(15.3)	-	(7.2)
Gain on acquisition of subsidiary	-	15.4	-	-	-	-
Profit before tax and royalties	**25.1**	**(13.8)**	**(41.0)**	**(27.1)**	**5.2**	**3.4**
Income tax (expense)/credit	(7.3)	5.0	(3.4)	(5.1)	1.2	(3.7)
Royalties expense	(7.7)	(6.7)	(4.0)	(0.6)	(1.5)	(2.6)
Profit (loss) after tax from continuing operations	**10.1**	**(15.5)**	**(48.5)**	**(32.7)**	**4.8**	**(2.9)**
Profit (loss) after tax from discontinued operations	-	-	(3.3)	85.3	-	-
Profit (loss for the year	**10.1**	**(15.5)**	**(51.8)**	**52.6**	**4.8**	**(2.9)**
Profit (loss) attributable to non-controlling interests	-	(1.1)	(22.0)	(10.1)	4.1	4.6
Profit (loss) attributable to NZO shareholders	**10.1**	**(14.4)**	**(29.8)**	**62.7**	**0.8**	**(7.5)**
Earnings per share (cents)	2.4	(3.6)	(8.6)	20.1	0.5	(4.5)
Dividend per share (cents)	6.0	-	4.0	4.0	4.1	-

Source: NZO Annual Reports (FY2014 – FY2018). Results include consolidated results of Cue from FY2015.Totals may not sum due to rounding.

The main features of NZO's historical performance over the six-year period to FY2019 can be summarised as follows:

- Revenue peaked at approximately $120m in FY2016 and has since decreased to levels around $40m from FY2017, due largely to the reduction in gas and condensate sales from Kupe following NZO's reduced interest in Kupe (declining from 15% to 4% in FY2017) and the sale of Tui in 2017;
- NZO acquired its controlling interest in Cue in FY2015 when it purchased an additional 28.1% stake in that business. Cue's financial results have been consolidated into NZO's results from 1 April 2015. Additionally, a non-cash gain of $15.4m was recorded in FY2015 to reflect the purchase price of that interest;
- The sale of a 15% interest in Kupe in FY2017 resulted in a $83.5m profit on sale which contributed to the $62.7m profit for the year;
- Exploration and evaluation and other costs (largely including corporate overheads) have reduced from FY2017 onwards as the Company reduced scale and changed strategy

following reduced interests in production assets. However, they have not reduced as fast as revenue resulting in operating earnings margin compression; and

- Asset impairments over FY2015 to FY2017 relate to impairments at Cue's Maari and Kisaran and Tui which have now been divested. The impairment in FY2019 relates to the write-down of NZO's residual value in Kisaran which has also effectively been divested.

2.8.3. Financial Position

A summary of NZO's financial position (including the full consolidation of Cue results from FY2015) for the six-year period between FY2014 and FY2019 is set out in Table 10 below.

Table 10: Historical Financial Position

Year End 30 June (NZD $m)	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Assets						
Cash and cash equivalents	135.1	83.7	96.8	125.1	98.0	105.6
Receivables, Prepayments and other current assets	28.9	29.6	13.2	6.5	11.8	8.0
Inventory	6.9	8.8	9.2	1.5	2.3	2.6
Assets Held for Sale	-	-	2.1	-	-	-
Evaluation and exploration assets[1]	54.9	15.3	14.6	6.7	7.2	3.6
Oil and gas assets	223.8	289.4	207.9	32.0	64.8	58.5
Other non-current assets	11.7	3.7	3.1	0.9	0.7	0.4
Total Assets	**461.2**	**430.4**	**346.9**	**172.6**	**184.8**	**178.8**
Liabilities						
Payables and other current liabilities	32.7	31.4	17.4	5.8	8.5	6.0
Borrowings	0.8	1.0	1.1	1.1	-	-
Tax Liabilities	44.5	30.3	21.8	6.3	6.1	5.6
Rehabilitation and other provisions	41.2	85.8	85.4	10.3	18.6	20.8
Liabilities associated with assets held for sale	-	-	-	-	-	-
Liabilities	**119.1**	**148.5**	**125.7**	**23.5**	**33.3**	**32.4**
Equity						
Share capital	377.7	319.1	318.1	208.6	211.9	211.9
Retained earnings and Reserves	(35.5)	(72.7)	(110.3)	(62.4)	(67.0)	(76.6)
Profit (loss) attributable to non-controlling interests	-	(1.1)	(22.0)	2.8	6.7	11.0
Total Equity	**342.1**	**281.8**	**221.2**	**149.1**	**151.6**	**146.3**

Source: NZO Annual Reports (FY2014 – FY2018). Results include consolidated results of Cue from FY2015. Totals may not sum due to rounding.
[1] NZO's accounting standard for the treatment of exploration and evaluation assets changed in 2016. FY2015 to FY2018 are based on NZO's current accounting treatment whereas FY2014 are based on the prior standard.

The main features of NZO's historical financial position over the six-year period to FY2019 can be summarised as follows:

- Asset sales including the $168m sale of NZO's 15% interest in Kupe during FY2017 and asset impairments in NZO's oil and gas production and exploration interest have seen NZO's operating assets decline significantly with total assets excluding cash declining from $326m in FY2014 to $73m at FY2019;
- Asset impairments, primarily relating to Kisaran, have seen NZO's evaluation and exploration assets decrease over FY2015 to FY2019;

- NZO's farm in to its 15.0% interest in the Ironbark Prospect occurred during FY2019 and the initial contribution is recognised in the evaluation and exploration assets above but will increase as further contributions are made; and
- A buyback in FY2015 and $100m capital return in FY2017 reduced NZO's net assets and share capital over the period.

2.8.4. Cashflow Movements

A summary of the movements in NZO's cash balances (including the full consolidation of Cue results from FY2015) over the six-year period to FY2019 is set out in Table 11.

Table 11: Historical Movements in Cash

Year End 30 June (NZD $m)	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Receipts from customers	108.6	120.6	136.8	73.4	36.5	46.6
Supplier payments and other expenditure	(21.8)	(51.7)	(67.4)	(46.1)	(24.1)	(22.7)
Other	1.2	(9.6)	(13.3)	(10.2)	(1.9)	(2.6)
Operating cash flow	**88.0**	**59.3**	**56.2**	**17.1**	**10.6**	**21.3**
Exploration and evaluation expenditure	(74.9)	(31.9)	(23.5)	(17.3)	(5.4)	(12.1)
Oil and gas asset expenditure	(1.4)	(19.3)	(11.5)	(5.2)	(3.4)	(1.7)
Related party loan advances and repayments	-	1.4	-	-	-	-
Proceeds from sale of oil and gas interests	-	-	-	158.9	-	-
Purchases of oil and gas interests	(7.7)	(2.8)	-	-	(29.7)	-
Other	(2.6)	(0.1)	(0.2)	(0.4)	(0.3)	(0.1)
Investing cash flow	**(86.6)**	**(52.6)**	**(35.1)**	**136.0**	**(38.8)**	**(13.9)**
Repayment of borrowings	-	-	-	-	-	-
Return of capital to shareholders	-	(63.2)	(1.0)	(109.4)	-	-
Dividends paid	(18.8)	(8.9)	-	(13.5)	(6.8)	-
Other	0.5	0.9	-	-	3.3	-
Financing cash flow	**(18.3)**	**(71.2)**	**(1.0)**	**(123.0)**	**(3.5)**	**-**
Net cash movement before exchange rate effects	**(16.9)**	**(64.5)**	**20.0**	**30.1**	**(31.8)**	**7.4**

Source: NZO Annual Reports. Results include consolidated results of Cue from FY2015.

The main features of NZO's historical cash movements over the five year period to FY2019 H1 can be summarised as follows:

- NZO's exploration and evaluation expenditure declined significantly from $74.9m in FY2014 to $5.4m in FY2018 due to the oil price climate and diminished activity as NZO has reduced its scale;
- However, exploration and evaluation activity increased in FY2019 to $12.1m relating to Kohatukai (since abandoned), Sampang, the Ironbark Prospect and other exploration activity. NZO has further exploration commitments for its share of costs for the Ironbark Prospect (approximately $24m), the majority of which will likely occur in FY2021; and
- NZO has returned a total of over $220m in dividends, capital returns and buybacks over the last 5 financial years.

