

# Full takeover offer for L&M Energy Limited

# Independent Adviser's Report

November 2012

KordaMentha confirms that it:

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

KordaMentha has satisfied the Takeovers Panel, on the basis of the material provided to the Panel, that it is independent under the Takeovers Code for the purposes of preparing this report.

KordaMentha has engaged Edison Investment Research (NZ) Limited to provide valuation services in connection with this report. Edison has been approved by the Panel for the purposes of preparing this report.



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# Glossary of key definitions

S         New Zealand dollars           IP         Proved Reserves           2P         The sum of Proved, Probable and Prosable Reserves           3P         The sum of Proved, Probable and Possible Reserves           ASX         Australian Securities Exchange           AUD         Australian dollars           bibli, biblid         Barrels, part and part and probable of the part and part	LME or the Company	L&M Energy Limited
IP Proved Reserves         Proved and Probable Reserves           3P         The sum of Proved, Probable and Possible Reserves           ASX         Australian Securities Exchange           AUD         Australian dollars           BUB Dibl, BbId         Barrels, barrels per day           BCF         Bill more both reserves for any state of oil equivalent           Budget         LME's budget for the year ending 31 December 2012           CPP         Coal prospecting permit           CSG         Coal seam gas           DCF         Discounted cash flow           EBITDA         Earnings before interest, tax, depreciation and amortisation           Edison NZ         Edison Investment Research (NZ) Limited           EY         Entrins avalue           Farm-in, Farm-out         A Joint Venture in which an incoming (farm-in) partner earns an interest in a property by funding the work programme           Hydrocarbon         Naturally occurring organic compounds containing carbon and hydrogen; includes natural gas, liquid Petroleum gases, natural gas condensate and crude oil           JV         Joint Venture           km²         Square kilometres           LME Options         71,455,000 options to acquire ordinary shares in LME           LME Options         71,455,000 options to acquire ordinary shares in LME           MHA         Met	. ,	· ·
2P         The sum of Proved, Probable and Possible Reserves           ASX         Australian Securities Exchange           AUD         Australian oblars           bbt, bbl/d         Barreis, barrels par day           BCF         Blilon cubic feet           boe         Barreis of oil equivalent           Budget         Libe budget for the year ending 31 December 2012           CPP         Coal prospecting permit           CSG         Coal seam gas           DCF         Discounted cash flow           EBIDDA         Earnings before interest, tax, depreciation and amortisation           EBIDDA         Enterprise value           Farm-in, Farm-out         A Joint Venture in which an incoming (farm-in) partner earns an interest in a property by funding the work programme           Hydrocarbon         A Joint Venture in which an incoming (farm-in) partner earns an interest in a property by funding the work programme           LMCSQ         L&M Coal Seam Gas Limited           LME Cyptions         71,645,000 options to acquire ordinary shares in LME           LME Shares         754,405,518 ordinary shares in LME           MBA         MHA Petroleum Consultants LLC           New Zealand Petroleum & Minerals           NZX         New Zealand Stock Exchange           Operator         The member of an exploration JV		
3P         The sum of Proved, Probable and Possible Reserves           ASX         Australian Securities Exchange           AUD         Australian Odlars           bibl, bibld         Barrels, barrels par day           BCF         Billion cubic feet           boe         Barrels, barrels par day           Budget         LME's budget for the year ending 31 December 2012           CPP         Coal prospecting permit           CSG         Coal seam gas           DCF         Discounted cash flow           EBITDA         Earnings before interest, tax, depreciation and amortisation           Edison NZ         Edison Investment Research (NZ) Limited           EV         Enterprise value           Farmin, Farm-out         A Joint Venture in which an incoming (farm-in) partner earns an interest in a property by funding the work programme           Hydrocarbon         Naturally occurring organic compounds containing carbon and hydrogen; includes natural gas, liquid Petroleum gases, natural gas, sendersaise and crude oil           JV         Joint Venture           InkCSG         LME Moral Seam Gas Limited           LME Options         71,645,000 options to acquire ordinary shares in LME           LME Shares         754,405,518 ordinary shares in LME           NEA         Nev Dawn Energy Limited           NZA <th></th> <th></th>		
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varying prices for option tranches  the Report  This independent adviser's report on the Offer in accordance with Rule 21 of the Takeovers Code  TSX  Toronto Stock Exchange  UCG  Underground coal gasification  VWAP  Volume weighted average price  WACC  Weighted average cost of capital	RENAV	Risked exploration net asset value
TSX Toronto Stock Exchange  UCG Underground coal gasification  VWAP Volume weighted average price  WACC Weighted average cost of capital	the Offer	
UCG Underground coal gasification  VWAP Volume weighted average price  WACC Weighted average cost of capital	the Report	This independent adviser's report on the Offer in accordance with Rule 21 of the Takeovers Code
VWAP Volume weighted average price WACC Weighted average cost of capital	TSX	Toronto Stock Exchange
WACC Weighted average cost of capital	UCG	Underground coal gasification
	VWAP	Volume weighted average price
YTD12 Financial year-to-date for the nine months ended 30 September 2012	WACC	Weighted average cost of capital
	YTD12	Financial year-to-date for the nine months ended 30 September 2012



# 1 Introduction

L&M Energy Limited ('LME' or 'the Company') is involved in exploring for conventional and unconventional oil and gas resources in New Zealand. LME is dual listed on the New Zealand Stock Exchange ('NZX') and Australian Securities Exchange ('ASX').

On 22 October 2012, New Dawn Energy Limited ('New Dawn') announced its intention to make a full takeover offer for 100% of LME at an offer price of AUD0.06 cash per ordinary share ('the Offer').

The Independent Directors of LME have appointed KordaMentha to prepare an independent adviser's report on the Offer in accordance with Rule 21 of the Takeovers Code ('the Report'). Our appointment was subsequently approved by the Takeovers Panel.

The Report has been prepared to assist LME shareholders to consider the merits of the Offer.

# 1.1 Background to the Offer

On 22 October 2012, New Dawn announced its intention to make a cash offer for 100% of LME, including all of the ordinary shares in LME ('LME Shares') and all of the options to acquire LME Shares ('LME Options'). New Dawn dispatched the Offer to LME's shareholders on 21 November 2012.

The consideration offered for each LME Share is AUD0.06 in cash. The consideration for each LME Option ranges from AUD0.0004 to AUD0.0599 in cash, depending on the date and terms of the issue of the relevant option. Details of the consideration for each LME Option are set out at Appendix 1 of this report.

New Dawn was incorporated on 28 September 2012 and is wholly owned by LME's Chairman and substantial security holder Mr A Geoffrey Loudon. As at the date of the Offer, New Dawn did not hold any LME Shares or LME Options. Mr Loudon owns 173,000,000 LME shares (22.93%) and 5,925,000 Options. The other director of New Dawn is Mr Gregory Hogan, who is also a director and shareholder of LME.

Including Mr Loudon's own shareholding in LME, 77.16% of LME's shareholders have committed to accept the Offer unless a higher cash offer for their LME Shares is received before the Offer becomes unconditional. Table 1.1 sets out the details of those parties which have agreed to accept the Offer.

Table 1.1: Shareholders which have agreed to accept the Offer

	LME Shares %	LME Options
Mr Loudon	22.93	5,925,000
Mr Hogan	2.93	3,950,000
Campania Holding Inc.	22.93	-
Tangent International Limited	22.93	-
Runa Investments Limited	5.44	-
	77.16	9,875,000



### 1.2 Offer terms and conditions

The Offer is conditional on New Dawn receiving sufficient acceptances that would result in New Dawn holding or controlling a minimum of 90% of the voting rights in LME. New Dawn has the ability to waive this condition.

The Offer includes a withdrawal right for Shareholders and Optionholders. An accepting Shareholder may withdraw their acceptance if there is an alternative cash takeover offer made offering a higher price for 100% of LME's Shares and Options (on no less favourable terms and conditions than the Offer) prior to the Offer being declared unconditional.

The Offer is conditional on LME's permits, licences or authorisations not being revoked, or threatened to be revoked, and all consents required for a change in control of LME being obtained.

The Offer is also subject to a range of other conditions that have become relatively standard in takeover offers. These conditions preclude LME from paying a dividend or other distribution during the Offer period or making any significant purchases or disposals, other than in the ordinary course of business or in connection with the bidding for Petroleum Exploration Permits ('PEPs') as part of the '2012 Block Offer' being conducted by the Ministry of Business, Innovation and Employment in New Zealand.

These conditions are for the benefit of New Dawn and, to the extent permitted under the Takeovers Code, may be waived by New Dawn at its discretion.

# 1.3 Other

The sources of information, to which we have had access and upon which we have relied, are set out in Appendix 2 of this report. We note that the Report relies on independent geological estimates of oil and gas reserves and resources for two of LME's permits. For two other permits management has provided its best estimate of reserves and resources because up-to-date independent geological assessments are not able to be sourced in the time available. Our report relies on those assessments and we note we have no geological expertise to critique LME management's conclusions.

We have engaged Edison Investment Research (NZ) Limited ('Edison NZ') to provide valuation services in connection with the permits. Edison NZ is routinely involved in the valuation of companies in the oil and gas industry.

This report should be read in conjunction with the statements and declarations set out in Appendix 3 regarding our independence, qualifications, general disclaimer and indemnity and the restrictions upon the use of this report.

References to '\$' are to New Zealand dollars, unless specified otherwise. References to 'AUD' are to Australian dollars. We have relied on a current AUD/NZD exchange rate of 0.7831.

References to years, financial years or 'FY' mean LME's financial year end 31 December unless specified otherwise.

Please note tables may not add due to rounding.



# 2 Merits of the Offer

The Takeovers Code requires the independent adviser to form an opinion as to the merits of the Offer and in doing so to take into consideration issues wider than just our valuation. In this section we consider the fundamentals of LME; pricing and valuation; potential outcomes of the Offer; and the likelihood of alternative offers.

The term 'merits' has no definition either in the Takeovers Code itself or in any statute dealing with securities or commercial law in New Zealand. While the Takeovers Code does not prescribe a meaning of the term 'merit', it suggests that merits include both positives and negatives in respect of an offer.

### 2.1 LME fundamentals

In New Zealand, exploration activity to date has been relatively low. Only one of 18 potentially hydrocarbon-bearing sedimentary basins has been commercialised. However, New Zealand has recently observed the highest level of exploration effort seen for a long time, driven by higher oil prices as well as exploration successes.

To date, the only commercial production in New Zealand is from the Taranaki Basin, where only around 500 total wells have been drilled since 1955 – leading industry experts to suggest that the basin has been under explored. LME has interests in two permits in the Taranaki Basin. It is currently the Company's area of operational focus.

LME has three permits focussed on coal seam gas ('CSG'), which is the methane gas trapped in coal seams. These represent unconventional exploration plays.

Unconventional petroleum refers to hydrocarbons that cannot normally be produced at commercial rates without employing specialist drilling and/or extraction treatments.

Investigations of coal seams in New Zealand have indicated considerable potential but gas yields have been relatively low by world standards. No commercial production has yet been achieved.

A potential issue for the local oil and gas industry is the current environmental and political debate concerning the practice of hydraulic fracturing ('fracking') in New Zealand.

In the case of CSG, fracking of a coal seam is often necessary to encourage trapped gas to flow at economic rates of extraction. There are potentially significant implications for the oil and gas exploration and production sectors from the ongoing investigation into fracking currently being led by the Parliamentary Commissioner for the Environment. In Edison NZ's view, fracking "is the future of the global industry, and if explorers and producers are restricted from employing the technology locally, the pressure on decision makers to direct exploration effort elsewhere will be substantial."

LME does not hold any producing assets. Its asset base is made up of holdings in a portfolio of six permits. LME has part interests in two conventional oil and gas permits in the producing Taranaki Basin and 100% interest in four permits in frontier, non-producing basins largely targeting unconventional gas.

LME does not have any operating revenue from the sale of hydrocarbons.

We understand from LME management that steps are being undertaken to reduce head office costs and a reasonable estimate of future management and overhead expenses is of the order of \$2 million per

<sup>&</sup>lt;sup>1</sup> 2012 New Zealand Petroleum Sector Yearbook, prepared by Edison NZ



annum. In the event that the Offer is successful, and LME is not required to be listed on exchanges, LME management estimate that further cost savings of approximately \$350,000 per annum could be achieved.

LME is currently incurring cash losses because it has no income and incurs costs related to its exploration activities and supporting its head office. It has cash reserves of \$5.8 million at 30 September 2012 but these are projected to be substantially spent by March 2013. As a result, LME will require capital to be raised in order to continue its exploration activities.

# 2.2 Pricing and valuation

Our valuation results are summarised in Table 2.1.

