#### **CIRCULAR DATED 4 JUNE 2022**

THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION. PLEASE READ IT CAREFULLY. IF YOU ARE IN ANY DOUBT AS TO THE ACTION YOU SHOULD TAKE, YOU SHOULD CONSULT YOUR STOCKBROKER, BANK MANAGER, SOLICITOR, ACCOUNTANT OR OTHER PROFESSIONAL ADVISER(S) IMMEDIATELY.

Unless otherwise defined, capitalised terms appearing on the cover of this Circular bear the same meanings ascribed to them in the section entitled "Definitions" of this Circular.

If you have sold or transferred all your shares in the capital of Eneco Energy Limited (the "Company") held through The Central Depository (Pte) Limited ("CDP"), you need not forward this Circular with the Notice of EGM and the enclosed Proxy Form to the purchaser or transferee as arrangements will be made by CDP for a separate Circular with the Notice of EGM and the enclosed Proxy Form to be sent to the purchaser or transferee. If you have sold or transferred all your shares in the capital of the Company represented by physical share certificate(s), you should immediately forward this Circular together with the Notice of EGM and the enclosed Proxy Form to the purchaser or transferee or to the bank, stockbroker or agent through whom the sale or transfer was effected, for onward transmission to the purchaser or transferee.

The Singapore Exchange Securities Trading Limited ("SGX-ST") assumes no responsibility for the correctness of any of the statements or opinions made or reports contained in this Circular.

This Circular (together with the Notice of EGM and the Proxy Form) may be accessed at the Company's website at the URL www.enecoenergy.com, and is also available on the SGX-ST's website at the URL https://www.sgx.com/securities/company-announcements. A printed copy of this Circular (together with the Notice of EGM and the Proxy Form) will NOT be despatched to Shareholders.

The EGM is being convened, and will be held, by way of electronic means pursuant to the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020.

Alternative arrangements relating to, *inter alia*, attendance at the EGM via electronic means (including arrangements by which the meeting can be electronically accessed via live audio-visual webcast or live audio-only stream), submission of questions in advance of, or live at, the EGM, addressing of substantial and relevant questions at or prior to the EGM, and voting live at the EGM by the Shareholders themselves or their duly appointed proxies (other than the Chairman of the EGM) via electronic means or voting by appointing the Chairman of the EGM as proxy at the EGM, are set out in the notes to the Notice of EGM attached to this Circular.



# **CIRCULAR TO SHAREHOLDERS IN RELATION TO:**

THE ENTRY INTO THE SETTLEMENT AND TRANSFER AGREEMENT DATED 23 NOVEMBER 2021 BY PT. HEXINDO GEMILANG JAYA AND, IN PARTICULAR, THE PROPOSED DISPOSAL OF PT. HEXINDO GEMILANG JAYA'S 10% PARTICIPATING INTEREST IN THE PRODUCTION SHARING CONTRACT RELATING TO THE LEMANG BLOCK TO JADESTONE ENERGY (LEMANG) PTE LTD AS A MAJOR TRANSACTION UNDER CHAPTER 10 OF THE LISTING MANUAL

# **IMPORTANT DATES AND TIMES**

Last date and time for lodgement of Proxy Form : 17 June 2022 at 2:00 p.m.

Date and time of Extraordinary General Meeting : 20 June 2022 at 2:00 p.m.

Place of Extraordinary General Meeting : The EGM will be held by way of electronic means

# **CONTENTS**

	PAGI	E NO.
DEF	INITIONS	1
CAU	TIONARY NOTE ON FORWARD-LOOKING STATEMENTS	9
1.	INTRODUCTION	10
2.	INFORMATION ON HEXINDO, JADESTONE AND THE LEMANG BLOCK	13
3.	PRINCIPAL TERMS OF THE AGREEMENT INCLUDING THE PROPOSED DISPOSAL	18
4.	RATIONALE FOR THE AGREEMENT AND THE PROPOSED DISPOSAL	25
5.	FINANCIAL INFORMATION	25
6.	FINANCIAL EFFECTS OF THE PROPOSED DISPOSAL	27
7.	RELATIVE FIGURES FOR THE PROPOSED DISPOSAL UNDER CHAPTER 10 OF THE LISTING MANUAL	28
8.	DIRECTORS' AND SUBSTANTIAL SHAREHOLDERS' SHAREHOLDINGS	29
9.	RECOMMENDATION BY THE DIRECTORS	31
10.	EXTRAORDINARY GENERAL MEETING	31
11.	ACTION TO BE TAKEN BY SHAREHOLDERS	31
12.	SERVICE AGREEMENT	33
13.	CONSENT	33
14.	DIRECTORS' RESPONSIBILITY STATEMENT	33
15.	DOCUMENTS AVAILABLE FOR INSPECTION	34
APP	ENDIX A – INDEPENDENT QUALIFIED PERSON'S REPORT	<b>A-1</b>
NOT	ICE OF EXTRAORDINARY GENERAL MEETING	N-1
PRO	XY FORM	