2.9. Capital Structure and Ownership

As at 30 June 2019, NZO had 164,430,718 fully paid ordinary shares on issue. NZO's majority shareholder is OGOG, the remainder of the shares are largely held by custodial entities on behalf of a range of investors, the largest sum of which is less than 5.0%. The top shareholder and remaining shares are set out in Table 12 below.

Table 12: Top Shareholders in NZO

Shareholder	Shares Held	Shareholding Percentage
O.G. Oil and Gas Singapore Pte Ltd	114,876,016	69.9%
Other	49,554,702	30.1%
Total	164,430,718	100.0%

Source: IRESS

NZO also has 3,418,000 PPS issued to employees (and former employees) as part of the ESOP. Of the PPS, only 1.0 million remain exercisable by participants in the ESOP with just over 2.4 million PPS having expired. Each PPS has been paid up to $0.01. See Section 3.8.1 for further details on the PPS.

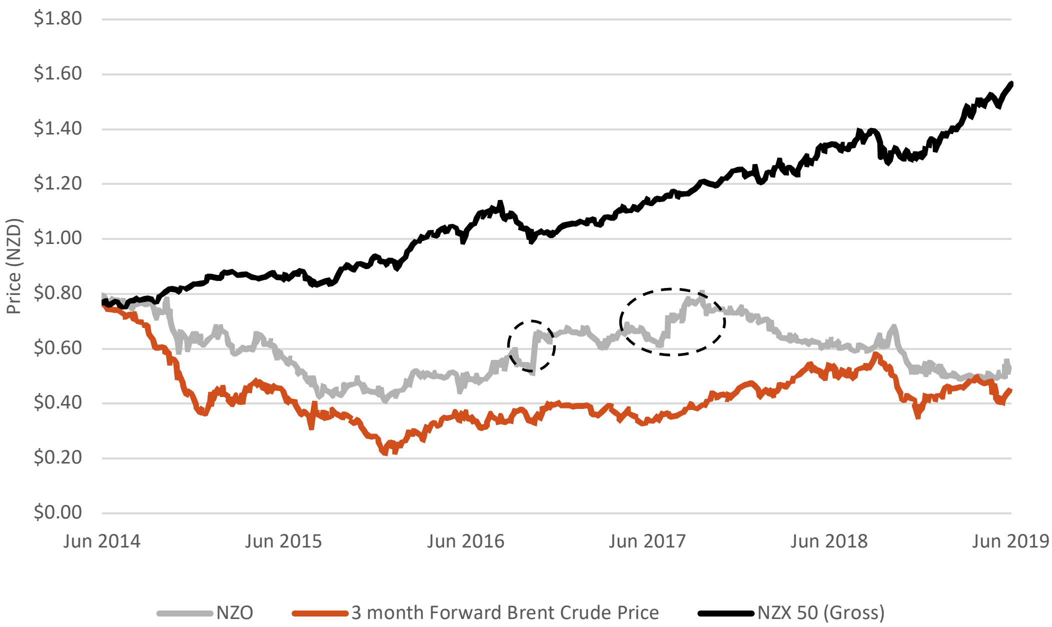
2.10. Share Price Performance

Figure 3 below illustrates NZO's pre-tax shareholder returns (including dividends which NZO paid up until October 2017) over the last 5 years to 30 June 2019, relative to the NZX50 Gross Capital Index and the 3-month forward Brent Crude oil futures price. This illustrates that NZO has underperformed the wider New Zealand market over the period, with the share price falling from a high of $0.79 in July 2014 to a low of $0.39 in January 2016. However, its performance has been consistent with the difficult global macroeconomic conditions for oil and gas companies over the last five years, as shown by the strong correlation between NZO's returns and oil price expectations.

NZO's key deviations from the 3 month forward Brent Crude price circled below include:

- The announcement of sale of NZO's 15.0% interest in Kupe in November 2016; and
- The announcement of Zeta Energy Pte Limited takeover offer in August 2017 and OGOG's subsequent competing successful partial takeover offer for NZO in September 2017.

Figure 3: NZO Share Price Performance Relative to Rebased NZX 50 Gross Index and Brent Crude Price



Source: IRESS, Northington Partners
All prices rebased at NZO 30 June 2014 Share Price

2.11. Liquidity

A useful way of understanding NZO's liquidity is to look at the daily median volume traded compared to the total free float securities outstanding. Free float securities exclude shares that are held by strategic shareholders, management and directors of the company. In the past 12 months, a median of approximately $9,500 worth of NZO shares were traded on a daily basis, compared to our estimate of the free float market capitalisation of the Company of $24.5 million (based on the pre-offer share price on 9 July 2019). This relatively small value of share trading demonstrates that NZO is highly illiquid, meaning it would be difficult for an investor to sell a large number of shares at the price observed in the market.

3.0 Valuation of New Zealand Oil & Gas

3.1. Summary

We have valued 100% of the equity in NZO at a range between $101.9 million and $137.7 million, which corresponds to a value of between $0.62 and $0.84 per share. This value represents the full underlying value of NZO and includes a premium for control[3]. Our assessed value range therefore exceeds the price at which, based on current market conditions, we would expect NZO to trade on the NZX in the absence of a takeover offer or scheme of arrangement where the offeror would gain control.

Given the nature of the Company and its assets, we have valued NZO on a sum-of-the-parts basis. This requires an estimate of the value of NZO's producing assets (Kupe), NZO's exploration assets, investment in Cue, the present value of NZO's future corporate overheads and an adjustment for working capital, net cash and partly paid shares. As detailed in Section 3.4.1, we have engaged RISC Advisory Pty Limited (**"RISC"**) to provide specialist valuation advice in connection with NZO's New Zealand exploration interests (Clipper and Toroa).

Table 13 below provides a summary of the aggregate sum-of-the-parts valuation.

Table 13: NZO Valuation Summary

		Value Range (NZ$m)		Value Range (NZ$ per share)	
	Report Section Reference	**Low**	**High**	**Low**	**High**
Kupe	*Section 3.3*	$24.0	$30.0	$0.15	$0.18
NZ Exploration	*Section 3.4.1*	$0.0	$5.9	$0.00	$0.04
Indonesian Exploration	*Section 3.4.2*	$0.0	$0.0	$0.00	$0.00
Australian Exploration	*Section 3.4.3*	$4.4	$20.0	$0.03	$0.12
Cue Shareholding	*Section 3.5*	$27.6	$31.3	$0.17	$0.19
Corporate Overheads	*Section 3.6*	($28.3)	($23.6)	($0.17)	($0.14)
Enterprise Value		**$27.7**	**$63.5**	**$0.17**	**$0.39**
Adjusted Net Cash	*Section 3.7*	$74.3	$74.2	$0.45	$0.45
Value of Equity		**$101.9**	**$137.7**	**$0.62**	**$0.84**
Assumed Shares on Issue		164.4m	164.4m	164.4m	164.4m

Source: Northington Partners analysis. Values may not sum due to rounding.

3.2. Valuation Methodology

For most assets, value should be determined as a function of the estimated level of cash returns that the assets are expected to generate in the future. The specific approach that is used to estimate this value is dependent on the nature of the asset, the varying characteristics, lifecycle stage and expectations regarding future performance. However, often the most reliable evidence as to the value of an asset is the price at which the asset or directly comparable asset has been bought and sold in an arm's length transaction. For many of NZO's assets, there has been recent transactional evidence which provides a readily observable value for the asset. Consequently, where available, we have relied on comparable transaction evidence as the main valuation approach for NZO's exploration and production assets, cross checked against a discounted cash flow valuation (see Section 3.3.1) for NZO's interest in Kupe.

Table 14 summarises our selected methods for valuing NZO's component parts.

[3] We believe that the Scheme Price should be compared to the full underlying value of the shares despite OGOG already owning a controlling shareholding in the Company. The reasons for this opinion are set out in Appendix 1 of this report under the section titled "Approach to Evaluation".

Table 14: Valuation Methods for Sum-of-the-Parts Valuation

Asset	Asset Lifecycle Stage	Valuation Method
Kupe	Production	Transactional Evidence / Discounted Cash Flow
NZ Exploration	Exploration	RISC Valuation Advice
Indonesian Exploration	Exploration	Transactional Evidence
Australian Exploration	Exploration	Transactional Evidence / Specialist Report
Cue Shareholding	Various	Current Market Capitalisation Value Range
Corporate Overheads	n/a	Discounted Cash Flow
Cash	n/a	Balance on Hand (with Adjustments)

3.3. Valuation of Kupe

3.3.1. Discounted Cash Flow

For most assets, value should be determined as a function of the estimated level of cash returns that the assets are expected to generate in the future. The specific approach that is used to estimate this value is dependent on the nature of the asset and the expectations regarding future performance.