Table 2.1: Summary of LME valuation (\$ million unless otherwise stated)

	Low	High
Kahili Permit	0.9	0.9
Alton Permit	5.5	10.0
Ohai Permit	-	42.1
Other permits and applications	0.3	3.0
Total value of permits	6.7	56.0
Capitalised head office costs	(4.6)	(4.6)
LME Options	(0.1)	(2.2)
Net debt	(0.4)	(0.4)
Equity Value	1.6	48.8
AUD:NZD exchange rate	0.7831	0.7831
Equity Value (AUD million)	1.2	38.2
Shares on issue (million)	754.4	754.4
Value per share (AUD)	0.002	0.051

For the purposes of this report, we have assessed a valuation range for LME's equity between say nil and AUD0.051 per share.

This represents a very wide valuation range for LME's equity. However, that reflects the uncertainty inherent in LME's asset portfolio, because it:

- does not hold any producing assets;
- has minority interests in two conventional oil and gas permits in the producing Taranaki Basin;
- has 100% interests in four permits in frontier, non-producing basins, primarily targeting unconventional gas; and
- results of the pilot project at LME's Ohai Permit have been disappointing to date.

LME represents a high risk investment. While it is possible that LME could strike a significant find, given the results of the work undertaken to date and the high risk nature of many of LME's permits, that is no certainty. In the event of a successful hydrocarbon discovery the value of LME would increase from its current level.

New Dawn's Offer price of AUD0.06 per share is above the high-end of our assessed valuation range (AUD0.051).



The LME Share price is currently (16 November 2012) trading at AUD0.057 per share. It has traded below the Offer price of AUD0.06 per share since the Offer was announced. This suggests that there is currently no market expectation of a higher alternative offer.

LME's shares have performed poorly since listing at AUD0.20 in 2007.

Since March 2010, LME's shares have declined from around AUD0.15 to around AUD0.04 in advance of the Offer. Key issues which appear to have affected the share price decline include market sentiment towards pre-production hydrocarbon explorers; the capital raising in July 2010; disappointing results from the Ohai CSG pilot; unsuccessful drilling results at Talon-1 in the Alton Permit; and the impending need for further capital raising in early 2013.

#### Premium over VWAP

New Dawn's Offer represents a premium of 40% to the volume weighted average price ('VWAP') per LME Share in the month prior to the Offer.

### 2.3 New Dawn's intentions

KordaMentha offered to meet with New Dawn to discuss its intentions regarding the Offer, its views on LME's future prospects and what New Dawn would do if another party made a higher competing offer. New Dawn declined to meet with us to discuss the Offer.

New Dawn's stated intention is to make no material changes to the business of LME or its subsidiaries.

### 2.4 Potential outcomes of the Offer

# 2.4.1 New Dawn secures 90% of the LME Shares

The Offer is conditional on New Dawn receiving a minimum of 90% acceptances and certain other conditions.

As a result of the pre-bid agreements, the Offer is guaranteed the support of 77.16% of LME Shares. Therefore, New Dawn requires acceptances from a further 12.84% of LME Shares out of an available 22.84%.

In the event that New Dawn receives acceptances for 90% of the LME Shares, the Offer will be successful (unless another Offer condition is not satisfied or the Offer is withdrawn with the consent of the Takeover Panel) and as a result New Dawn will be able to control the future direction of LME.

New Dawn says its intention is to enact the compulsory acquisition provisions under the Takeovers Code in the event it secures 90% of the LME Shares.

## 2.4.2 New Dawn waives the condition of 90% acceptance

New Dawn may, at its discretion, waive the condition of the Offer that it receives a 90% shareholding in LME. In that case, by nature of the pre-bid agreements, it would own a minimum of 77.16% of the LME Shares. As a result, New Dawn would have effective control over the day-to-day operations of LME.

The Companies Act, NZX Listing Rules and the Independent Directors on LME's Board provide some level of protection to minority shareholders. However, New Dawn would be entitled to appoint new



directors to the Board of LME and, as a result of its majority shareholding, would control the outcome of any resolution put to LME shareholders. However, New Dawn would be prohibited from voting on any resolution that, if accepted, would result in an increase in its shareholding in LME.

After 12 months from the closing of the Offer, New Dawn would be entitled to acquire an additional 5% shareholding in LME per annum under the "Creep" provisions of the Takeovers Code.

#### 2.4.3 The Offer fails

The Offer is conditional on New Dawn receiving a 90% shareholding in LME. In the event that New Dawn receives less than a 90% shareholding and does not waive this condition, then the Offer will fail.

The Offer will also fail if any other condition of the Offer is not met or waived by New Dawn.

### Capital raising alternatives

New Dawn states that the background to the Offer is that LME will shortly need more capital and LME's other large shareholders have indicated an unwillingness to participate in further capital raisings.

LME management say the Company will exhaust its existing cash around March 2013. Therefore, it is likely that LME will need to raise further capital prior to March 2013.

In June 2012, Mr Loudon invested AUD5 million in LME through a bridging loan, which subsequently became a convertible note following approval by Shareholders on 29 June 2012. This investment was considered necessary because LME was projected to have expended its available funds by mid-2012. LME management have confirmed that there were limited alternative sources of capital at that time.

In the event the Offer is unsuccessful, LME management consider it likely that there will be a rights issue or capital raising in early 2013.

Rights issues for oil and gas exploration companies are typically at a discount to existing share prices and therefore dilutive for those Shareholders who do not participate.

LME management have considered an additional listing on the Toronto Stock Exchange ('TSX') in order to raise capital. In the event the Offer is unsuccessful, we understand LME management consider the most likely alternative for capital raising is to list on the TSX. Advisers appointed by LME to consider this option earlier in the year were confident that they would be able to achieve a capital raising in the order of AUD20 million but the key issue was around pricing. LME management's view was that price would have been in the order of AUD 2 to 3 cents per LME Share.

### Share price after the Offer

LME's share price has traded around the Offer price since the Offer was announced. In the absence of actual and potential takeover speculation, the LME share price is likely to be lower than the current share price. This is broadly to be expected given share prices reflect prices for small parcels of minority shares whereas takeover offers typically includes some premium for control.

In the absence of any other factors, we consider there is a real prospect that LME's share price may recede from current levels, following the Offer.



# 2.5 Liquidity

The market for LME Shares (on both the NZX and ASX) is highly illiquid.

In the event the Offer fails, LME Shares will continue to be illiquid.

If the 90% acceptance condition is waived, the remaining free float of LME's shares will likely decrease. New Dawn has pre-bid acceptances form 77.16% of LME Shares. In our view the Offer is likely to attract acceptances from at least some of LME's shareholders (apart from those who have already accepted). Therefore, under this scenario it is likely that the remaining free float of LME Shares would decrease following the Offer. This would further limit the liquidity of trading in LME's shares.

# 2.6 Likelihood of New Dawn increasing its Offer price

We consider it very unlikely New Dawn will increase its Offer price given it has already secured 77.16% of LME through its agreements with other shareholders, in the absence of a competing offer.

# 2.7 Prospect of alternative takeover offers

Given the high level of pre-bid acceptances (77.16%), in normal circumstances, we would consider an alternative offer unlikely. However, the Offer includes a withdrawal right for Shareholders and Optionholders if there is an alternative cash takeover offer made offering a higher price for 100% of LME's Shares and Options prior to the Offer being declared unconditional.

It is possible that an industry participant, such as NZEC, which owns the remaining 65% of LME's Alton Permit and the neighbouring Eltham Permit, could make an alternative takeover offer. However, there is no certainty that an alternative offer will be made or indeed at what price and on what terms and conditions any such offer would be made.

There is no need for shareholders to accept the New Dawn Offer early and shareholders do not need to do anything in relation to the New Dawn Offer until close to its closing date of 11 January 2013.

# 2.8 Prospect of an investor acquiring a strategic shareholding less than 20%

It is possible that an investor could acquire a strategic shareholding of less than 20% of LME. A shareholding of greater than 10% could be considered a blocking stake because it would prevent New Dawn from meeting its 90% minimum shareholding condition and prevent New Dawn or any future shareholder from reaching the 90% shareholding necessary to compulsorily acquire the Company under the Takeovers Code. It is possible that any acquisition of a strategic shareholding could be made at a premium to the Offer price of AUD0.06.

We are not aware of any investor considering making a strategic acquisition of LME Shares.

The possibility of an investor acquiring a strategic shareholding less than 20% at a price above the Offer reinforces that there is no need for shareholders to accept the New Dawn Offer early and shareholders do not need to do anything in relation to the Offer until close to its closing date of 11 January 2013.



# 2.9 Summary

Key issues to be considered when assessing the merits of the Offer include:

- New Dawn's Offer price of AUD0.06 per share is above the high-end of our assessed valuation range;
- LME represents a high risk and potentially high reward investment. While it is possible that LME could strike a significant find, given the results of the work undertaken to date and the high risk nature of many of LME's permits, that is no certainty. In the event of a successful discovery the value of LME would increase significantly from its current level;
- in the event that the Offer is unsuccessful LME requires an injection of cash by March 2013 in order to continue its exploration activities. Rights issues for oil and gas exploration companies are typically at a discount to existing share prices. LME management have considered an additional listing on the TSX in order to raise capital. LME management's view was that price would have been in the order of AUD 2 to 3 cents per LME Share. Unless an individual shareholder participates in the capital raising they are likely to have their shareholding in LME diluted and those increasing their shareholdings are likely to do so at a price below the Offer;
- the Offer is above the LME closing price on 16 November 2012 of AUD0.057 per share. In the absence of any other factors, we consider there is a real prospect that LME's share price may recede from current levels, following the Offer;
- the Offer provides some liquidity for LME's minority shareholders at a price approximately 40% above share trading levels observed in advance of the Offer; and
- LME's shares are closely held and there is a lack of trading volume. This limits the liquidity available to shareholders and their ability to sell shares. There may not be a better exit opportunity for LME's minority shareholders in the short term, at least.

It is possible that an alternative Offer at a higher price could be received. However, given the circumstances, including the Offer price relative to our valuation, it would be presumptive to assume any future offer would necessarily be forthcoming.

Shareholders considering accepting the New Dawn Offer should wait until towards the end of the Offer period to see whether an alternative offer eventuates.

The closing date for the Offer is 11 January 2013.

### Acceptance or rejection of the Offer

Acceptance or rejection of the Offer is a matter for individual shareholders based on their own views as to value and future market conditions, risk profile, liquidity preference, portfolio strategy, tax position and other factors. In particular, taxation consequences will vary widely across shareholders. Shareholders will need to consider these consequences and, if appropriate, consult their own professional adviser.



# 3 Industry profile

## 3.1 Global overview

During 2007 and 2008, when oil prices increased sharply, there was speculation about structural supply shortages as growth in global hydrocarbon reserves could not keep pace with growth in global demand.

In the last few years a number of new world-scale petroleum discoveries have been made. A number of these are in new frontier regions not previously known to hold reserves. Contrary to some press reports, recent successes in exploration have resulted in global oil and gas reserves positions increasing.

As a result of improved reserves and the GFC-led decline in global demand for petroleum resources the price of oil and gas has reduced. Another key factor is the role that technology has played in enabling new tranches of what were previously technically or economically un-extractable hydrocarbon deposits to be produced.

# 3.2 New Zealand overview

Although New Zealand's electricity generation is dominated by renewable energy sources such as hydro-power, geothermal and a growing wind energy sector (which together contribute approximately 70% of the country's power generation), New Zealand is a net importer of energy, largely in the form of oil and oil products.

Exploration activity to date has been relatively low, with approximately 500 wells drilled in the entire country. Only one of 18 potentially hydrocarbon-bearing sedimentary basins (Taranaki Basin) has been commercialised.

Oil prices have a significant bearing on the rate of petroleum exploration and the economics of recovery. Higher oil prices encourage exploration of both oil and gas. New Zealand has recently observed the highest level of exploration effort seen for a long time, driven by high oil prices, as shown in Figure 3.1, as well as exploration successes.

35 120 Exploration Oil price real (2011) wells US\$/bbl (bars) 30 100 (line) 25 80 20 15 10 20 5 1950 1960 1965 1970 1975 1980 1985 1990 1995 2000

Figure 3.1 Drilling activity and oil prices

Source: Gas supply and demand scenarios 2012-2027, August 2012, Concept Consulting Group



### 3.3 Oil Sector

New Zealand's 2P oil reserves as at January 2012 totalled 153 million barrels ('bbl'), representing production coverage of approximately nine years<sup>1</sup>. Local oil production does not meet domestic demand with New Zealand importing a significant quantity of its crude oil and refined petroleum products.

# 3.4 Gas Sector

New Zealand's 2P reserves totalled 2,001 petajoules ('PJ') at 1 January 2012, representing approximately 11.7 years of production coverage<sup>2</sup>. Production is currently dominated by the Pohokura and Maui fields. Maui has been in production since 1979 and over the past decade has been in decline as production has depleted known reserves. In 2011 Maui produced 33PJ. Pohukara is a relatively young field that has been in production since 2006 and has produced at a rate of approximately 70PJ per annum.