For the purpose of this Circular, except where the context otherwise requires or is otherwise stated, the following definitions shall apply throughout:

### General

"Affiliate" : Means, in relation to any Party, any subsidiary or parent

company of that Party and any subsidiary of any such parent

company

"Agreement" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Akatara Gas Development Project"

The Akatara Gas Development Project located within the Lemang Block for the exploration and development of petroleum resources

"Arbitral Awards" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Asset" : Has the meaning ascribed to it in Section 3.4.2(e) of this Circular

"Assigned Participating Interest": Has the meaning ascribed to it in Section 1.1 of this Circular

"Associate" : (a) In relation to any director, chief executive officer,

Substantial Shareholder or Controlling Shareholder (being

an individual) means:

(i) his immediate family;

(ii) the trustees of any trust of which he or his immediate family is a beneficiary or, in the case of a

discretionary trust, is a discretionary object; or

(iii) any company in which he and his immediate family together (directly or indirectly) have an interest of

30% or more; and

(b) in relation to a Substantial Shareholder or a Controlling

Shareholder (being a company) means any other company which is its subsidiary or holding company or is a subsidiary of such holding company or one in the equity of which it and/or such other company or companies taken

together (directly or indirectly) have an interest of 30% or

more

"Board" : The board of Directors of the Company as at the Latest

Practicable Date

"BPMIGAS" : Badan Pelaksana Kegiatan Usaha Hulu Minyak Dan Gas Bumi

(The Implementing Body for Upstream Oil and Gas Business Activities), a state-owned body in Indonesia which previously supervised the exploration, exploitation and marketing activities

for Indonesian oil and gas before its dissolution in 2012

"Business Day" : A day (excluding Saturdays, Sundays and gazetted public

holidays) on which banks generally are open in Singapore for the

transaction of normal banking business

"CDP" : The Central Depository (Pte) Limited

"Circular" : This circular to Shareholders dated 4 June 2022

"Claims" : Any claim or liability of any kind, whether contractual or non-

contractual, whether or not before any government agency, court or tribunal, whether known or unknown, foreseen or unforeseen, contingent or actual, present or future, accrued or not accrued, or any compliant or report to any governmental agency (whether of a civil or criminal nature, formal or informal, directly or indirectly

through third parties)

"Companies Act" : The Companies Act 1967 of Singapore as may be amended,

modified or supplemented from time to time

"Company" : Eneco Energy Limited

"Completion" : The completion of the Proposed Disposal

"Conditions Precedent" : The conditions precedent set out in Section 3.2.1 of this Circular

"Condition Date" : The date that is five (5) months after signing of the Agreement or

such other date as may be agreed between the Parties in writing

"Consideration" : Has the meaning ascribed to it in Section 3.2.5(b) of this Circular

"Controlling Shareholder" : A person who:

(a) holds directly or indirectly 15% or more of the total number of issued voting Shares in the Company. The SGX-ST may determine that a person who satisfies this paragraph is not

a Controlling Shareholder; or

(b) in fact exercises control over the Company

"CPF" : Central Provident Fund

"CPF Funds" : CPF investible savings

"CPF Investment Account" : The investment account maintained with an approved CPF agent

bank for the purpose of investment of CPF Funds under the

CPFIS - Ordinary Account

"CPFIS" : CPF Investment Scheme

"CPFIS Members" : Shareholders who have previously purchased Shares using their

CPF Funds under their CPF Investment Accounts

"Director" : A director of the Company as at the Latest Practicable Date

"Discharge Confirmation" : Has the meaning ascribed to it in Section 3.2.1(c) of this Circular

"EPS" : Earnings per share

"Eastwin" : Eastwin Global Investments Limited

"Eastwin JOA" Has the meaning ascribed to it in Section 1.1 of this Circular

"EGM" The extraordinary general meeting of the Company to be

convened and held on 20 June 2022 at 2:00 p.m. by way of electronic means, notice of which is set out on pages N-1 to N-3

of this Circular

"Encumbrance" A mortgage, charge (whether fixed or floating), encumbrance,

> debenture, lien, pledge, claim, option, equitable right of interest, equity, production payment, earned interest, power of sale, hypothecation, usufruct, retention of title, assignment by way of security, trust arrangement for the purpose of providing security or any other security interest including retention arrangements, or other burden (including but not limited to any restriction on transfer, net profit interest, royalty interest, right of pre-emption, right of first refusal, right to acquire, or other third party right of any kind) or any agreement, arrangement or obligation to create

any of the above.