A discounted cash flows ("**DCF**") approach is based on an explicit forecast of the annual cash flows that will be generated over a specified forecast period (typically between 5 and 10 years). The value of cash flows that may occur after the end of the explicit forecast period is incorporated into the valuation process by capitalising an estimate of maintainable cash flows for the terminal period. A DCF model is therefore usually made up of two components:

(i) The present value of the projected cash flows during the forecast period; and

(ii) The present value of all other cash flows projected to occur after the explicit forecast period. This component is commonly referred to as the terminal value.

Given the nature of oil and gas producing assets, a DCF approach is clearly most appropriate for Kupe. However, because of the expected finite life of the asset, our valuation model only incorporates the present value of the projected cash flows over the economic life of the asset with no allowance for a terminal value (although abandonment liabilities are taken into account post final production). This approach is standard in the oil and gas industry.

3.3.2. Framework and Assumptions for DCF Valuation

The DCF framework for the Kupe asset is based on cash flow models prepared by NZO, with a range of modifications to reflect our views on the key input parameter values and a range of valuation scenarios. Details of the general model structure are set out in Table 15, and a summary of the input parameters is presented in the following section.

Table 15: DCF Model Structure

Assumption	Discussion
Valuation Date	30 June 2019
Model Term	Based on the expected life of the asset given its assumed 2P production profile and 2P reserves.
Cash Flow Basis	Post-tax nominal
Cash Flow Timing	Mid-period discounting

3.3.3. Key Cash Flow Assumptions

Table 16 below summarises the key base case assumptions and variables used to forecast future cash flows. We note that many of the assumptions are commercially sensitive and full details cannot be disclosed in our report.

Table 16: Cash Flow Assumptions

Assumption	Discussion
Currency	All the forecast cash flows are based in NZ$ with US$ components (primarily condensate sales) translated to NZ$ at an assumed NZ$/US$ long run rate of $0.65.
Fuel Prices	We have reviewed a range of independent forecasts for crude oil and have adopted a forecast price path based on broker consensus forecasts and forward market contracts. This generally reflects a long-run oil price of ~US$50 per barrel in real terms. The crude oil price path is adjusted with a discount to the reference crude oil price due to the geographic region of the Kupe field and expected quality of product output (supported by production from adjoining productive basins). Gas and LPG prices are based on existing sale agreements, with LPG pricing reflecting the correlation of historic Saudi Contract Price to oil prices and the long-term uncontracted gas sales (assumed to be at NZ$6.00 per GJ (real)).
Tax	Applicable tax (New Zealand 28% corporate rate), royalties and tariffs relevant in the tax jurisdiction.

3.3.4. Required Rate of Return

A nominal post-tax discount rate in the range of 10.0% – 12.0% has been adopted for Kupe. This assessment is based on comparable market evidence and estimates of the required returns from production assets in the oil and gas sector with commodity price exposure.

3.3.5. Kupe Transaction Evidence

The two most recent transactions (in January 2017) provide directly relevant evidence for the value of NZO's 4% interest in the asset. NZO was a counter-party in both transactions, and the transaction value from Mitsui relates directly to the interest under consideration. Both transactions are summarised in Table 17 below.

Table 17: Kupe Transaction Values

Effective Transaction Date	Buyer	Vendor	Value (NZ$m)	Kupe Interest %	Implied Kupe Value for 4% Interest	Implied EV / 2P Reserves (NZ$/boe)
1 Jan 2017	NZO	Mitsui	$35.0	4%	$35.0	$13.8
1 Jan 2017	Genesis	NZO	$168.0	15%	$44.8	$17.7

Source: Northington Partners.

We note that the sale of NZO's interest to Genesis included overriding royalty payments and contracted gas and LPG sales at prices higher to those under the Mitsui interest. In addition, the 15% interest provided Genesis with more influence over the Kupe JV than a 4% interest would confer. Consequently, we consider NZO's acquisition of the Mitsui interest to be the most relevant benchmark transaction.

3.3.6. Kupe Valuation Summary

We have valued NZO's 4% interest in Kupe in a range between $24 million and $30 million. Our assessed value is consistent with the following:

- The transaction evidence in Table 17 allowing for the depletion in Kupe's 2P reserves from 1 January 2017 to 30 June 2019 (2.6 mmboe to 2.0 mmBoe (4% interest)); and
- Our DCF valuation of Kupe. Our modelling is based on a number of production scenarios that are consistent with the operator's expected production profile, and considers the potential upside from better field reservoir performance and the scope for potential increases in field reserves.

3.4. Valuation of NZO's Exploration Assets

3.4.1. New Zealand Exploration Assets

As detailed in Section 2.4, NZO's New Zealand exploration assets comprise:

i. the Clipper permit, including the Barque prospect and Clipper discovery in the Canterbury basin; and

ii. the Toroa permit, including the Kaipatiki and Kehe prospects in the Great South basin.

We have engaged RISC to provide valuation advice in deriving a market value range for each of NZO's New Zealand exploration interests[4]. RISC provided input based on the potential for attracting a farm-in partner for at least 50% of NZO's costs. The valuation method for each asset involved effectively multiplying the probability of finding a farm-in partner by 50% of the capital contributed by NZO. The lower end probability of attracting a partner was assessed to be 0% and upper end probability of attracting a partner was assessed to be 100%.

Utilising RISC's specialist advice, we have attributed a value of $0 to $5.9 million to NZO's New Zealand exploration interests. This represents an estimate of the price that an acquirer would be willing to pay for the New Zealand exploration portfolio as a whole. Table 18 below provides a summary of our valuation.

Table 18: New Zealand Exploration Interest Valuation

	Value Range (NZ$m)	
Exploration Asset	**Low**	**High**
Clipper PEP 52717	$0.0	$3.3
Toroa PEP 55794	$0.0	$2.7
Total	**$0.0**	**$5.9**

Source: Northington Partners analysis.

The assessed current market value for the assets reflects the difficult investment environment for exploration properties, particularly in frontier basins which provide significant opportunities but at very high risk. The nil value ascribed at the low end of the value range is consistent with recent evidence of permit interest holders relinquishing their interests for zero consideration (including Woodside Petroleum in respect of Toroa).

We note that if any one of the New Zealand exploration interests were to be successful, the realised value may be many magnitudes higher than the value attributed above. With no further well or seismic commitments, there is also limited cost to NZO of holding the permits. Consequently, the eventual value of NZO's New Zealand exploration interests is highly sensitive to long-run oil prices as well as the outcome of any farmout agreements and the initial drilling which is yet to occur.

3.4.2. Indonesian Exploration Assets

NZO's Indonesian exploration assets comprise the Bohorok PSC, Palmerah Baru PSC and Kisaran PSC prospects. Further details on each asset are set out in Section 2.5.

NZO has reached agreements to effectively dispose of all its Indonesian interests but retained some exposure which may entitle NZO to payments from the Kisaran PSC and Bohorok PSC should the exploration efforts be successful. A summary of each agreement is detailed in Table 19 below.

Table 19: Indonesian Exploration Disposal Agreement Descriptions

Exploration Asset	Agreement Description Summary
Kisaran PSC	In March 2019 NZO entered into the Kisaran Option Agreement with Pacific Oil & Gas. While exact terms of the agreement are confidential, it effectively results in removing any ongoing cost obligations to NZO while retaining the opportunity to

[4] Further information in relation to the RISC report is set out in Appendix 3.

	receive up to US$1.75 million if Pacific Oil & Gas exercises a call option granted to them prior to December 2021.
Bohorok PSC	In December 2018 NZO disposed of its interest to the operator of Bohorok PSC (Bow Energy International Holdings) on terms that will see it receive a cash payment of US$2 million if production commences following the first well, with a further US$1 million from production of a second well (**"Bohorok Sale Agreement"**).
Palmerah Baru PSC	NZO has executed a sale and purchase agreement with Bow Energy, NZO has no further cost obligations or upside potential.

Source: NZO public announcements and sale and purchase agreements.

All conditions of the Kisaran agreement have been satisfied, while the agreements for Bohorok PSC and Palmerah Baru PSC are awaiting Indonesian Government approval.

In relation to key aspects of these agreements, we note:

- Considering the prolonged inactivity in the Kisaran block and low oil price environment, we assess the likelihood of Pacific Oil & Gas exercising its option under the Kisaran Option Agreement as low; and
- The likelihood of production commencing in the near term at Bohorok PSC is also low, meaning the present value of any future cash payments may be limited.