New Zealand is one of only two OECD nations not to have cross-border pipeline or liquefied natural gas ('LNG') infrastructure to enable direct connection to the gas supply networks of other countries. As a result, the direct gas market is not subject to international competition. The primary users of natural gas in 2012 included the power sector (51%), industrial users (24%), and the petrochemical sector (16%).

Methanex is the world's largest supplier of methanol. It owns and operates plants in five countries including at two separate sites in New Zealand. Despite only using 40% of its capacity in recent years, Methanex accounted for 20% of all New Zealand gas demand in 2011. In July 2012, Methanex completed a \$100 million project to re-commission its second Motonui train. This will help underpin demand for gas in New Zealand in the short to medium term. Methanex secured a long term gas supply contract at a price which market commentators have estimated at between \$5 and \$6 per GJ.

In New Zealand's North Island a reticulated gas network is in place over a significant portion of the island, including Wellington and Auckland. Any new gas fields that can be readily connected to this network could be sold through the existing system. However, gas prices could be adversely impacted by the introduction of a significant volume of gas to a constrained market.

There is no existing natural gas reticulation network operating to or within the South Island. To be commercialised, any new gas find would need either to establish a new South Island natural gas market, be transported to the North Island or be liquefied as LNG for either local use as a fuel (e.g. to generate electricity) or for transport to other markets such as the global LNG market.

# 3.5 Royalties

In New Zealand, mineral rights are owned by the Crown and are permitted to oil and gas companies for a specified number of years. However, surface access must be negotiated with local landholders while all relevant stakeholders must also be consulted, including local Iwi.

As of December 2009, all new discoveries are subject to a new royalty regime. The regime specified that royalty is payable at the higher of either a 5% ad valorem royalty ('AVR') on net revenue or a 20% Accounting Profits Royalty ('APR'). The AVR royalty consists of top-line production revenue multiplied by the 5% AVR royalty rate while the APR rate is 20% of accounting profit (with

<sup>&</sup>lt;sup>1</sup> Source: 2012 New Zealand Petroleum Sector Yearbook, prepared by Edison NZ

<sup>&</sup>lt;sup>2</sup> ibid



accounting profit calculated by subtracting prospecting and exploration costs including production costs, exploration and development costs, permit acquisition costs and other costs). In addition corporate taxes are also payable on profits.

### 3.6 Permits

There are two main types of permits that are applicable for oil and gas exploration in New Zealand:

- **Petroleum Exploration Permits (PEPs):** where holders may carry out a number of different activities to explore areas in greater detail and to determine whether it is economically viable to commercially develop the resource. These activities will usually include desktop geological and geophysical studies, 2D and/or 3D seismic surveys. PEPs generally include an obligation to drill one or more exploratory wells (for which environmental consents are required). PEPs are granted for up to five years initially. The permit may be extended beyond five years, typically over a maximum of 50% of the original area, to a maximum of 10 years, to assess the oil and gas potential of an area. An appraisal extension of up to four years is possible and there is no limit on the number of times this can occur. LME currently has interests in five PEPs, one coal prospecting permit ('CPP') and a further three applications in process. In addition, applications have been made for a further two permit interests in the 2012 Blocks offer.
- Mining permits: which allow a permit holder to undertake mining operations relevant to the extraction, separation, treatment and processing of oil and gas for a period up to 40 years. They are awarded subsequent to an exploration permit and following an extensive appraisal programme and preparation of a work programme for development and mining of a discovery. Operations may use different methods and equipment depending on the resource under production and its physical location. The mining of oil and gas can occur onshore or offshore. Production processes are subject to New Zealand's environmental consent processes. LME has no mining permits.

The New Zealand government does not sell its permits. Instead permits are tendered for on the basis of the level of work a tenderer is willing to commit to exploring the area covered by the permit. The returns to the New Zealand government accrue from royalties earned on the successful production of hydrocarbons.

The latest 'blocks offer' tender process was opened by the Crown in June 2012 with bids closing on 15 October 2012. LME has bid for two permits/blocks with bid costs of approximately \$50k each. LME will not know the results of the blocks offer until mid-December 2012 at the earliest.

# 3.7 Petroleum reserves and resources

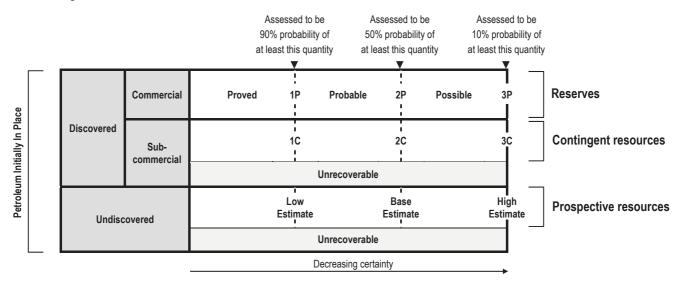
When exploring for oil and gas there are a number of classifications and terms used to describe the probability of extracting oil and gas from a permitted area. A summary is set out in Figure 3.3.

The framework that supports the reserve estimation process breaks the total petroleum initially in place ('PIIP') into two categories:

- **Reserves:** the portion of PIIP that is economic to develop and extract under a given set of technical, commercial and economic assumptions; and
- **Resources:** the portion of PIIP that is not economic to develop and extract under the same assumption set.



Figure 3.3: Petroleum reserves and resources



Source: Society of Petroleum Engineers

The Report relies on the classification and terminology set out in Figure 3.3 to stratify the oil and gas reserves and resources estimated at LME's permits. Clearly the more certainty that reserves and resources exist and can be extracted, the higher the value ascribed to those reserves and resources.

From the diagram set out at Figure 3.3 key definitions we use in the Report include:

Table 3.1: Key definitions of reserves and resources

Term	Description
Reserves	Quantities of hydrocarbons which are anticipated to be commercially recovered. Reserves may be assessed at different confidence levels:  • 1P representing 90% confidence that at least this amount is available ('proved' reserves)  • 2P representing 50% confidence that at least this amount is available ('proved' + 'probable' reserves)  • 3P representing 10% confidence that at least this amount is available ('proved' + 'probable' + 'possible' reserves).
Proved Reserves	Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable.
Probable Reserves	Probable Reserves are those additional reserves that are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves.
Possible Reserves	Possible Reserves are those additional reserves which analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves.
Resources	Quantities of hydrocarbons which do not satisfy all the criteria required to be classified as 'Reserves'. Resources are classified as 'contingent' if they are discovered and 'prospective' if undiscovered.
Contingent Resources	Those estimates of Petroleum, which are potentially recoverable from known accumulations, but which are not currently considered to be commercially recoverable. Contingent Resources may be assessed at different confidence levels:  1 C representing 90% confidence that at least this amount is available  2 C representing 50% confidence that at least this amount is available  3 C representing 10% confidence that at least this amount is available
Prospective resources	Those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations. Prospective Resources may be assessed at different confidence levels:  • Low Estimate representing 90% confidence that at least this amount is available  • Best Estimate representing 50% confidence that at least this amount is available  • High Estimate representing 10% confidence that at least this amount is available



## 3.8 Outlook

With increasing domestic demand; a strong domestic commodity pricing outlook; and good infrastructure, New Zealand has become increasingly attractive for oil and gas exploration. Furthermore, New Zealand offers a commercially attractive and politically stable environment to operate within. Industry commentators consider the emerging New Zealand oil and gas industry holds potential for significant growth in the near future.

# 3.9 New Zealand hydrocarbon basins

New Zealand has a total land area above sea level of 268,000 square kilometres ('km²'). The land mass above sea level is part of an extensive, mainly submerged, continental landmass with a total area of 6 million km². Northwest, south and east of New Zealand are large areas of relatively shallow sea that border the deep ocean basins of the Pacific Ocean and Tasman Sea.

New Zealand has established an Exclusive Economic Zone ('EEZ') defined by a line 200 nautical miles from the New Zealand coastline and, under the United Nations Convention on the Law of the Sea, also defined an Extended Continental Shelf ('ECS') beyond the EEZ. In August 2008, a United Nations Commission confirmed the extent of New Zealand's maritime entitlement. Therefore, New Zealand has sovereign rights over more than 5.7 million km² of seabed. This is an area 22 times greater than New Zealand's land area.



Figure 3.4: New Zealand hydrocarbon basins

Source: New Zealand Ministry of Economic Development



### 3.10 Taranaki Basin

To date, the only commercial oil and gas production in New Zealand is from the Taranaki Basin.

The history of oil and gas in the Taranaki Basin goes back to 1865 when a well was drilled near New Plymouth. The modern era of exploration and production began in 1959 with the discovery of the large on-shore Kapuni gas-condensate field near Hawera.

The Taranaki Basin is situated onshore and offshore, with the majority of producing fields located onshore in close proximity to the Taranaki fault, which defines the eastern boundary of the basin.

The largest discoveries made to date (Kapuni, Maui and Pohukara) are gas-condensate fields.

Around 2 billion barrels of oil equivalent have now been produced from the Taranaki Basin, most of which has come from Maui and Kapuni.

Discovered resources within the Taranaki Basin are estimated at approximately 7 trillion cubic feet of natural gas reserves and 600 million barrels of oil and condensate reserves. Approximately two-thirds of the reserves are believed to lie offshore.

Annual gas production is approximately 430 million cubic feet per day while annual oil and liquids production averages approximately 55,000 barrels per day ('bbl/d').

Whilst the Maui Field contained the bulk of reserves overall, this field is in decline. Two other fields, Maari and Pohokura, currently contain about 53% of remaining oil and condensate reserves, whilst Pohokura accounts for 43% of remaining gas reserves. The rest of the reserve base is distributed across 17 other producing fields.

Although the Taranaki Basin covers an area of about 100,000 km<sup>2</sup> and has been the focal point of oil and gas exploration and production to date. Only around 500 total wells have been drilled since 1955, leading industry experts to suggest that the basin has been under explored compared to other oil and gas regions around the world.

Although all drilling to date has taken place onshore or within the basin's continental shelf, recent and current seismic testing focused offshore in deep-water has revealed encouraging plays.

LME has interests in two onshore permits in the Taranaki Basin. It is currently the Company's area of operational focus.

# 3.11 Coal seam gas

LME has three permits focussed on CSG. These represent unconventional exploration plays.

Unconventional petroleum refers to hydrocarbons that cannot normally be produced at commercial rates without employing specialist drilling and/or extraction treatments.

While CSG exploration and production is well established in the United States and Australia, and is being developed elsewhere, there has only recently been interest in New Zealand. It is estimated that CSG provides 15% of the gas supply in the United States and approximately 90% of gas supply in Queensland, Australia.

Investigations of coal seams in New Zealand have indicated considerable potential but gas yields have been relatively low by world standards. No commercial production has yet been achieved, although gas produced from exploration wells operated by Solid Energy in the Huntly Coalfield has been used to power a 1 Megawatt generator. Solid Energy has also been undertaking a work programme on



separate permits it holds over Taranaki coal fields and in May 2012 reported an independently accessed 2C contingent resource estimate of 900PJ in respect of its Taranaki acreage.

A potential issue for the local oil and gas industry is the current environmental and political debate concerning the practice of hydraulic fracturing ('fracking') in New Zealand.

Fracking is the creation of fissures in targeted rock formations deep underground. An emulsion, or mixture, comprised mostly of water and sand with some additives is pumped into the target rock formation. The additives keep the sand in suspension in the fluid throughout the pumping process. When the additives break down the fluids are removed and the sand remains to keep the fissures open and increase the flow characteristics of the rock.

In the case of CSG, fracking of a coal seam is often necessary to encourage trapped gas to flow at economic rates of extraction. There are potentially significant implications for the oil and gas exploration and production sectors from the ongoing investigation into fracking currently being led by the Parliamentary Commissioner for the Environment.

In Edison NZ's view, fracking "is the future of the global industry, and if explorers and producers are restricted from employing the technology locally, the pressure on decision makers to direct exploration effort elsewhere will be substantial."

# 3.12 Other comparable industry participants and recent activity

New Zealand's petroleum exploration sector includes a range of participants from very large international oil companies (e.g. Andarko, OMV, Petrobas and Shell) to small junior exploration companies like LME.

A brief description of comparable junior industry participants and their recent exploration activities is set out below.

#### 3 12 1 Kea

Kea Petroleum PLC ('Kea') is a London-listed New Zealand-based oil and gas exploration company. It holds interests in three oil and gas exploration permits in the Taranaki and Northland basins. The company's prospective resources include approximately 686 billion cubic feet of gas and 36.5 million barrels of oil.