We have therefore valued NZO's remaining Indonesian exploration interests at nil value. While NZO has retained upside potential for total cash payments of up to US$4.75 million, we consider there to be low probability of receiving the payments: if any cash is received under the Bohorok Sale Agreement, it is likely to be of minimal value in net present value terms per NZO share.

3.4.3. Australian Exploration Assets

As detailed in Section 2.6, NZO's Australian exploration assets comprise the Ironbark Prospect. This includes:

i. A 15% interest in the WA-359-P petroleum exploration permit; and

ii. an option to acquire a 5.36% participating interest in the adjoining field (WA-409-P petroleum exploration permit).

NZO acquired its interest in these exploration permits from Cue in October 2018 (transaction completed in June 2019) under a farmout agreement which was approved by Cue shareholders in January 2019 (the "**Ironbark Transaction**"). This arrangement was commercially similar to Cue's transaction with Beach Energy in November 2017. As such, the consideration offered by NZO to Cue provides a reliable starting point for the valuation of the asset. The details of the Ironbark Transaction are summarised in Table 20 below.

Table 20: Transaction Description of NZO's Australian Exploration Assets

Exploration Asset	Transaction Description Summary
WA-359-P	NZO entered into a farmout agreement to acquire a 15.0% participating interest in WA-359-P. Under the agreement with NZO, Cue will retain a free carry for 2.85% of the costs of drilling the exploration well (capped at US$2.57 million) and NZO reimbursed Cue for AUD$642,600 of past costs.
WA-409-P	NZO acquired an option to acquire a 5.36% participating interest in WA-409-P, which is intended to be executed after the commencement of drilling in the neighbouring block. Under the option, Cue will receive a free carry for 5.36% of the costs of drilling the exploration well and Cue is entitled to a 10% royalty on all future revenue from NZO's participating interest, effectively leaving NZO with 4.82% of the future revenue from the permit.

Source: Cue Energy Notice of General Meeting, Explanatory Memorandum and Independent Expert's Report

As the disposal of part of Cue's interest in WA-359-P and WA-409-P represented a material transaction with a related party (by virtue of NZO's 50.04% ownership of Cue), the Ironbark

Transaction required Cue shareholder approval. Consequently, Cue commissioned an Independent Expert's Report to establish whether the transaction was fair and reasonable to Cue shareholders not associated with NZO. The independent expert ("**PKF Melbourne**") engaged SRK Consulting (Australasia) Pty Ltd (**"SRK"**), an oil and gas resource specialist, to provide specialist advice on the value of the prospective resources for each exploration asset. The Notice of General Meeting, Explanatory Memorandum and Independent Expert's Report including the SRK valuation report relating to the transaction are available at Cue's website (www.cuenrg.com.au). Table 21 below summarises SRK's valuation of WA-359-P (15%) and WA-409-P (5.36%) assuming the WA-409-P option has been exercised[5].

Table 21: SRK Summary Valuation of Cue Prospective Resources (NZ$m) – NZO's interest

Exploration Asset	Low	High	Preferred
WA-359-P	$0.6	$84.5	$56.3
WA-409-P option exercised	$0.2	$13.0	$8.6

Values have been converted at an exchange rate of 0.9511 NZD / AUD.

In assessing whether the Ironbark Transaction was fair and reasonable to Cue shareholders, PKF Melbourne also referenced prior farmout transactions with BP (acquiring a 42.5% interest in WA-359-P and 80% interest in WA-409-P) and Beach Energy (acquiring a 21% interest in WA-359-P and 7.5% interest in WA-409-P) which occurred in October 2016 and November 2017 respectively. Based on these comparable transactions for the same assets, PKF Melbourne assessed the value of the 15% interest in WA-359-P in the range of A$3.0 – A$4.2 million.

PKF Melbourne also assessed the consideration being offered by NZO for the interests in the Ironbark Prospect at A$4.2 million, being the value of past costs reimbursed to Cue and a free carry of the costs of drilling a well equivalent to 2.85% of the total well cost for WA-359-P (capped at US$2.57 million).

In conclusion, PKF Melbourne assessed the Ironbark Transaction as being reasonable but not fair to Cue shareholders on the basis of:

- The value of the consideration offered by NZO was within the market value range assessed by SRK, with the wide valuation range indicative of the uncertainty associated with early stage exploration assets;
- No value was attributed to the option for WA-409-P as there was no means to establish the value of the assets being given up and the consideration offered at this point in time;
- While the consideration offered by NZO was within SRK's wide valuation range, PKF Melbourne considered that the basis for determining fairness should be measured with reference to SRK's "preferred" valuation (equivalent to NZ$56.3 million for WA-359-P) and therefore concluded that the transaction was not fair;
- However, as the value of the consideration was within the value range and on terms that were relatively consistent with or more favourable than the terms agreed with Beach Energy and BP under "arms-length" transactions (as well as a range of other considerations), PKF Melbourne determined the consideration offered by NZO was reasonable.

Minority shareholders of Cue not associated with NZO overwhelmingly approved the Ironbark Transaction in January 2019.

Based on the recent Ironbark Transaction evidence and independent report prepared by PKF Melbourne, we have attributed a value range for NZO's Australian exploration assets between NZ$4.4 million and NZ$20.0 million (at an assumed spot NZ$/AU$ rate of $0.95).

Our assessed value range reflects:

[5] Further information in relation to the SRK report is set out in Appendix 3.

- At the low end of the range, the effective value of the consideration transferred to Cue in NZO's recent acquisition of the exploration assets (as approved by Cue shareholders);
- At the upper end of the range, our assessment of the potential market value upside having consideration to:
  - SRK's "preferred" valuation for WA-359-P of approximately NZ$56 million. While we believe that the SRK assessment is based on reasonable assumptions, we have attributed more weight to the transaction-based evidence which supported a A$3.0 – A$4.2 million value range. The arms-length transactions with NZO, BP and Beach Energy are directly comparable transactions which followed an intensive farmout exercise over several years which did not procure any other offers; and
  - The share price performance of Cue since shareholders approved the Ironbark Transaction and our assessment of the estimated market implied valuation of Cue's exploration interests. These include both WA-359-P and WA-409-P, as well as WA-389-P (another Carnarvon Basin prospect immediately adjacent to WA-359-P and WA-409-P) and some Indonesian exploration permits. We also note that SRK's "preferred" valuation is disproportionate to the current market implied value of Cue's entire business including both production and exploration assets (approximately NZ$41.2 million as of 25 June 2019 excluding net cash).
- No value has been ascribed to the option for WA-409-P, as the option is unlikely to be exercised unless the adjoining WA-359-P field is commercially successful. There is also no basis at present to suggest the well will be commercially successful before expiry of the option.

3.5. Valuation of Cue

Similar to NZO, Cue's assets comprise production assets (Maari and Sampang PSC), a number of exploration prospects in Australia and Indonesia, and cash of A$21.0 million (as at 31 December 2018). Given Cue's relatively small market capitalisation and NZO's 50.04% shareholding, Cue's shares are illiquid and the prevailing market value is not always necessarily a true reflection of underlying value.

Cue's market capitalisation as of 21 August 2019 was A$66.3 million (NZ$69.8 million), implying the market is attributing A$45.3 million of value to Cue's production and exploration assets (excluding its net cash position).

We have valued NZO's 50.04% shareholding in Cue at NZ$27.6 million to NZ$31.3 million, representing a value per share of A$0.075 to A$0.085 (at a NZ$/AU$ spot rate of $0.95). This compares to a share price of A$0.095 and a 30-day volume weighted average market price ("**VWAP**") of A$0.097 as of21 August 2019..

3.6. Valuation of Corporate Overheads

NZO incurred total overhead costs of $7.6 million in FY19 (excluding Cue). However, NZO's assets consist mainly of minority interests in non-operated assets, and it is unlikely that the current level of overheads will be incurred indefinitely. While NZO is continuing to evaluate new investment opportunities, the Company's objective is that head office costs will be offset by new income generating assets in the short-medium term. Alternatively, if NZO is unsuccessful in commercialising new opportunities, head office costs will be reduced to the minimum level needed to maintain NZO's residual assets.

We note that Cue also incurred approximately A$2.4 million of overheads and administration costs in FY2018. Given the similarity of exploration and production assets between Cue and NZO, there is clearly potential scope for NZO to reduce its overheads to a size similar to that of Cue over the medium term.

Taking these factors into account, we have valued NZO's future head office costs at a range of between $23.6 million and $28.3 million based on an NPV approach. Key assumptions in our assessment are as follows:

- The FY20 draft budget overheads of $8.1 million are maintained at this level (adjusted for inflation) until December 2022. This reflects current head office resource requirements and the expected timing of a full commercial evaluation of the Ironbark Prospect and appraisal of the Toroa and Clipper permits;
- Additional one-off project costs of $1.2 million (in real terms) are incurred in FY20 and FY21 reflecting costs associated with assessing the Ironbark Prospect and other acquisition or exploration opportunities. This level is consistent with budgeted costs for FY20;
- The collective annual overhead and administration costs are then reduced to $3.0 million in real terms by FY2024 and maintained at this level for a further 3 years (i.e. until the end of FY2027). This reflects our assessment of the minimum head office costs required to maintain administration functions, with no further exploration or corporate development related expenditure;
- NZO has sufficient taxable income from its other assets (primarily Kupe at present) to realise the tax benefit of the corporate overheads;
- No allowance for potential synergies for a prospective acquirer of NZO; and
- A discount rate of 10%.

In essence, our approach assumes that unless NZO can generate new offsetting revenue streams (by investing its available cash in higher yielding assets), it will look to reduce operations in the short term and potentially eliminate all costs in the medium term. Given the low end of our valuation range implies a low chance of success for NZO's exploration assets, this reduction in overheads over the short and medium term is consistent with NZO abandoning exploration and liquidating its remaining assets.

3.7. Adjusted Net Cash and Other Assets and Liabilities

We have adopted an adjusted net cash position for valuation purposes of NZ$74.3 million to $74.2 million as of 30 June 2019. In determining this estimate, we have made a number of adjustments to NZO's 30 June 2019 balance of $78.2 million (excluding cash held by Cue):

- A reduction of NZ$3.9 million to reflect the maximum amount due to Cue but yet to be paid under the Ironbark Transaction (reflecting the remaining free carry costs for drilling at WA-359-P). This adjustment is necessary as we have recognised the Ironbark Prospect asset value in our sum-of-the-parts valuation, but NZO has an outstanding liability for the unpaid consideration due to Cue;
- No reduction or addition in relation to a change in exchange rate in cash balances held in currencies other than NZ$ (exchange rates are assumed to be held constant); and
- At the upper end of the valuation range, a reduction of $0.1 million for the assumed cash settlement of partly paid shares (see Section 3.8). This reflects that some of the partly paid shares would be "in-the-money" at the top of valuation range ($0.74 Issue Price for 1 million partly paid shares relative to $0.84 at the upper end of the valuation range) and rather than the partly paid shares being paid up (increasing the fully paid shares on issue), they are assumed to be cash settled at their assessed value (largely being the difference in the upper end valuation and their exercise price).

3.8. Valuation of Partly Paid Shares

3.8.1. Partly Paid Shares

PPS are used as an employee incentive under NZO's ESOP. The PPS are issued to certain staff (**"Participants"**) under the ESOP at a specified issue price (**"Issue Price"**). The Participants pay $0.01 per share when the PPS are issued. The PPS are held for the Participants' beneficial interest by NZOG Services Limited ("**Trustee**"), in its capacity as trustee of the ESOP.

After the completion of an escrow period and assuming certain conditions are met, each Participant has the option to fully pay for the shares (by paying the difference between the Issue Price and the $0.01 per share). Table 22 below details the schedule of NZO's 3,418,000 unlisted PPS as of 2 September, comprising:

i. Tranche 1 PPS: 2,418,000 PPS held by the Trustee which had various issue prices but have all passed their Expiry Date; and

ii. Tranche 2 PPS: 1,000,000 PPS held by 1 Participant with an Issue Price of $0.7435 and an Expiry Date of 24 February 2022.

Table 22: Schedule of Partly Paid Shares

Beneficial Holder	Number of PPS	Issue Date	Expiry Date	Issue Price
		Tranche 1 PPS		
Trustee	2,418,000	*Various*	*Various (all expired)*	*Various*
		Tranche 2 PPS		
Andrew Jefferies	1,000,000	24-Feb-17	24-Feb-22	$0.74
Total	**3,418,000**			

Source: NZO

The PPS voting rights and rights to dividends or other distributions by NZO are proportionate to the amount paid up ($0.01) relative to the Issue Price. Upon the payment of the unpaid amounts, the PPS become fully paid shares and are transferred from the Trustee to the Participant.

Subject to limited exceptions set out in the ESOP rules, the PPS cannot be assigned, transferred or disposed of without the approval of NZOG's nomination and remuneration committee.

3.8.2. PPS Valuation Framework

Each PPS effectively provides an employee with the right to purchase a share at some time in the future at a fixed price. Because the employee is not obligated to make the purchase unless it is in their best interest to do so, the PPS can be viewed as a variant of a standard call option[6].

Because the rights attached to the PPS will only have value in the future if the NZO share price exceeds the Issue Price before the Expiry Date, the current value is related to the potential distribution of the NZO share prices before or at the Expiry Date of each tranche. There are several mathematical models which translate the potential future distribution of share prices into an option value today.

Tranche 1 PPS have already expired with Issue Prices that are "out-of-the-money" relative to the Scheme Price. The current option value attached to these tranches of PPS are therefore negligible. Conversely, Tranche 2 PPS have over 2 years to the Expiry Date and will have some option value.

3.8.3. Black-Scholes Model

We have used a Black-Scholes option pricing model for deriving the value of the Tranche 2 PPS. The Black-Scholes model was derived for simple European-style options[7], assuming that the option instrument trades in a liquid market and has a relatively short time to maturity (6 – 9 months).

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[6] A call option provides the holder with the right, but not the obligation, to purchase an asset at a fixed price either during, or at the termination of, a specified future period.

[7] European-style options can only be exercised on the expiration date, while American-style options can be exercised at any time prior to maturity. The rights attached to the PPS's are American-style after the completion of escrow period.

Because some of these conditions do not hold for the rights attached to the PPS, values derived from the Black-Scholes model will overstate the underlying fair value.

From a valuation perspective, the key complications relate to the fact that the PPS are non-tradeable and are effectively forfeited if the employee leaves the Company prior to the Expiry Date. This type of option is therefore often exercised earlier than is optimal for standard options, thereby reducing the payoff that could have been received had the option been retained for the full term.

The usual approach to deal with these issues is to use a standard option pricing model to estimate some benchmark values, initially ignoring the value impacts of the employee option features. Appropriate value discounts to reflect factors such as non-tradability and the potential for forfeiture can then be applied with reference to the limited amount of available empirical evidence or assessed on a matter of judgement.

3.8.4. Key Black-Scholes Model Assumptions

Each component of the Black-Scholes framework is detailed in Table 23 below.

Table 23: Black-Scholes Model Assumptions

Assumption	Discussion
Current share price	In order to assess fair value of the PPS in the context of the Scheme, the assumed current share price should be set equal to the Scheme Price ($0.62).
Volatility	This parameter determines the likelihood that the share price will exceed the Issue Price prior to the Expiry Date. The higher the volatility, the higher the probability of the PPS will be in-the-money and the greater the current value of the PPS. We assessed the volatility at a range of 25.0% - 35.0%, based on observed market volatility of NZO shares and an assessment of potential future volatility.
Valuation Discount	An appropriate valuation discount to apply to the theoretical model prices largely remains a matter of judgement. Market rules of thumb suggest discounts up to 30% from the values derived from the most appropriate variant of the Black-Scholes model, largely dependent on the PPS time to maturity, transferability and vesting conditions. Given the relatively short period of time to the Expiry Date for Tranche 2 of the PPS, we have assessed the appropriate discount in this case at 10%.

Source: Northington Partners

3.8.5. Valuation of Partly Paid Shares

As summarized in Table 24, we have valued Tranche 1 of the PPS at $0.01 per PPS ($24,180 in aggregate) and Tranche 2 between $0.07 and $0.11 per PPS ($63,102 – $99,293). In deriving these values, we note the following:

- The value for Tranche 1 reflects that these PPS are deep "out of the money" and have expired. However, the assessed value is in line with NZO's historical policy of repaying employees the paid-up amount of each PPS on expiry ($0.01 per PPS); and
- The value range for Tranche 2 is based on the discounted Black-Scholes model values as described above. The assessed values reflect the lower Issue Price for this tranche, the longer time to maturity and the corresponding greater probability of the NZO share price exceeding the Issue Price by the Expiry Date (February 2022).