On 10 October 2012, The National Business Review reported that Kea is about to take the leap from explorer company to explorer-producer – meaning it will be able to fund at least some of its exploration costs from production income. Oil and gas is expected to be produced from Kea's Puka well, near Eltham, early next year. In early 2013, Kea will also drill a separate well (Mauku-1) under a funding and participation agreement with Methanex.

# 3.12.2 New Zealand Energy Corporation

New Zealand Energy Corporation ('NZEC'), which is listed on the TSX, is an oil and natural gas exploration company which was formed in 2010. It engages in the acquisition, exploration, development and production of conventional and unconventional oil and natural gas resources in New Zealand.

NZEC's permits collectively cover approximately two million acres of conventional and unconventional prospects in the Taranaki Basin and East Coast Basin of the North Island.

<sup>&</sup>lt;sup>1</sup> 2012 New Zealand Petroleum Sector Yearbook, prepared by Edison NZ



In the Taranaki Basin, it holds a 100% interest in the Eltham Permit and a 65% interest in the adjoining Alton Permit, which is 35% owned by LME. To date, NZEC has announced successful results from three wells drilled in its Eltham permit. The wells are producing through NZEC facilities and trucked to a local sales point. Other wells have been drilled and are awaiting testing. The Alton permit shares most of the regional geological potential of the Eltham Permit. In addition, NZEC has recently undertaken 100 km² of 3D seismic testing over the Northern portion of the Eltham and Alton permits. That data is still in the process of being interpreted.

In May 2012, NZEC announced its acquisition of the TAWN permits and associated assets from Origin Energy. The TAWN permits are near the Eltham and Alton permits.

NZEC also owns 100% interests in the Castlepoint, Ranui, and East Cape Permits located in the East Coast Basin. It has stated it plans to drill 12 wells in 2012.

NZEC is headquartered in Vancouver, Canada.

### 3.12.3 TAG Oil

TAG Oil Limited ('TAG Oil'), which is also listed on the TSX, engages in the exploration, development and production of oil and gas in New Zealand.

TAG Oil holds a 100% interest in the Cheal oil and gas field in the Taranaki Basin. TAG Oil has achieved significant exploration success and has drilled 19 successful wells.

It also has permits in the East Coast Basin (covering approximately 1 million acres), Canterbury Basin and offshore Taranaki Basin.

TAG Oil has announced an extensive exploration programme across its East Coast Basin permits. If the full program is completed it is expected to be undertaken over four years and cost \$125 million, largely funded by Apache Corporation.

TAG Oil is headquartered in Vancouver, Canada.

# 3.12.4 Drilling activity levels

Edison NZ estimates that nearly 90 new oil and gas exploration wells are planned in New Zealand over the next two years. The estimated cost of this activity is up to \$2.3 billion.

The increase in expected onshore drilling activity is broad-based. As well as incorporating a continuation of the recent drilling campaigns of TAG Oil and NZEC, higher activity levels also reflect significant commitments from large industry participants such as Todd Energy.

Edison NZ estimates as many as 28 offshore wells are also planned, including life extension programmes at the Maui A and B platforms and numerous other exploration and appraisal wells in other permit areas.



# 4 Company overview

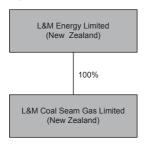
# 4.1 Overview

LME engages in the exploration and development of oil, conventional gas and CSG resources in New Zealand. It holds equity interests in six permits covering approximately 4,000 km<sup>2</sup> of exploration acreage across three basins in New Zealand (plus an additional three Priority in Time ('PIT') applications and two applications under the 2012 Blocks offer).

LME does not hold any producing assets. Its asset base is made up of shareholdings in a portfolio of six permits. LME has part interests in two conventional oil and gas permits in the producing Taranaki Basin and 100% interests in four permits in frontier, non-producing basins largely targeting unconventional gas.

Figure 4.1 shows the corporate structure of LME and its subsidiary.

Figure 4.1: LME's corporate structure



Source: LME management

LME acquired L&M Coal Seam Gas Limited ('LMCSG') in early 2010 for consideration which was satisfied by the issue of LME shares and options. The transaction was valued at approximately \$75 million (for both shares and options)<sup>1</sup>.

# 4.2 History

In January 2007, LME raised AUD20 million through an IPO and dual listed on the ASX and NZX as an early stage oil and gas exploration company. Prior to listing, LME was associated with the L&M Group of companies with the ultimate parent of each company being a company associated with Mr Loudon.

LME was incorporated in March 1997 and has had various name changes. From incorporation, LME has been active in securing PEPs around New Zealand for the exploration of hydro carbons. Over the years, LME has surrendered a number of PEPs and farmed out and farmed in PEPs to associated and non-associated interests.

At the time of listing in January 2007, LME held five exploration permits covering 8,790 km<sup>2</sup> of the Western Southland Basin in the south-west region of the South Island of New Zealand.

LME continued to explore in areas outside of the Taranaki basin with a number of permits throughout the country until September 2008 when LME together with Mosaic Oil NL ('Mosaic') was successful in being awarded an onshore exploration permit, PEP51151 ('Alton Permit') in the Taranaki Basin, which is near the producing Rimu, Kauri and Manutahi fields. Mosaic subsequently sold its interest to NZEC and LME has farmed out its interest so that it now holds a 35% stake.

<sup>&</sup>lt;sup>1</sup> Based on LME's share price of \$0.15 as at 26 February 2010.



In February 2009, LME announced that it was granted a second five year term on PEP38226 ('Waiau Permit'). As required, LME surrendered 50% of the original permit area, however, the area retained contains what LME considers the most prospective conventional acreage together with the entire CSG trend identified in the eastern part of the original permit.

On 7 September 2009, LME announced it had commenced discussions with respect to the possible acquisition of LMCSG or its underlying CSG asset base.

In December 2009, LME announced that it had entered into a sale and purchase agreement to acquire all of the issued shares of LMCSG for consideration to be satisfied by the issue of LME Shares and Options. The principal focus of LMCSG since incorporation in October 2004 had been on the exploration and development of CSG resources in New Zealand. In October 2009, LMCSG had announced initial CSG reserves in PEP38220 ('Ohai Permit') on a 3P reserve basis of 173PJ. The independent certification of the reserves was undertaken by MHA Petroleum Consultants LLC ('MHA'). Ohai Permit is adjacent to LME's Waiau Permit. LMCSG has been one of the most active CSG explorers in New Zealand over the 10 years up to 2011. However, since that time LME has reduced its focus on CSG. LME has drilled a considerable number of wells in its CSG permitted areas and is yet to flow any commercial quantities of gas.

With the global financial crisis having a significant impact on world financial markets and on commodity and oil demand and prices, LME has been careful to manage its cash resources. Given the nature of LME's operations as an exploration company a level of its expenditures are discretionary in that they can be reduced if needed. A more detailed analysis of exploration expenditure incurred by LME is set out later in the Report.

# 4.3 Overview of permits

Table 4.1 and Figure 4.2 summarises the exploration permits in which LME has an interest. A detailed description of each of LME's permits is set out in the Valuation section of the Report.

Table 4.1: LME's permits

	Permit	Operator	Ownership interest	Basin	Primary Type	Area (km²)	Exploration costs to date	Permit expiry
Conventional permits								
Kahili Permit	PEP 53247	LME <sup>1</sup>	25%	Onshore Taranaki	Conventional oil and gas	6	\$2.4m	Dec-15
Alton Permit	PEP 51151	NZEC	35%	Onshore Taranaki	Conventional oil and gas	482	\$10.5m	Sep-13
Unconventional permits								
Waiau Permit	PEP 38226	LME	100%	Western Southland	CSG/Conventional oil and gas	559	\$15.4m	Nov-13
Ohai Permit	PEP 38220	LME	100%	Western Southland	CSG	57	\$4.9m	Nov-11 <sup>2</sup>
Waikato Coal Permit	CPP 52711	LME	100%	Waikato	Underground coal gasification	2,112	<\$0.1m	Mar-13
Aparima River Permit	PEP 52819	LME	100%	Western Southland	CSG	822	<\$0.1m	Mar-17

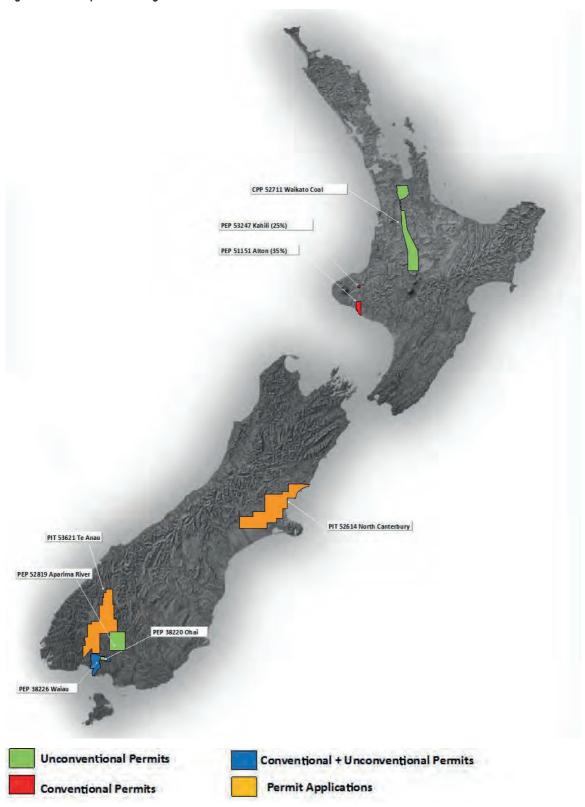
 $Source: \textit{Management information and New Zealand Petroleum \& \textit{Minerals website} \\$ 

<sup>&</sup>lt;sup>1</sup> Under delegation from Mosaic Oil NZ Limited.

<sup>&</sup>lt;sup>2</sup> Ohai Permit expired 10 November 2011. LME applied for an appraisal extension in November 2011.



Figure 4.2: LME's permit holdings



Source: LME management



### 4.3.1 Applications

In addition to LME's current permits, it has applied for three exploration permits shown in Table 4.2:

Table 4.2: LME's permit applications

	Ownership interest	Basin	Primary Type	Area (km²)
PIT 52614 (North Canterbury)	100%	Canterbury	Gas	4,959
CEPA 54798 (Kawhia)	100%	Waikato	UCG1	110
PIT 53621 (Te Anau)	100%	Western Southland	Gas	2,876

Source: Management information

LME management expect that there is a strong likelihood of two of these applications being awarded. However, applications are competitive against other bidders and there is no certainty that LME will be successful.

### 4.3.2 2012 Block tender

As part of the 2012 Block tender, LME has bid for two permits, which remain subject to confidentiality agreements. LME will not know until mid-late December whether its bids have been successful.

# 4.4 Corporate office

In addition to LME's activities under the permits, the Company has a small corporate office comprising executive management, technical and support staff. The permanent staff employed by LME amount to 4.5 full time equivalents. LME has no other staff and uses consultants for exploration activities.

<sup>&</sup>lt;sup>1</sup> Underground coal gasification



### 4.5 Shareholders

LME currently has 754,405,518 fully paid ordinary shares. The 20 largest ordinary shareholders, as at 30 October 2012 are listed in Table 4.3.

Table 4.3: Top 20 Shareholders as at 30 October 2012

	Shares	Percentage
Campania Holding Inc	173,000,000	22.93%
Mr Loudon	173,000,000	22.93%
Tangent International Limited	173,000,000	22.93%
J P Morgan Nominees Australia	60,785,000	8.06%
G R Hogan	21,570,000	2.86%
HSBC Custody Nominees	13,757,154	1.82%
Hubbard Churcher Trust	6,473,659	0.86%
Pagodatree Investments Limited	5,831,705	0.77%
New Zealand Central Securities	5,083,250	0.67%
Adelaide Equity Partners	5,000,000	0.66%
Balpina Pty Limited	2,300,000	0.30%
R Langley & others	2,222,222	0.29%
Poirot Pty Limited	2,078,660	0.28%
Maminda Pty Limited	2,000,000	0.27%
High Octane Fund Limited	1,250,000	0.17%
Forty Traders Limited	1,245,455	0.17%
FNZ Custodians Limited	1,244,482	0.16%
R Prefontaine	1,241,178	0.16%
Citicorp Nominees Pty Limited	1,161,314	0.15%
Dagger Nominee Limited	1,140,018	0.15%
Top 20	653,384,097	86.61%
Remaining shareholders	101,021,421	13.39%
Total	754,405,518	100.00%

Source: LME management

LME's substantial security holders are Campania, Mr Loudon, Tangent and Runa, which holds its shares through JP Morgan Nominees Australia.

Table 4.3 shows LME's shares are relatively closely held. 20 shareholders control 86.6% of shares and the remaining 13.4% of shares are held by small shareholders.