Table 24: Assessed Valuation of each PPS

	Value Range (NZ$)		Value Range (NZ$ per PPS)	
	Low	High	Low	High
Tranche 1 PPS	$24,180	$24,180	$0.01	$0.01
Tranche 2 PPS	$63,102	$99,293	$0.07	$0.11

Source: Northington Partners Analysis

3.8.6. Assessment of the fairness of the PPS Offer Prices

While the Code does not apply to a scheme of arrangement, typically the Panel must be satisfied that Code equivalent disclosures have been made, and that the scheme has been structured in a manner consistent with Code principles, before it issues a no-objection statement. Rule 8(3) of the Code requires that if there is more than 1 class of voting securities included in a full offer, the consideration and terms offered for each class of voting securities must be fair and reasonable as between the classes of voting securities. In this particular case, the Code therefore requires that the consideration and terms for the PPS must be fair and reasonable:

- Compared to the consideration and terms offered for the fully paid ordinary shares; and
- As between each tranche of PPS.

Further details relating to the scope of our report are set out in Appendix 1.

Our assessed valuation of each tranche of PPS compared to the PPS Offer Prices is set out in Table 25 below.

Table 25: PPS Proposal Comparison to Assessed Value Range

	Assessed Value Range (NZ$ per PPS)		
	Low	**High**	**PPS Offer Prices**
Tranche 1 PPS	$0.01	$0.01	$0.01
Tranche 2 PPS	$0.07	$0.11	$0.09

Source: Northington Partner 's Analysis and Scheme Implementation

Based on the fact that the PPS Offer Price for each tranche is in line with our assessed values, we conclude the consideration and terms offered for each tranche of PPS under the Scheme are fair and reasonable compared to the consideration and terms offered for the fully paid ordinary shares, and as between all tranches.

4.0 Assessment of the Merits of the Scheme

4.1. Comparison of the NZO Scheme Price relative to assessed value

4.1.1. Ordinary Shares

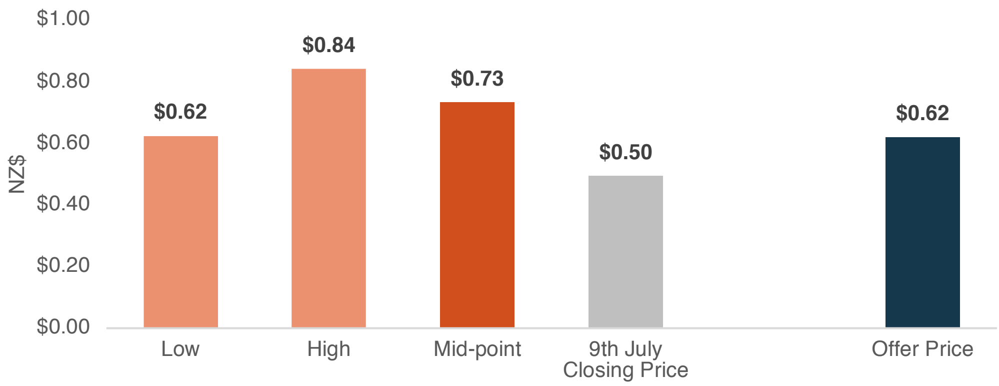
As set out in Section 3.0, we have assessed the full underlying value of NZO shares in a range between $0.62 and $0.84 per share, with a mid-point of $0.73 per share.

The full underlying value is the price a person or entity would be expected to pay to acquire the company as a whole and accordingly includes a premium for control. The price offered by OGOG should be compared to the full underlying value of NZO given that, if the Scheme is successful, OGOG will have full effective control over the business.

The OGOG Scheme Price of $0.62 per share is at the bottom end of our assessed value range of $0.62 to $0.84 and we therefore characterise the Scheme Price as reasonable, but not overly compelling. However, as discussed further below, there are a range of other key factors that should be considered in conjunction with the price comparison.

Figure 4 compares the OGOG Scheme Price with our assessment of the full underlying value of NZO's shares and NZO's share price immediately prior to the market announcement of the Scheme.

Figure 4: Comparison of the OGOG Scheme Price to the Assessed Value Range



Source: Northington Partners

We note that adjusted cash[8] makes up $0.45 per share of our value range (54% - 73%), while our value for Kupe ($0.15 to $0.18 per share) is largely offset by the present value of corporate overheads (-$0.14 to -$0.17 per share). Consequently, our assessed value range is most sensitive to the estimated market value of NZO's directly owned exploration interests and those indirectly held through Cue. Notwithstanding the current market value range for NZO's exploration interests, the ultimate value could fall outside this range. Exploration outcomes are typically binary, with successful outcomes generating substantial value but exploration failure effectively resulting in complete value loss. Accordingly, the value of NZO's exploration interests (and more broadly the overall exploration program, including the expenditure commitments) could ultimately be significantly greater than the current estimates of value. On the other hand, it is also possible that the ultimate value will be far less than current estimates.

4.1.2. Partly Paid Shares

As set out in Section 3.8, we assess that the current value of Tranche 1 of the PPS at $0.01, and that the current value of Tranche 2 is between $0.07 and $0.11. On the basis that the PPS Offer Prices are $0.01 for Tranche 1 and $0.09 for Tranche 2, we conclude that the PPS Offer Prices are fair and

[8] See Section 3.7

reasonable compared to the Scheme Price, and are fair and reasonable as between each tranche of PPS.

4.2. Potential Outcomes of the Scheme

NZO shareholders will vote to approve or reject the resolution to implement the OGOG Scheme. The Scheme will proceed to the High Court if both voting thresholds below are passed:

- Threshold 1: a majority of 75% of the votes of the shareholders in each interest class entitled to vote and voting; and
- Threshold 2: a simple majority of the votes of those shareholders entitled to vote. This threshold applies in respect of the total number of NZO voting rights, rather than in respect of the votes cast in each interest class separately.

The following two interest classes will vote separately for the resolution:

- OGOG and its associates; and
- All other shareholders.

As OGOG already controls greater than 50% of the voting rights in NZO, Threshold 2 will be satisfied by OGOG voting in favour. However, the implication of OGOG's existing shares being treated as a separate interest class is that, in order for the Scheme to proceed, 75% of the votes actually cast by non-OGOG shareholders must vote in favour to meet Threshold 1.

It is very likely that at least some of the NZO shareholders will not vote on the Scheme resolution, and the threshold for the Scheme to proceed could therefore be quite low. For example, if holders of only 50% of the non-OGOG voting securities on issue vote, Threshold 1 will be achieved if only 11.3% of the total shares on issue vote in favour of the resolution.

The probability of a 100% acquisition being successfully completed under a scheme structure is therefore increased relative to a takeover offer. Under a takeover offer, a minimum of 20% of the total voting securities on issue (67% of the non-OGOG voting securities) would need to accept the offer in order for the offeror to achieve the 90% threshold required to compulsorily acquire the balance. Conversely, there is also increased potential for a small portion of minority shareholders preventing the Scheme from being approved relative to a takeover offer if shareholder turnout for the Scheme is low.

The possible outcomes of the Scheme process are therefore a function of the level of approval by NZO's non-OGOG shareholders. Further discussion on each outcome is set out below.

4.2.1. Scheme is Successful

If the voting thresholds to approve the Scheme are achieved and all other conditions are satisfied (or waived where capable of a waiver), the Scheme will be implemented. In this circumstance, all holders of fully paid ordinary shares in NZO (other than OGOG) will have their fully paid ordinary shares acquired at $0.62 per share.

Regardless of whether an NZO shareholder votes in favour of the Scheme, NZO shareholders will only realise cash under the Scheme if the voting thresholds are achieved, the other conditions are satisfied (or waived where capable of waiver), and the transaction is therefore implemented. If the transaction is implemented NZO will be delisted. For those shareholders wishing to retain an equity investment in the oil and gas production and exploration sector there are no other such listed companies on the NZX, although proceeds could be reinvested into other oil and gas exploration and production companies on international stock exchanges (including Cue and Beach Energy, each listed on the ASX).

4.2.2. Scheme is Unsuccessful

If the voting thresholds to approve the Scheme are not achieved, the Scheme will not proceed, and no shares will be acquired by OGOG. NZO will remain a listed company and will have no further obligation to OGOG in relation to the Scheme. While OGOG may decide to make another offer for NZO in the future, there is no certainty it would do so.