Trading of LME Shares over the three months prior to the announcement of the Offer is summarised in Table 4.4 and shows that approximately 0.57% of LME Shares were traded over this period. This highlights relatively low liquidity in the market for LME Shares.

Table 4.4 shows LME's share trading on the ASX and NZX combined in the three months immediately prior to the Offer.

Table 4.4: Share trading prior to 24 October 2012 (AUD)

Period	Share Price Low	Share Price High	VWAP	Cumulative Volume	% of Issued Capital
1 Week	0.043	0.044	0.043	317,210	0.04%
1 Month	0.042	0.046	0.043	1,068,410	0.14%
3 Months	0.040	0.058	0.049	4,266,190	0.57%

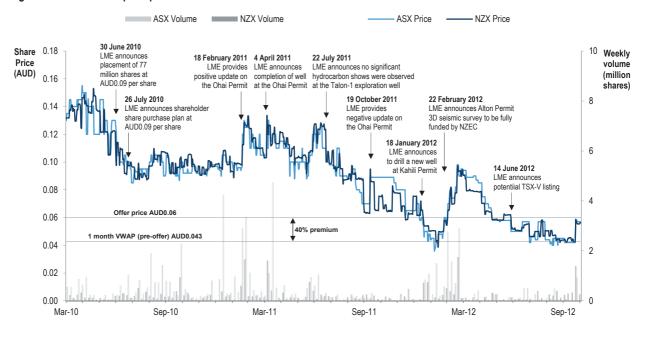
Source: Capital IQ



# 4.6 Share price performance

LME's ordinary shares are traded on the NZX and ASX. Figure 4.3 illustrates the share price of LME (in AUD) and the total volumes of share trades since March 2010.

Figure 4.3: LME's share price performance<sup>1</sup>



Source: Capital IQ

LME Shares initially traded at AUD0.20 at its IPO in 2007. Since March 2010, LME's shares have declined from around AUD0.15 to levels around AUD0.04 in advance of the Offer. Key issues which appear to have affected the share price decline include market sentiment towards pre-production hydrocarbon explorers; the capital raising in July 2010; disappointing results from the Ohai CSG pilot; unsuccessful drilling results at Talon-1 in the Alton Permit; and the impending need for further capital raising in early 2013.

Since New Dawn's announcement that it intended to make an offer the share price has tended to trade in a range between AUD0.055 and AUD0.059.

The Offer price of AUD0.06 per share represents a:

- premium of 41% to the closing price of AUD0.043 on the day before the Offer;
- premium of 40% to the VWAP in the week prior to the Offer of AUD0.043;
- premium of 40% to the VWAP in the month prior to the Offer of AUD0.043; and
- premium of 23% to the VWAP in the three months prior to the Offer of AUD0.049.

<sup>&</sup>lt;sup>1</sup> NZX price is converted to AUD using the NZD/AUD exchange rate on the relevant date.



# 5 Financial analysis

# 5.1 Financial performance

Table 5.1 summarises LME's financial performance for the three financial years ended 31 December 2011, FY12 Budget ('Budget') and for the nine months ended 30 September 2012 ('YTD12') (both actual and budget).

Table 5.1: Summary of LME's statement of financial performance (\$ million)

		Full financial year				YTD12	
	FY09	FY10	FY11	FY12 Budget	Actual	Budget	
Miscellaneous income	0.5	0.4	0.5	-	-	-	
Reimbursement of well costs	-	-	1.6	-	-	-	
Loan forgiveness	-	1.2	-	-	-	-	
Total income	0.5	1.5	2.1	-	-	-	
Exploration expenditure	(1.8)	(3.4)	(2.6)	(2.3)	(0.4)	(1.4)	
Share option compensation	(0.3)	(8.0)	(1.5)	(1.3)	(0.9)	(1.0)	
Other expenses	(2.6)	(3.0)	(2.8)	(2.5)	(1.8)	(1.9)	
EBITDA	(4.3)	(12.9)	(4.8)	(6.0)	(3.1)	(4.2)	

Source: Management and statutory accounts

LME acquired LMCSG in February 2010 for consideration which was satisfied by the issue of LME Shares and Options. However, because of the related nature of the transaction, it was structured as a reverse merger transaction (i.e. LME became LMCSG's subsidiary). Due to this transaction, FY10 financials are not directly comparable with other years.

### 5.1.1 Income

LME does not have any commercially producing wells, and therefore does not have any operating revenue from the sale of hydrocarbons.

We note that miscellaneous income includes overhead recoveries from joint ventures.

Reimbursement of well costs of \$1.6 million in FY11 relates to NZEC fully funding the drilling of the unsuccessful Talon-1 when it purchased a 50% share in the Alton Joint Venture ('Alton JV'). The benefit from this transaction is recorded in LME's financial accounts as an income which offsets the exploration costs incurred by LME.

# 5.1.2 Expenses

A major cost to LME is direct exploration costs. LME's FY12 Budget included total exploration costs of \$2.3 million, which includes LME's share of the cost to drill the Kahili-2 well at the Kahili Permit.

LME have incurred management and other overhead expenses of between \$2.8 and \$3.0 million per annum (after the inclusion of LMCSG and excluding share option compensation) related to operating its head office, including bidding for permits, business development and miscellaneous expenditure.

We understand from LME management that steps are being undertaken to reduce head office costs and a reasonable estimate of future management and overhead expenses is of the order of \$2 million per annum. In the event that the Offer is successful and LME is not required to be listed on share exchanges, LME management estimate that further cost savings of \$350,000 could be achieved.



# 5.2 Financial position

Table 5.2 summarises the balance sheet for LME as at 31 December 2011 and 30 September 2012.

Table 5.2: Summary of LME's statement of financial position (\$ million)

	31 Dec 2011	30 Sep 2012
Cash on hand	2.2	5.8
Inventory	0.7	0.7
Trade and other receivables	0.2	0.1
Property, plant and equipment	0.7	0.7
Capitalised permit expenditure	25.3	25.4
Total assets	29.0	32.7
Payables, accruals and provisions	0.6	0.4
Loan - Mr Loudon	-	6.2
Total liabilities	0.6	6.7
Share capital	40.3	40.3
Stock compensation reserve	6.1	7.1
Retained earnings	(18.0)	(21.3)
Total equity	28.4	26.1
Net tangible assets (excluding permit expenditure)	3.1	0.7
Net tangible assets per share (cents per share)	0.004	0.001

Source: Management and statutory accounts

Key points to note on LME's balance sheet include:

- LME maintains cash reserves (primarily to fund exploration costs). Due to the nature of LME's business and its lack of tangible assets and positive cashflows, it is unable to raise bank debt to fund its activities;
- LME's most significant asset is its capitalised permit expenditure (\$25.4 million as at 30 September 2012), which we discuss below;
- On 13 July 2012, LME issued AUD5.0 million (\$6.4 million) in unsecured convertible notes to Mr Loudon. The notes have a term of 18 months and may be converted into ordinary shares in LME at the Company's option after 12 months (subject to certain conditions). If the shares are converted to equity, then they will be converted at the VWAP of LME's shares over the 20 trading days up to the conversion date less a discount of 2%; and
- LME reports a net asset position of \$26.3 million. However, this is almost entirely made up of capitalised permit expenditure. Its net tangible assets ('NTA') (excluding capitalised permit expenditure) are \$0.7 million as at 30 September 2012.



### 5.2.1 Capitalised permit expenditure

Table 5.3 shows a breakdown of LME's capitalised permit expenditure.

Table 5.3: Break down of capitalised permit expenditure (\$ million)

	30 Sep 2012
Acquisition of Waiau permit	21.5
Ohai pilot project	3.9
Total	25.4

Source: Management accounts

All capitalised permit expenditure on LME's statement of financial position relates to the Waiau Permit and Ohai Permit.

#### Waiau Permit

Upon acquisition of LMCSG by LME, it was deemed to be the 'acquiring' company. Therefore, LMCSG was required to allocate the 'acquisition price' of LME for consolidated reporting purposes. The acquisition price of LME was deemed to be its market capitalisation as at 26 February 2010 (\$26.3 million).

On the date of acquisition LME had a NTA of \$4.8 million, which largely comprised cash and working capital items. As a result there was a 'gap' of \$21.5 million which the market had attributed to LME above the value of its NTA. After considering the permits held by LME at the time of the acquisition, the gap of \$21.5 million was attributed entirely to the Waiau permit.

Therefore, the capitalised permit expenditure is based on an allocation of the market capitalisation of LME as at 26 February 2010, as opposed to actual exploration expenditure, which has been capitalised.

### Ohai Permit

Within the consolidated financial statements, expenditure on the Ohai pilot project (which is only part of the total expenditure on the Ohai Permit) is recorded at cost. At 30 September 2012 this totalled \$3.9 million.

# 5.3 Cash burn

LME has no income and incurs costs related to its exploration activities and supporting its head office. Our analysis, summarised in Figure 5.1, shows LME's cash is expected to suffice until around March 2013.

The major remaining payments in FY12 relate to drilling the Kahili well (\$1.6 million drilling costs plus non-drilling exploration costs). After making allowance for other minor work programme commitments; application costs; and corporate overheads, LME management estimate net cash payments of \$2.9 million will be required in the remaining months of FY12.

LME management estimate that in the first three months of FY13, LME will incur net cash payments of \$2.4 million and by March 2013 will have a cash balance of \$0.4 million. Therefore, it is likely that LME will need to raise further capital prior to March 2013.



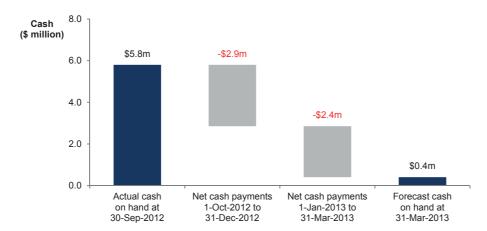


Figure 5.1: Management estimate of LME cash spend1

In June 2012, Mr Loudon invested AUD5 million in LME through a bridging loan, which subsequently became a convertible note following approval by Shareholders on 29 June 2012. This investment was considered necessary because LME was projected to have expended its available funds by mid-2012. LME management have confirmed that there were no viable alternative sources of capital at that time.

In the event the Offer is unsuccessful, LME management consider it likely that there will be a rights issue or capital raising in early 2013.

Rights issues for oil and gas exploration companies are typically at a discount to existing share prices and therefore dilutive for those Shareholders who do not participate.

LME management have considered an additional listing on the TSX in order to raise capital. In the event the Offer is unsuccessful, we understand LME management consider the most likely alternative for capital raising is to list on the TSX. Advisers appointed by LME to consider this option were confident that they would be able to achieve a capital raising in the order of AUD20 million but the key issue was around pricing. LME management's view, was that price would have been in the order of AUD 2 to 3 cents per share.

<sup>&</sup>lt;sup>1</sup> Net cash payments are forecast by LME management.



# 6 Valuation

In our view, it is appropriate to consider the value of LME based on a sum-of-the-parts approach. This involves an estimate of the value of each of LME's permits as well as adjustments for corporate overheads, options outstanding and net debt.

As discussed above, KordaMentha has engaged Edison NZ to provide valuation advice in connection with the permits.

In preparing our report, KordaMentha has reviewed the assumptions and approaches taken by Edison NZ when valuing LME permits. We consider the assumptions and approaches taken by Edison NZ to be reasonable and have incorporated them into our valuation of LME.

# 6.1 Valuation methodology

There are four methodologies commonly used for valuing oil and gas exploration permits:

- Risked exploration net asset value ('RENAV');
- Comparable metrics;
- Comparable transactions; and
- Permit spend incurred.

Each of these valuation methodologies are discussed below and are appropriate in different circumstances. A key factor in determining which methodology is appropriate is the stage of exploration and confidence in the underlying resource for a permit.

Table 6.1 summarises the primary valuation methodology adopted for each permit.

Table 6.1: Primary valuation methodologies adopted

Permit	Valuation methodology
Kahili Permit	RENAV
Alton Permit	Comparable transactions
Ohai Permit	Comparable metrics
Other Permits	Adjusted permit spend incurred

### 6.1.1 Risked exploration net asset value

RENAV considers the value of the permit if exploration and appraisal activities are successful, and the costs which will be incurred under both successful and unsuccessful exploration.

The successful and unsuccessful value outcomes are risk weighted, to consider the geological, commercial, technical and financial risks of failure, which need to be overcome.

The value of the permit in a successful outcome is valued using a discounted cash flow ('DCF') valuation. In a DCF valuation, the value of an asset is represented by its future cash flows, discounted to present value at a discount rate which reflects the risk inherent in those cash flows.

The DCF methodology requires considerable judgement in estimating future cash flows and the valuer generally places significant reliance on medium to long term projections prepared by either management or other suitably knowledgeable entity (e.g. independent geological assessment). The DCF valuation methodology can also be very sensitive to changes in underlying assumptions.