If the Scheme is unsuccessful, NZO will continue to manage its current assets focused on Kupe, evaluation of the Ironbark Prospect and continuing to assess farmout opportunities for its New Zealand exploration interests. As NZO has now committed to well exploration at the Ironbark Prospect and is continuing to evaluate its New Zealand exploration opportunities, its exploration risks are now more accentuated than they were when the portfolio was more invested in production assets (e.g. 15% interest in Kupe). This changing focus also coincides with the New Zealand coalition Government's ban on new offshore oil and gas exploration, which has created greater uncertainty around future exploration investment activity. While the ban does not impact NZO's existing New Zealand interests, it has had an impact on its ability to attract partners for New Zealand exploration. Consequently, NZO's strategy beyond its current exploration interests is uncertain. Depending on the outcome of the Ironbark Prospect appraisal, we suggest this may result in NZO seeking more international opportunities in the future (much like its investment in the Ironbark Prospect) or the winding-up of NZO.

Therefore, a key consideration for NZO shareholders is the risk associated with the Company's current strategy and whether, in time, a continued investment in NZO will yield a higher value outcome than the Scheme Price. Key aspects to consider include:

- As detailed in Section 2.0, exploration well drilling and subsequent evaluation of the Ironbark Prospect are expected to commence in the second half of 2020, with more definitive results unlikely to be known until late 2020 or early 2021. The current estimated total costs for drilling and appraising the Ironbark Prospect are approximately US$90 million, of which NZO's share will be approximately US$16 million (NZ$24 million) including the capped Cue free carry of US$2.57 million. The drill costs are based on the operator's (BP) estimate and reflect expected drilling conditions. However, major drilling difficulties could add significantly to the drill cost and require NZO and Cue to contribute further capital.
- Early stage exploration is highly uncertain and the potential value outcome from drilling the Ironbark Prospect is largely binary. While we have assessed the current market value of the Ironbark Prospect between $4.4 - $20.0 million, the value outcome could vary significantly after full evaluation of the drilling results. Potential outcomes include:
  - No commercial petroleum resources being found, and the well being abandoned. Under this scenario, NZO may have committed over NZ$24 million on a prospect with zero commercial value; and
  - A successful commercial discovery of petroleum resources. Depending on the quantity of resource being developed into reserves and the commercial feasibility of developing the Ironbark Prospect, this could result in a highly valuable economic outcome for NZO, Cue and the other field partners.
- Therefore, our valuation range does not capture the full range of possible future high and low value scenarios for the Ironbark Prospect – it reflects our assessment of the market value range today. While it is difficult to assess the full range of potential future value outcomes for the Ironbark Prospect, we note that SRK assessed its "unrisked" discovered value at between US$2,500 to US$7,500 million based on an assumed 2,500 mmBoe discovery. However, it effectively assessed the chance of economic success to development stage at approximately 5%. SRK therefore assumed a 95% chance of the field failing to reach development stage (after incurring over US$90 million in development costs) relative to a success case value of several billion dollars. Consequently, the future value of NZO's interest in the Ironbark Prospect (through its direct 15% interest and indirectly through the 21% interest held by Cue) may be significantly higher or lower than our current assessed value range.
  - Under a fail scenario, NZO would have committed approximately NZ$24 million of cash (possibly more) in addition to Cue's commitment of approximately NZ$12 million (net of costs carried by NZO, BP and Beach Energy) to the appraisal. If a commercial discovery is not made, this would likely result in NZO losing over

NZ$24 million in cash and the value of its 50.04% shareholding in Cue deteriorating significantly due to the significance of the Ironbark Prospect to Cue's current overall value;

  - Conversely, a successful discovery may result in significant value upside not captured in our assessed value range for the Ironbark Prospect. This would impact NZO through both its direct interest in the Ironbark Prospect and indirectly through its shareholding in Cue.

- There is also significant uncertainty around NZO's New Zealand exploration interests (Clipper and Toroa). While there are no immediate exploration drilling plans, currently NZO must drill Clipper and Toroa prior to April 2022 otherwise the permits will be relinquished. NZO has been marketing these opportunities for farmout partners over several years with limited success. Therefore, while we have attributed limited value to these prospects ($0.0 to $5.9 million), the realisation of any future value remains dependent on identifying suitable farmout partners. The prospects of doing so in the current political environment are highly uncertain.
- NZO shares are highly illiquid and will remain so if the Scheme is unsuccessful. That means it will continue to be difficult for shareholders to trade large parcels of shares without impacting NZO's share price. We also note that NZO could decide to delist from the NZX which would further reduce shareholders' ability to trade their shares. A delisting would likely require approval of minority shareholders by way of ordinary resolution.
- If NZO's current exploration interests were unsuccessful and the Company was wound up, we suggest the net value available to shareholders would be substantially lower than the Scheme Price and would not be realised for some time. Therefore, it is likely that in order for shareholders to realise value above the Scheme Price, NZO would have to enjoy success with some or all of its current exploration interests.

While an investment in an oil and gas exploration business such as NZO is inherently risky, shareholders may wish to consider their risk appetite for the Ironbark Prospect and NZO's other exploration activities in evaluating the merits of the Scheme. While the Scheme Price is at the lowest point of our valuation range, it does provide shareholders with the opportunity to crystallise some value for NZO's exploration activities today without taking on the risks associated with exploration.

If the Scheme is unsuccessful, OGOG will continue to control NZO through its existing 70% shareholding providing the ability to determine the business plan, capital structure and dividend policy of the Company. Under the creep provisions of the Code, OGOG will also be able to acquire a further 5% per annum of the outstanding shares of NZO without making a further offer for the Company. If it reached 75%, OGOG could then pass both ordinary and special resolutions potentially affording more control over time.

4.3. Potential for Alternative Offers or a Higher Price

While it is possible that another bidder could emerge with a price higher than the Scheme Price, we believe that the prospects for such an outcome are extremely limited. This view reflects that OGOG controls 70% of the NZO shares which, unless it sold into a competing offer, would represent a significant impediment to the completion of a competing offer.

In the absence of a competing offer, it is unlikely that OGOG could be compelled to increase the Scheme Price. Although it is unclear how OGOG would respond if the Scheme is rejected, there is certainly no guarantee that OGOG would make another offer to acquire 100% of NZO.

4.4. Acceptance or Rejection of the Scheme

This report has been prepared without taking into account the objectives, financial situation or needs of individual NZO shareholders. Accordingly, before acting in relation to investment, shareholders should read the Scheme Booklet issued by NZO and consider their own situation.

Acceptance or rejection of the Scheme is a matter for individual shareholders based on their own view as to value and future market conditions, risk profile, liquidity preference, portfolio strategy, tax position and other factors. Shareholders will need to consider these consequences and, if appropriate, consult their own professional adviser(s).

Appendix 1. Regulatory Requirements and Scope of this Report

Introduction

The proposed Scheme is to be implemented by way of scheme of arrangement under Part 15 of the Companies Act and is required to be approved by the High Court. An explanation of the role of the High Court is set out in the notice of meeting sent to NZO's shareholders.

As NZO is listed on the NZX Main Board, the NZX Listing Rules (as well as general law) requires that the notice of meeting must state the nature of the business to be transacted at the meeting in sufficient detail to enable shareholders to form a reasoned judgement in relation to it.

Role of Takeovers Panel

Under the Companies Act, the High Court cannot approve a scheme of arrangement which affects the voting rights in a Code company (such as NZO) unless:

- the Court is satisfied that shareholders will not be adversely affected by the use of a scheme rather than the Code to effect the change involving the Code company; or
- the Takeovers Panel has provided a statement indicating that the Takeovers Panel has no objection to the Court making an order approving the scheme. This is known as a "no-objection statement".

In this case, NZO has requested that the Takeovers Panel issue a "no-objection statement" in relation to the Scheme to present to the High Court to assist with its deliberations. The primary role of the Takeovers Panel is to assist the High Court by:

- Reviewing scheme documents to ensure that appropriate information is placed before shareholders; and
- Helping to ensure that matters that are relevant to the High Court's decision are properly brought to the High Court's attention.

Although there is no legal requirement under the Companies Act or the Code for an independent adviser's report as a result of the Scheme of Arrangement, the practice of the Takeovers Panel (except in very limited circumstances) is to require the preparation of an independent adviser's report before it will consider issuing a no-objection statement.

NZO requested Northington Partners to prepare an independent adviser's report setting out, in its opinion, the merits of the Scheme. Our appointment was approved by the Takeovers Panel on 27 May 2019.