### 6.1.2 Comparable metrics

Oil and gas exploration permits generally have nil revenue and negative earnings. Therefore, are unsuited to be valued on the basis of current earnings. Instead, exploration permits are valued on the basis of permit value per unit of:

- reserves (1P, 2P and 3P);
- contingent resources (1C, 2C and 3C); and
- prospective resources (low, best and high case estimate).

In valuing a permit, an estimate of value per unit of resource is based on other companies with comparable resources. When assessing valuation metrics, it is appropriate to apply discounts or premia to reflect different geological, technical and commercial settings. For example, similar volumes of 2P reserves at two sites may have different values due to the ability, cost and value of commercialising the reserves at each location.

Valuation parameters for oil and gas exploration permits tend to provide a greater degree of confidence when there is increased:

- probability of success (e.g. valuations based on 2P reserves tend to be more reliable than those based on 2C contingent resources); and
- certainty (e.g. valuations based on 1P or 2P reserves tend to be more reliable than those based on 3P reserves).

### 6.1.3 Comparable transactions

Oil and gas exploration permits may be valued on the basis of relevant transactions.

Some permits where LME has an interest have been the subject of transactions which can provide an implied value for LME's shareholding.

## 6.1.4 Permit spend incurred

Sometimes the work programmes for exploration permits are not sufficiently advanced to justify applying either one of the above methodologies because it is impractical to model future cash flows or potential reserves with any confidence. In these situations the spend to date on the permit may be used as a proxy for fair value for oil and gas exploration permits.

This approach takes the hypothetical view that a willing buyer of a permit would recognise the value of the permit as the amount of capital that has been invested in the work programme to date.

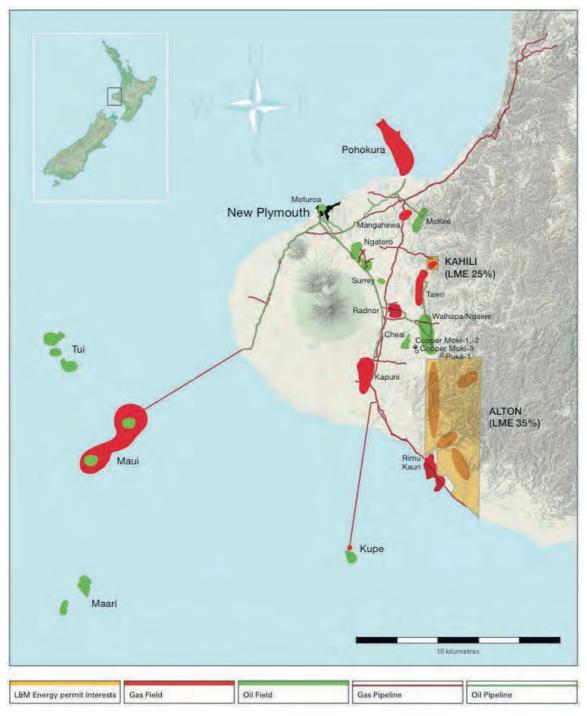
Importantly, there are adjustments that should be made to gross spend numbers to reflect the individual circumstances and situations of different acreage positions (e.g. acreage in highly prospective regions such as the Taranaki Basin is likely to be more valuable than acreage in frontier regions). In such cases, it can be appropriate to apply discounts or premia to the actual spend.



# 6.2 Valuation of conventional permits

LME holds interests in two conventional oil and gas exploration permits in the onshore Taranaki Basin, a 25% interest in the Kahili Permit and 35% interest in the Alton Permit (see Figure 6.1).

Figures 6.1: Taranaki Basin



Source: LME management



### 6.2.1 Kahili Permit

#### Permit overview

PEP 53247 ('Kahili Permit') was granted on 15 December 2010 and covers an area of 6 km<sup>2</sup> in the Taranaki Basin.

The Kahili Permit is held via a joint venture ('JV') of LME and a subsidiary of AGL Energy Limited ('Kahili JV'). LME has a 25% interest in the Kahili Permit.

The Kahili Permit covers the area previously held under a mining licence PMP 38153. The permit was granted in 2004 and production commenced August 2004. Production ceased three months later due to the well depleting. The permit was surrendered in March 2009 when the previous permit holders were unable to meet the commitment to drill an additional well.

As part of commencing production in 2004, a \$9 million production station to process the gas produced from the Kahili Field was commissioned by a third party. When production ceased, the production station was mothballed (put under a care and maintenance programme). We understand from LME management that if gas can be extracted from the permit area then the Kahili JV can be commercialised relatively quickly by re-commissioning the production station.

### Neighbouring permits

The Kahili Permit area is near, and considered by LME to be analogous, to the Tariki Field (operated by Origin Energy). The Tariki Field has estimated ultimate recoveries of 47 billion cubic feet ('BCF').

The Kahili Permit and Tariki Field are on the 'Taranaki Eastern Margin Thrust Trend', which contains ten discoveries with estimated ultimate recovery of 360 BCF and 89 million barrels of oil.

### Work programme

As part of its agreed work programme, the Kahili JV acquired, processed and interpreted 30km of new 2D seismic data; and reprocessed and interpreted 160km of existing 2D seismic data. The Kahili JV has identified and mapped an encouraging drilling target.

Based on the Kahili JV's investigations, LME management say that they now have a better understanding of the Kahili structure and the hydrocarbon accumulation trapped. Further, the new mapping is considered to provide an improved geological interpretation of the Kahili structure, as well as enabling a more reliable assessment of the remaining gas resource.

The Kahili Permit is LME's most mature opportunity and is close to producing hydrocarbons. As a result, the Kahili JV plans to drill a new well (Kahili-2) in late-2012.

### Independent Geological Report

We have not received an independent geological report on the Kahili Permit, instead management have estimated recoverable oil and gas as set out at Table 6.2.

Table 6.2: Summary of recoverable oil and gas at the Kahili Permit

	Low	Best	High
Recoverable gas (BCF)	4	5	10
Recoverable oil (barrels)	80,000	90,000	180,000
Total (barrels of oil equivalent)	810,000	980,000	1,910,000

Source: LME management



LME management's best estimate of recoverable oil and gas at the Kahili Permit is 980,000 barrels of oil equivalent ('boe').

The estimates of recoverable oil and gas provided by LME management for Kahili are relatively modest. However, management consider that even at these low volumes the Low, Best and High cases are all economic.

#### Outlook

At only 6km<sup>2</sup> the Kahili permit has a very small physical footprint. Nonetheless, Kahili-1A demonstrated the viability of the permit as a comparatively small but potentially viable gas-rich reservoir.

In January 2012, LME confirmed its decision to drill a new well, Kahili-2, to test its hypothesis of a larger main body beyond the northern fault boundary. Modelling has concluded a 2P estimate at a modest 5 BCF of gas and 90,000 bbl of condensate. If a commercial success, the well is projected to flow at 10TJ/day gas for 18 months before declining and shut after three years.

In the longer term, testing of the deeper formations within the permit could yield further and potentially larger resource increments.

#### Valuation

The Kahili Permit has been valued using a RENAV approach because:

- it is highly likely a well will be drilled within the next 12 months;
- the estimated probability of success is comparatively high due to the demonstrated success of the previous well (albeit short-lived); and
- the economics of the permit have been considered by management and the Board.

The assumptions underlying the DCF valuation of the Kahili Permit in the success scenario are summarised in Table 6.3

Table 6.3: Summary of assumptions adopted in valuing Kahili

Timing	Drilling in the first quarter of FY13, production within first half of FY13
Capital expenditure	\$6.5 million drilling and completion
Production	Initial year one production rate at gas plant capacity of 10TJ/day gas and 430bbl/d condensate, declining sharply after year one. Final production 2015
Sales and pricing	Condensate: US\$80/bbl Gas: \$5.50/GJ
Operating costs	Gas plant owner/operator fixed operating expenditure of \$1.5 million per annum. Condensate trucking export cost \$11/bbl, real terms 2012
Royalties	As legislated
Terminal value	Nil
Weighted average cost of capital	12.5% nominal post-tax as set out at Appendix 4

Source: Edison NZ

Based on the above assumptions, the un-risked value of the Kahili Permit is \$10.0 million. The value of the Kahili Permit on a risked basis is \$3.5 million, after assuming a 35% probability of success.

LME has a 25% working interest in the Kahili Permit. Therefore, using a RENAV valuation methodology, the risked value of LME's interest in the Kahili Permit is \$0.9 million.



### 6.2.2 Alton Permit

#### Permit overview

Alton Permit was granted on 23 September 2008 and covers an area of 482 km<sup>2</sup> in the Taranaki Basin.

The Alton Permit is held by a JV between LME and NZEC (together the Alton JV). LME's current share is 35%.

The term of the permit is for five years with potential for a further five years with the surrender of 50% of the existing land area. The Alton Permit expires on 22 September 2013, although LME management expect to renew for a further five years.

The majority of the prospects on this permit appear to be in the deeper formations (Kapuni and Moki), but a new 3D seismic survey, currently being undertaken, is expected to provide a better assessment of the prospectivity once it has been completed.

### Neighbouring permits

The Alton Permit is adjacent to the Eltham Permit and shares most of the same geologic potential. However, the large regional bounding Taranaki fault runs north-south through the permit, making only about the Western 60% of the permit prospective.

To date, NZEC has drilled three successful exploration wells on the northern edge of the Eltham Permit, Copper Moki-1 (CM-1), Copper Moki-2 (CM-2) and Copper Moki-3 (CM-3). Copper Moki-4 (CM-4) has been drilled and awaits testing. The Copper Moki discoveries are in the northern tip of the 92,467 acre permit.

The Copper Moki wells are located less than 4km from the Alton permit boundary while the commercial Cheal field, operated by TAG Oil, is less than 8km from the boundary. The productive Mt Messenger, Moki and Kapuni formations in the adjoining fields are believed to extend into the Alton permit.

#### Work programme

The Alton JV has undertaken various technical studies, reprocessed approximately 200 km of existing 2D seismic data and acquired 58 km of new 2D seismic data in the southern area of the permit.

In mid-2011 the JV drilled the Talon-1 well at the Southern end of the permit area, the Talon-1 well site was selected based on 2D seismic data. The well was unsuccessful and the Alton JV has since changed focus to follow an exploration strategy that involves the acquisition of high quality 3D seismic data to identify drilling targets, in particular the identification of productive oil bearing sands.

The 3D seismic acquisition has been completed and the data processed. The interpretation of data is underway and reports should be due back to LME early in 2013.

Once the 3D seismic data has been interpreted the current intention is to prioritise wells based on locations that:

- are well defined;
- are likely to contain lower risk shallow oil; and
- have deeper exploration targets.

We understand that this strategy is similar to that which NZEC used at the Eltham Permit. LME management expect the additional 3D seismic survey to potentially define multiple drilling prospects.



# Independent Geological Report

LME commissioned a report from AJM Deloitte to estimate the total PIIP and resources (contingent and prospective) at the Alton Permit. The results of this report, dated 8 November 2012, are summarised as follows:

Table 6.4: Summary of resources at the Alton Permit (Gross thousand boe)

	Low	Best	High
Prospective resources	17,885	38,120	87,993
Unrecoverable	194,407	382,251	802,311
Total undiscovered PIIP	212,292	420,372	890,304

Source: AJM Deloitte report dated 8 November 2012

The AJM Deloitte Report sets out a best estimate of prospective resources at the Alton site of 38,120,000 boe and estimated the chance of success at 35%.

With the Alton Permit at an early and relatively under-explored stage, AJM Deloitte was only prepared to estimate prospective resources and was unable to estimate commercial reserves.

# Equity transactions

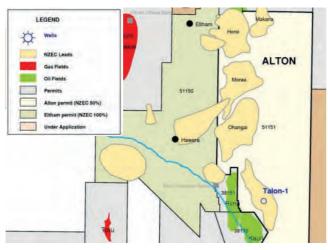
# Acquisition of 50% Equity

NZEC acquired its share in the Alton JV in the second quarter of 2011 by paying AUD2.0 million to the previous Alton JV partner (Mosaic Oil NZ Limited – a subsidiary of AGL Energy). NZEC also agreed to fund 100% of the Talon-1 well in exchange for LME transferring operatorship of the permit to NZEC and for LME not exercising is pre-emptive rights over AGL Energy's shares.

The total value of the Alton Permit implied by the transaction is approximately \$8.6 million, based on a \$3.2 million cost to drill well, as at the time of the transaction<sup>1</sup>. We note that this implies a value of LME's share at \$4.3 million.

One of the main reasons for NZEC acquiring its share in the Alton JV is the prospectivity of the Horoi lead. The Horoi lead is the largest single lead that NZEC has identified. Figure 6.2 is from a NZEC presentation, the Horoi lead is at the North-West of the Alton permit.

Figure 6.2: Alton permit map



Source: Extract from NZEC disclosure dated 31 May 2011

<sup>&</sup>lt;sup>1</sup> Based on an AUD:NZD exchange rate of approximately 0.75 as at the time of the transaction.



# 15% Equity Farm-out

On 22 February 2012, LME announced that it had entered into a farm-out agreement with NZEC whereby NZEC increased its equity from 50% to 65% by funding the 50 km<sup>2</sup> 3D seismic survey over the northern part of the Alton Permit area.

We understand from management that the total estimated cost for the 3D seismic survey prior to its commencement was \$4.7 million. We note that this implies a total value of the Alton permit of approximately \$11.0 million (prior to the seismic survey), and a value of LME's share at \$5.5 million.

#### Outlook

To meet permit work programme minimums, the JV must drill a well by September 2013. Given the success NZEC has realised with Eltham, Edison NZ consider it highly likely that the JV would indeed drill as required. In the event that the Offer is unsuccessful, it is uncertain how LME would fund its share of JV drilling costs. A possible outcome would be that NZEC would carry LME's costs in exchange for a greater equity share of the JV, which would serve to further dilute LME's stake in the Alton JV.

The location of the permit and its proximity to existing infrastructure and markets would mean that commercialising a discovery would be relatively straightforward.

#### Valuation

It is not appropriate to value Alton using the RENAV approach given the uncertainty surrounding it and because there is yet to be any firm commitment to drill within the next twelve months. Furthermore, the capital expenditure required to commercialise a discovery is also uncertain.

The value of Alton is assessed based on the previous transactions involving Alton's equity, namely:

- from NZEC's acquisition of Mosaic's 50% stake and commitment to 100% fund the Talon-1 well drilling costs, the inferred equity value of LME's then 50% stake in the Alton venture was approximately \$4.3 million; and
- from the agreement for NZEC to fully-fund the 3D seismic programme, the inferred equity value of LME's now 35% stake in the Alton venture was approximately \$5.5 million.

Because the last of these transactions was relatively recent it makes it a valid starting point to assess the value of Alton

If the Alton Permit work programme continues to serve to reduce the risk of future exploration and, possibly, reveal discoveries, its value is likely to grow from current levels.

The apparent success of the 3D programme and the on-going procession of successful wells being drilled in close proximity to Alton may have already served to lift value beyond that implied in the transaction earlier in 2012.

We consider a reasonable valuation range for Alton sits between NZ\$5.5m and NZ\$10m.

Edison NZ has undertaken a very high level assessment of a RENAV for Alton and that is supportive of the assessed valuation range.



# 6.3 Valuation of unconventional permits

#### 6.3.1 Ohai Permit

#### Permit overview

Ohai Permit was granted on 11 November 2002 and covers an area of 57 km<sup>2</sup> in the Western Southland Basin. The Ohai Permit is directly adjacent to the Waiau Permit.

The Ohai Permit expired 10 November 2011 and an appraisal extension was applied for on 9 November 2011 for an additional 3 year term. As at the date of this report, the appraisal extension is still in process.

# Neighbouring permits

There has yet to be any commercial finds in the Western Southland Basin.

# Work programme

During the term of the permit, the Company undertook a drilling programme to obtain a wide variety of base line data including coal quality, desorbed gas contents and fresh coal samples for adsorption and other CSG-related analyses. The results from this work indicated good desorbed gas measurements within the sub-bituminous coals of the Ohai area.

Upon expiry of the initial permit term and subsequent award of an appraisal extension, appraisal work continued with the establishment of a multi-well pilot project. In parallel, LME prepared for the commercial sale of any produced gas from the pilot by sourcing a gas generator, securing the necessary regulatory consents and negotiating an off-take agreement with an end user for a small gas fuelled power station. Due to relatively poor results, the pilot test well was shut down in July 2012. In the absence of further near term production or testing work taking place the well will be decommissioned; down-hole and surface metering equipment removed and the well suspended.

A drilling/permeability testing programme is being considered for the wider Ohai area. If approved the programme is likely to include up to four wells.

# Independent Geological Report

LME has commissioned MHA to prepare an update of its independent report which estimates the 3P (potential) CSG reserves at the Ohai Permit area. The original report is dated 22 October 2010 and the update is at 26 November 2012. The update was obtained for the purposes of this Report.

The results of the MHA update are summarised as follows:



Table 6.5: November 2012 estimate of contingent resources and 3P reserves at Ohai coalfield

	PJ
Contingent coal resources	
Beaumont coal measures	6.4
Morley Starr seam	1.9
Total contingent resources	8.4
3P seam reserves	
Morley 1	44.8
Linton Main	35.7
Morley 2	139.2
Morley 3	8.6
Total 3P reserves	228.3

Source: MHA update dated November 2012

The MHA update sets out an estimate of 3P reserves at the Ohai site of 228PJ.

MHA had previously estimated 274PJ of 3P CSG reserves in October 2010. The reduction in reserves is mainly due to MHA's interpretation and analysis of the poor results from the pilot test wells.

#### Outlook

Results to date from LME's multi-well pilot project have been disappointing and commercial flow rates have not been achieved.

Over the past 12 months, LME has reduced its Ohai Permit work programme and focused its resources towards its conventional prospects in the Taranaki Basin.

With LME's current financial situation it is unlikely that the Ohai work programme would be meaningfully advanced without either an injection of new capital or a partner joining the work programme and providing capital as part of the farm-in arrangement. With the lack of success from the pilot project, neither option appears likely at the current time.

#### Valuation

The lack of positive results from the pilot highlights the inherent risk involved in exploring in frontier regions, such as Ohai. This is a key difference between LME's Ohai play and its conventional Taranaki Basin prospects, and is important when considering the value of Ohai.

When assessing value, the primary focus is the potential commerciality of a resource. This typically requires a 2P reserve base to be defined which was the primary purpose of the Ohai pilot project. Given the lack of success with the pilot, current information suggests that a CSG project cannot be commercialised for Ohai.

## 2010 valuation of Ohai

As part of the LMP and LMCSG merger, an Independent Adviser Report was prepared which concluded on a valuation range for Ohai's 3P resource of between AUD43.2 million and AUD95.2 million (based on AUD0.25 to AUD0.55 per GJ).



The 2010 conclusion was based on the independent adviser's analysis of what it considered to be comparable multiples (for ASX listed companies with 3P certified resources) and transactions (for Australian based deals relating to 3P certified resources for CSG assets). The companies considered comparable by the independent adviser had significant differences to Ohai, including:

- the comparables were heavily weighted towards proven CSG regions (including Queensland Surat and Bowen Basins) whereas Ohai is a frontier region with significantly higher geological risk);
- a number of the comparable companies had producing and in some cases relatively mature asset bases whereas Ohai was yet to prove it was commercial viable; and
- many of the comparables had plays with large 3P resources and modest 2P estimates, however in Australia that generally reflects a high degree of confidence that 3P resource will in time be able to be upgraded to 2P but that there is no need to incur the near term cost of exploration and/or appraisal activities to support the assessment of 2P reserves. This is very different for an area like Ohai where there is no precedent of 3P reserves being upgraded to 2P and indeed no commercial production had previously been achieved from the Western Southland Basin.

These factors combine to justify a significant discount being applied to LME's Ohai asset compared to broadly comparable companies that represent plays with significantly lower risk profiles.

#### Valuation of Ohai

Table 6.6 shows companies that Edison NZ considers broadly comparable to LME.

Table 6.6: 3P value metric for broadly comparable CSG companies

Company	Ticker	EV (USD million)	3P estimate (PJ)	EV/3P (USD/GJ)	Geographic focus
Dart Energy	ASX:DTE	57.3	141	0.41	Australia, China, India, Indonesia, UK, Europe
Metgasco	ASX:MEL	81.4	2,542	0.03	Clarence-Moreton basin, NSW
Westside Corp	ASX:WCL	104.2	725	0.14	Bowen & Galilee Basins, QLD
Green Dragon Gas	AIM:GDG	561.5	2,513	0.22	China
Far East Energy	PINK:FEEC	58.8	549	0.11	China
Great Eastern Energy	LON:GEEC	592.7	191	3.10	India
Sino Gas	ASX:SEH	111.3	13	8.56	China
Median				0.22	

Source: Edison NZ

Although there is a very wide range, Table 6.6 shows a median enterprise value ('EV')/3P multiple of USD0.22/GJ. This suggests an upper bound for the comparable companies of say USD0.30/GJ is appropriate and a lower bound of nil.

In addition, Edison NZ has applied a further discount of 50% to account for the higher technical risks involved with commercialising Ohai coals compared to the coal beds of the peer companies.

On this basis, a reasonable valuation range for Ohai is between nil and NZ\$42 million. While this represents a very wide valuation range, this is a result of the inherent risk and uncertainty around the ability to commercialise the Ohai Permit. Given that risk and uncertainty we consider a reasonable point estimate for the value of the Ohai Permit would lie below the middle of our range. However, for the purpose of this Report and given the circumstances (where the Offer price is above our valuation range for LME Shares), we consider the wide valuation range reasonable.



# 6.3.2 Waiau Permit

#### Permit overview

Waiau Permit was granted on 19 November 2003 and covers an area of 559 km<sup>2</sup> in the Western Southland Basin. The Waiau Permit is directly adjacent to the Ohai Permit.

A number of CSG wells (17) have been drilled in the Waiau Permit with limited success. LME management say that holding 100% of the permit allows future activity to be undertaken in conjunction with planned work on the Ohai Permit.

LME has lodged an 'Application to Amend Conditions of Permit' with New Zealand Petroleum & Minerals ('NZPAM') to allow additional technical work to be conducted to firm up potential drilling targets.

# Neighbouring permits

There has yet to be any commercial finds in the Western Southland Basin.

# Work programme

The early history of the permit was to explore for conventional targets but that has evolved to consider unconventional (CSG) plays.

An initial analysis of the CSG potential within the onshore Western Southland Basin permit area has resulted in the identification of potential CSG fairways, estimated to contain 297 BCF of potential resources.

# Independent Geological Report

As a result of a lack of drilling data, independent geological advisers have been unable to certify any reserves at Waiau.

# Equity Transactions

The Waiau Permit was formerly a Joint Venture between LME and Mighty River Power ('MRP') LME applied for Ministerial consent to acquire the remaining 10% equity held by MRP, which was granted in 2011. LME paid \$85,000 for MRP's 10% holding.

#### Outlook

Since 2010, LME's spend on the Waiau Permit has been minimised while resources have been prioritised towards LME's conventional permits in the Taranaki Basin.

LME identified two conventional oil prospects in the permit. The most attractive is the Otahu prospect, which LME initially estimated could have gas initially in place ranging from 61 BCF to 628 BCF. Due to its depth and the lack of availability of suitable drilling equipment in the region, a well would be expensive and cost around \$7 million to complete. LME does not have the ability to fund the well from its current resources and does not plan to do so unless a farm-in deal could be struck. We understand LME has been marketing this arrangement for some time and, despite some interest, there is no indication that an agreement is forthcoming.

LME estimates the probability of success for Otahu is approximately 7%.

LME has also identified the Rowallan prospect, 13 km to the south of Otahu.



#### Valuation

Waiau is in a frontier region with no existing production history and only very limited exploration history. As a result it is a very high risk play. Furthermore, the lack of commercial success to date from the work programme undertaken and the absence of a partner to enable the work programme to be meaningfully advanced does not provide a high level of confidence over value.

Based on available information, there is no basis to apply a success based valuation approach (e.g. RENAV) to value LME's interest in Waiau.

Based on discussions with LME management and Edison NZ, there is no basis to ascribe any commercial value to LME's interest in Waiau.

# 6.3.3 Aparima Permit

#### Permit overview

PEP 52819 ('Aparima River Permit') was granted on 12 March 2012 and covers an area of 822 km<sup>2</sup> in the Western Southland Basin.

# Neighbouring permits

The Aparima River Permit is located near the Ohai Permit.

# Work programme

To date LME has spent minimal amounts (approximately \$20,000) on exploration of the Aparima River Permit area, having only completed the initial six month work programme. However, we understand that LME intends to further investigate the potential of CSG extraction within the permit area.

# Independent Geological Report

Due to the preliminary stage of the Aparima River Permit, no independent geological report has been prepared.

#### Valuation

The Aparima River Permit has yet to be explored in detail. Its potential remains uncertain. LME has incurred costs to date of approximately \$20,000 (including application costs and exploration activities), which we have used at the low-end of our valuation range.



# 6.3.4 Waikato Coal Permit

#### Permit overview

CPP 52711 ('Waikato Coal Permit') was granted on 30 March 2011 and covers an area of 2,112 km<sup>2</sup> in the Waikato Basin.