Basis of Assessment for Ordinary Shares

The exact meaning of the word "merits" is not prescribed in the Code and there is no well accepted, authoritative New Zealand reference that clearly establishes what should be considered when assessing the merits of a transaction. Although the Takeovers Panel has published a guidance note about the role of an Independent Adviser, it has been careful not to limit the scope of the assessment and states that the relevant factors that should be taken into consideration will depend on the features of the proposed transaction as well as the prevailing circumstances of the parties involved. However, the Takeovers Panel suggests that a merits assessment is broader than a valuation assessment and will include other positive and negative aspects of a transaction.

Northington Partners has assessed the merits of the Scheme for NZO shareholders by taking into account the following matters:

- the estimated value range of NZO and the Scheme Price when compared to that estimated value range;
- the likelihood of an alternative offer and alternative transactions that could realise fair value;
- the likely market price and liquidity of NZO shares in the absence of the Scheme;

- any advantages or disadvantages for NZO shareholders of accepting or rejecting the Scheme;
- the current trading conditions for NZO;
- the attractions of NZO's business; and
- the risks of NZO's business.

Approach to Evaluation

A fundamental principle of the Code is that all shareholders are treated equally. It is therefore our view that the price to be paid under the Scheme should be compared to the full underlying value of NZO, assuming a 100% control position. This is despite OGOG already having effective control of NZO. Our rationale for this approach is summarised as follows:

- Prior to the introduction of the Code, some market commentators held the view that where a major shareholder had a controlling shareholding, any control premium attached only to that shareholding. One of the key intended outcomes of the Code was that any control premium should be available to all shareholders under an offer, regardless of the size of their shareholding or the size of the offeror's shareholding at the time the offer is made. It would seem inconsistent with the Code that an offeror could acquire >50% control of a company with a control premium incorporated into the offer price, and then make a subsequent offer for the outstanding shares without including a control premium on the basis it already had control;
- The compulsory acquisition provisions of the Code specify that an independent adviser must determine the fair and reasonable value of an equity security based on the full underlying value of all securities in that class with each security then being valued on a pro rata basis. In other words, it is intended that each minority shareholder will receive its share of the full underlying value. Again, we think it would be inconsistent with the Code for one group of minority security holders (those selling through compulsory acquisition) to be treated any differently to the security holders who accepted an earlier takeover offer;
- If a full or partial takeover offer was made for all of NZO by a party other than OGOG, a control premium clearly would be expected; and
- As the Scheme requires a no-objection statement from the Panel, the principles of the Code should apply to the Scheme.

Basis of Assessment for Partly Paid Shares

Pursuant to Rule 8(3) of the Code, if there is more than 1 class of voting securities included in a full offer, the consideration and terms offered for each class of voting securities must be fair and reasonable as between the classes of voting securities. If a full offer was made under the Code which included the PPS, then the consideration and terms for the PPS would need to be fair and reasonable:

- Compared to the consideration and terms offered for the Ordinary Shares; and
- As between each tranche of PPS.

As with our approach to assessing the merits of the offer for the ordinary shares, our approach to dealing with the merits of terms and consideration offered for the PPS under the Scheme reflects the requirements under the Code for a full takeover offer. Our assessment set out in Section 3.8 therefore reflects the analysis typically contained in Rule 22 independent adviser's report that accompanies an offer under the Code.

Appendix 2. Declarations, Qualifications and Consents

Declarations

This report is dated 2 September 2019 and has been prepared by Northington Partners at the request of the independent directors of NZO to fulfil the requirements of the Takeovers Panel in relation to the Scheme and to be used for the purposes of the Court application to approve the Scheme. This report, or any part of it, should not be reproduced or used for any other purpose. Northington Partners specifically disclaims any obligation or liability to any party whatsoever in the event that this report is supplied or applied for any purpose other than that for which it is intended.

Prior drafts of this report were provided to NZO for review and discussion. Although minor factual changes to the report were made after the release of the first draft, there were no changes to our methodology, analysis, or conclusions.

This report is provided for the benefit of all of the shareholders of NZO that are being asked to consider the Scheme, and Northington Partners consents to the distribution of this report to those people.

Our engagement terms did not contain any term which materially restricted the scope of our work.

Qualifications

Northington Partners provides an independent corporate advisory service to companies operating throughout New Zealand. The company specialises in mergers and acquisitions, capital raising support, expert opinions, financial instrument valuations, and business and share valuations. Northington Partners is retained by a mix of publicly listed companies, substantial privately held companies, and state owned enterprises.

The individuals responsible for preparing this report are Greg Anderson B.Com, M.Com (Hons), Ph.D, Jonathan Burke B.Com (Hons), BCM and Charles More BE(Hons), MBM. Each individual has a wealth of experience in providing independent advice to clients relating to the value of business assets and equity instruments, as well as the choice of appropriate financial structures and governance issues.

Northington Partners has been responsible for the preparation of numerous independent reports in relation to takeovers, mergers, and a range of other transactions subject to the Takeovers Code and NZX Listing Rules.

Independence

Northington Partners Limited confirms that it:

- Has no conflict of interest that could affect its ability to provide an unbiased report; and
- Has no direct or indirect pecuniary or other interest in the Scheme considered in this report, including any success or contingency fee or remuneration, other than to receive the cash fee for providing this report.

Northington Partners Limited has satisfied the Takeovers Panel, on the basis of the material provided to the Panel, that it is independent under the Takeovers Code and the Panel's requirements for schemes of arrangement involving Code companies for the purposes of preparing this report.

The preparation of this IAR will be Northington Partners' only involvement in relation to the proposed Scheme. Northington Partners will be paid a fixed fee for its services which is in no way contingent on the outcome of our analysis or the content of our report.

Disclaimer and Restrictions on the Scope of Our Work

In preparing this report, Northington Partners has relied on information provided by NZO . Northington Partners has not performed anything in the nature of an audit of that information, and does not express any opinion on the reliability, accuracy, or completeness of the information provided to us and upon which we have relied.

Northington Partners has used the provided information on the basis that it is true and accurate in material respects and not misleading by reason of omission or otherwise. Accordingly, neither Northington Partners nor its directors, employees or agents, accept any responsibility or liability for any such information being inaccurate, incomplete, unreliable or not soundly based or for any errors in the analysis, statements and opinions provided in this report resulting directly or indirectly from any such circumstances or from any assumptions upon which this report is based proving unjustified.

We reserve the right, but will be under no obligation, to review or amend our report if any additional information which was in existence on the date of this report was not brought to our attention, or subsequently comes to light.

Indemnity

NZO has agreed to indemnify Northington Partners (to the maximum extent permitted by law) against any and all losses, claims, costs, expenses, actions, demands , damages, liabilities or any other proceedings, whatsoever suffered or incurred by Northington Partners in respect of any claims by a third party arising from or connected to any breach by NZO of its obligations under its agreement with Northington Partners, except to the extent resulting from any act or omission of Northington Partners finally determined by a New Zealand Court of competent jurisdiction to constitute negligence or wilful misconduct by Northington Partners.

Appendix 3. Valuation Information

Our valuation assessment of NZO has referred to two sources of valuation information that has been prepared by other parties. Table 26 sets out information equivalent to that required pursuant to clause 20 of Schedule 2 of the Code in relation to that valuation information.

Table 26: Summary of Asset Valuation Information

Required Information		
Asset	NZO's New Zealand exploration assets, comprising the Clipper permit and the Toroa permit.	NZO's Australian exploration assets, comprising a 15% interest in the WA-359-P permit and an option to acquire a 5.36% interest in the WA-409-P permit.
Source of Valuation Information	RISC Advisory Pty Ltd	SRK Consulting (Australasia) Pty Ltd
Date of Valuation	25 June 2019	20 November 2018
Summary of Valuation	Total value in a range between NZ$0.0 million and NZ$5.9 million.	Based on SRK's value range for 100% interest in each permit, the implied total value of NZO's interests was between NZ$0.8 million and NZ$97.5 million.
Basis of Computation and Key Assumptions	Values estimated as the product of the probability of securing a farm-in partner for each permit and 50% of the sunk costs incurred by NZO. The low end of the value range assumes 0% probability of securing a farm-in partner and the top end of the value range assumes 100% probability.	SRK's valuation conclusions considered the book values since inception, the block commitment work programs and estimated expenditures, the comparative transaction values and the estimated potential project value defined by an exploration success case.

Source: Northington Partners

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