LME's intention is to explore the potential of underground coal gasification ('UCG') within the permit area. UCG allows the conversion of difficult-to-mine coal into electricity, fuel and fertiliser.

# Neighbouring permits

The Waikato Coal Permit surrounds the area where state-owned Solid Energy is currently undertaking a UCG trial. Therefore, we consider it likely that the value of the Waikato Coal Permit area could partly depend on the success of the Solid Energy trial.

# Work programme

The Waikato Coal Permit is in the early stages of exploration. To date LME has spent minimal amounts (less than \$60,000) undertaking the exploration activities required by its work plan in the first 12 months. LME has submitted an Application to Change Permit Conditions for the second twelve months of the work programme.

This permit is for early stage exploration work only and expires in approximately four months. Therefore, if LME identify areas within the permit it would like to investigate further then it will need to apply for a permit period extension.

LME has spent approximately \$60,000 in preliminary investigation and application costs in acquiring the permit area.

# Independent Geological Report

Due to the preliminary stage of the Waikato Coal Permit, no independent geological report has been prepared.

#### Valuation

The Waikato Permit has yet to be explored in detail. Its potential remains uncertain and the results of the neighbouring exploration activity being undertaken by Solid Energy may provide useful information. LME has incurred costs to date of approximately \$60,000 in the Waikato Coal Permit (including application costs and exploration activities), which we have used at the low-end of our valuation range.



# 6.4 Capitalised head office costs

Our valuation analysis includes a deduction for the value of recurring head office costs. Management's estimate of expected before-tax costs is \$2.0 million per annum (increasing with inflation). In the event the Offer is successful in 90% of shareholders accepting the Offer, LME would no longer be listed. LME management estimate that this would result in before-tax cost savings of \$350,000 per annum (increasing with inflation). Based on before-tax costs of \$1.65 million per annum (increasing at inflation) we have valued head office costs at \$4.6 million using a DCF approach with a post-tax discount rate of 12.5% and a life of say 5 years.

# 6.5 LME Options<sup>1</sup>

Prior to making the Offer, New Dawn obtained the Rule 22 Report. The Rule 22 Report did not consider the fairness of the Offer only whether the consideration offered for the LME Options is fair and reasonable in comparison to the amount offered for LME Shares (i.e. AUD0.06 per share).

The report writer (Northington Partners) concluded that "... the consideration and terms offered for non-voting securities (being the Options) is fair and reasonable in comparison with the terms offered for the voting securities (being the Ordinary Shares)". In broad terms, we concur with that conclusion. However, after adopting our valuation of LME Shares; and reviewing the volatility measures of broadly comparable companies we have assessed an estimate of the value of the options at between say \$0.1 million and \$2.2 million for the purposes of our report.

It is appropriate to deduct the value of the options from our assessed enterprise value of LME in order to arrive at the value of LME Shares.

# 6.6 Net debt

At 30 September 2012, LME had:

- interest-bearing debt (convertible notes) of \$6.2 million;
- cash on hand of \$5.8 million; and therefore
- net debt of \$0.4 million.

<sup>&</sup>lt;sup>1</sup> LME Options are described in detail in an independent adviser's report prepared for the Offer by Northington Partners pursuant to Rule 22 of the Takeovers Code ('Rule 22 Report').



# 6.7 LME valuation summary

Our valuation results are summarised in Table 6.7.

Table 6.7: Summary of LME valuation (\$ million unless otherwise stated)

	Low	High
Kahili Permit	0.9	0.9
Alton Permit	5.5	10.0
Ohai Permit	-	42.1
Other permits and applications	0.3	3.0
Total value of permits	6.7	56.0
Capitalised head office costs	(4.6)	(4.6)
LME Options	(0.1)	(2.2)
Net debt	(0.4)	(0.4)
Equity Value	1.6	48.8
AUD:NZD exchange rate	0.7831	0.7831
Equity Value (AUD million)	1.2	38.2
Shares on issue (million)	754.4	754.4
Value per share (AUD)	0.002	0.051

We have made a broad estimate of value of other permits and applications (Waikato Coal Permit; Aparima River Permit, three applications in process and two tenders under the 2012 block tender) of \$0.3 to \$3.0 million. The low-end of that range is based on costs incurred to date and the high-end takes account of the optionality of these assets. We consider the high-end of the range to be optimistic.

For the purposes of this report, we have assessed a valuation range for LME's equity between say nil and AUD0.051 per share. This represents a very wide range for the value of LME's equity. However, that reflects the uncertainty inherent in LME's asset portfolio, because it:

- does not hold any producing assets;
- has minority interests in two conventional oil and gas permits in the producing Taranaki Basin;
- has outright ownership of four permits in frontier, non-producing basins, primarily targeting unconventional gas; and
- results of the pilot project at LME's Ohai Permit have been disappointing to date.

LME represents a high risk and potentially high return investment. While it is possible that LME could strike a significant find, given the results of the work undertaken to date and the high risk nature of many of LME's permits, that is no certainty. In the event of a successful strike the value of LME would increase from its current level.



# Appendix 1: LME Options

Table A1.1: Details of the LME Options

	Tranche	Options Outstanding	Exercise Price	Expiry Date	Offer Price (AUD)			
A.	Employee Share Options							
	1	1,875,000	AUD\$0.20	15 April 2013	0.0004			
	2	220,000	AUD\$0.125	5 November 2013	0.0059			
	3	1,875,000	AUD\$0.10	27 April 2014	0.0115			
	4	120,000	AUD\$0.11	12 November 2014	0.0135			
	5	280,000	AUD\$0.14	17 March 2015	0.0126			
	6	3,175,000	AUD\$0.14	28 April 2015	0.0127			
	7	2,750,000	AUD\$0.12	10 November 2015	0.0168			
	8	11,250,000	AUD\$0.12	2 May 2016	0.0178			
	9	2,750,000	AUD\$0.12	7 November 2016	0.0196			
	10	2,750,000	AUD\$0.07	28 February 2017	0.0255			
	11	11,250,000	AUD\$0.12	28 June 2017	0.0202			
B.	Consideration Options – Vested							
	E	27,050,000	NZD\$0.0001	26 February 2015	0.0599			
C.	Considerations Options – Non-Vested							
	Е	6,300,000	NZD\$0.0001	26 February 2015	0.0554			



# Appendix 2: Sources of information

# Documents relied upon

Documents relied upon include, but are not limited to, the following:

- LME Management Accounts;
- LME Annual Report 2010 and 2011;
- LME's FY12 Budget;
- LME's FY13 cash-burn projections;
- LME shareholder notices;
- LME's shareholder register;
- LME website: http://http://www.lmenergy.co.nz;
- Management presentation on the Kahili permit;
- Reports prepared by AJM Deloitte on the Alton permit;
- Original and updated reports prepared by MHA on the Ohai Permit;
- Capital IQ website: http://www.capitaliq.com;
- NZX website: http://www.nzx.co.nz;
- NZ Petroleum and Minerals website: http://www.nzpam.govt.nz;
- 2010 broker reports on LME by Intersuisse and McDouall Stuart;
- 2012 New Zealand Petroleum Sector Yearbook by Edison NZ;
- Valuations of LME's permits prepared by Edison NZ; and
- Other publically available information.

We have also had discussion with some of LME's management executives in relation to the nature of the business operations, and LME's specific risks and opportunities for the foreseeable future.

# Reliance upon information

In forming our opinion we have relied upon and assumed, without independent verification, the accuracy and completeness of all information that was available from public sources and all information that was furnished to us by LME and its advisers. We have no reason to believe any material facts have been withheld.

We have evaluated that information through analysis, enquiry and examination for the purposes of forming our opinion but we have not verified the accuracy or completeness of any such information. We have not carried out any form of due diligence or audited the accounting or other records of LME. We do not warrant that our enquiries would reveal any matter that an audit, due diligence review or extensive examination might disclose.



# Appendix 3: Qualifications and declarations

#### Qualifications

KordaMentha is an independent New Zealand Chartered Accounting practice, internationally affiliated with the KordaMentha group. The firm has established its name nationally through its provision of professional financial consultancy services with a corporate advisory and insolvency emphasis, and because it has no business advisory, audit or tax divisions, avoids any potential conflicts of interest which may otherwise arise. This places the firm in a position to act as an independent adviser and prepare independent reports.

The persons responsible for preparing and issuing this report are Grant Graham (BCom, CA); Shane Bongard (BCom (Hons)); and Shaun Hayward (BCom and BProp). All three have significant experience in providing corporate finance advice on mergers, acquisitions and divestments, advising on the value of shares and undertaking financial investigations.

#### **Disclaimers**

It is not intended that this report should be used or relied upon for any purpose other than as an expression of KordaMentha's opinion as to merits of the proposed transaction. KordaMentha expressly disclaims any liability to any LME equity security holder that relies or purports to rely on the Report for any other purpose and to any other party who relies or purports to rely on the Report for any purpose.

This report has been prepared by KordaMentha with care and diligence and the statements and opinions given by KordaMentha in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading. However, no responsibility is accepted by KordaMentha or any of its officers or employees for errors or omissions however arising (including as a result of negligence) in the preparation of this report, provided that this shall not absolve KordaMentha from liability arising from an opinion expressed recklessly or in bad faith.

KordaMentha has engaged Edison NZ to provide it with valuation services in connection with LME permits. KordaMentha considers the assumptions and approaches taken by Edison NZ when valuing those permits to be reasonable and, accordingly, Edison NZ's valuations are referred to in this report and included in our valuation for LME. However, Edison NZ shall not be liable or otherwise responsible to any LME equity security holder in relation to any errors or omissions howsoever arising (including as a result of negligence) in the preparation of its valuation of the LME permits provided that this shall not absolve Edison NZ from liability arising from an opinion expressed recklessly or in bad faith.

# Indemnity

LME has agreed that, to the extent permitted by law, it will indemnify KordaMentha and its partners, employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of this report. This indemnity does not apply in respect of any negligence, misconduct or breach of law. LME has also agreed to indemnify KordaMentha and its partners, employees and officers for time incurred and any costs in relation to any inquiry or proceeding initiated by any person except where KordaMentha or its partners, employees and officers are guilty of negligence, misconduct or breach of law in which case KordaMentha shall reimburse such costs.

# Independence

KordaMentha does not have at the date of this report, and has not had, any shareholding in, or other relationship, or conflict of interest with LME that could affect its ability to provide an unbiased opinion in relation to this transaction.



KordaMentha will receive a fee for the preparation of this report. This fee is not contingent on the success or implementation of the Offer or any transaction complementary to it. KordaMentha has no direct or indirect pecuniary interest or other interest in this transaction.

We note for completeness that a draft of this report was provided to LME and its legal advisers, solely for the purpose of verifying the factual matters contained in the Report. While minor changes were made to the drafting, no material alteration to any part of the substance of this report, including the methodology or conclusions, were made as a result of issuing the draft.

#### Consent

KordaMentha consents to the issuing of this report, in the form and context in which it is included, in the information to be sent to LME shareholders. Neither the whole nor any part of this report, nor any reference thereto may be included in any other document without the prior written consent of KordaMentha as to the form and context in which it appears.



# Appendix 4: Weighted Average Cost of Capital

We have estimated LME's post-tax, nominal Weighted Average Cost of Capital ('WACC') at say 12.5% based on our assessment of LME's cost of equity.

We have assessed an appropriate level of target gearing for LME to be nil. In determining an appropriate level of gearing, we have had regard to:

- within the oil and gas industry, generally only the largest companies with producing wells have debt facilities. LME is a comparatively small exploration company;
- the median gearing (Debt / Equity) of comparable companies is nil and the vast majority have a positive net cash balance; and
- LME does not have any bank debt and the convertible note from Mr Loudon has equity-like characteristics.

At nil gearing a company's WACC is equal to is costs of equity. We have determined the cost of equity for LME to be in a range of 11.9% to 13.1% using the Brennan-Lally specification of the Capital Asset Pricing Model, which uses the following formula:

$$R_e = R_f (1 - T_i) + \beta_e [R_m - R_f (1 - T_i)]$$

where:

- $R_f = Risk$  free rate = 3.55%, based on long term government bond yields
- $T_i$  = Investors' effective tax rate on interest, dividends and capital gains = 28%
- β<sub>a</sub> = Asset Beta = 1.25 to 1.40 (based upon a review of the betas of comparable companies and LME's value being dependent on the price of crude oil, which also tends to affect the economy (albeit to a lesser degree)
- $\beta_e$  = Equity Beta =  $\beta_a$  (1+D/E) = 1.25 to 1.40
- $R_{m}$   $R_{f}$  (1-  $T_{i}$ ) = Expected excess return, after investor taxes, on the market portfolio of equity investments = 7.5%