"Existing Share Capital" The existing share capital of the Company comprising

646,867,923 Shares (excluding treasury shares) as at the Latest

Practicable Date

"Extended Condition Date" Has the meaning ascribed to it in Section 3.2.4 of this Circular

"Final Settlement Date" The date on which the Final Settlement Sum is paid by

> Jadestone and received by Hexindo, being no more than ten (10) Business Days following the Unconditional Date or such other

date mutually agreed to by the Parties in writing

"Final Settlement Sum" Has the meaning ascribed to it in Section 3.2.5(b) of this Circular

"Final Settlement Sum (SPE)" Has the meaning ascribed to it in Section 1.1 of this Circular

"First Amendment Agreement" Has the meaning ascribed to it in Section 1.1 of this Circular

"First Settlement Agreement" Has the meaning ascribed to it in Section 1.1 of this Circular

"FY" Financial year ended or ending 31 December

"Government Approvals" Has the meaning ascribed to it in Section 3.2.1(d) of this Circular

"Group" The Company and its subsidiaries from time to time

"GST" The goods and services tax levied and imposed under the

> applicable laws and regulations of the Republic of Singapore, including the Goods and Services Tax Act 1993 of Singapore

"Hexindo" PT. Hexindo Gemilang Jaya, an indirect 80.4% owned subsidiary

of the Company

"Hexindo Claim" : Any Claim of or by Hexindo and/or any other Hexindo Group

Member arising from or in connection with the JOA, the PSC or any other agreement, undertaking, deed or matter related to the Lemang Block but does not include any Claim enforcing the

rights or obligations of any Party under the Agreement

"Hexindo Group Member" : Hexindo, each of its Related Persons including the Company, and

each of its shareholders, including PT Tridatu

"Hexindo Participating Interest": Has the meaning ascribed to it in Section 1.1 of this Circular

"Independent Qualified Person": THREE60 Energy (Singapore) Pte. Ltd., the independent

qualified person

"Independent Qualified

Person's Report"

The independent qualified person's report dated 3 January 2022 on the petroleum resources and their associated values for the

Akatara Gas Development Project located within the Lemang Block under the PSC as prepared by the Independent Qualified Person, with an effective date of 31 December 2021, as set out in

Appendix A of this Circular

"Indonusa" : Indonusa Oil Ltd

"Jadestone" : Jadestone Energy (Lemang) Pte Ltd

"Jadestone Claim" : Any Claim of or by Jadestone and/or any other Jadestone Group

Member arising from or in connection with the JOA, the PSC or any other agreement, undertaking, deed or matter related to the Lemang Block, including without limitation the Total Debt, but does not include any Claim enforcing the rights or obligations of

any Party under the Agreement

"Jadestone Group Member" : Jadestone and each of its Related Persons

"JOA" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Latest Practicable Date" : 3 June 2022

"Lemang Block" : The area known as the "Lemang Block" located in the Jambi and

Riau Provinces, Onshore South Sumatra, Indonesia

"Limited Indemnity" : Has the meaning ascribed to it in Section 3.3.1(b) of this Circular

"Listing Manual" The listing manual of the SGX-ST, as may be amended, modified

or supplemented from time to time

"LPS" : Loss per share

"Mandala" : Mandala Energy Lemang Pte Ltd

"Market Day" : A day on which the SGX-ST is open for trading of securities

"MOU" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Mr. Bachir" : Mr. Mohammad Soetrisno Bachir

"Mr. Soeryadjaya" : Mr. Edward Seky Soeryadjaya

"Net Proceeds" : Has the meaning ascribed to it in Section 5.1 of this Circular

"Notice of EGM" : The notice of the EGM which is set out on pages N-1 to N-3 of

this Circular

"Novation Deed" : Has the meaning ascribed to it in Section 1.1 of this Circular

"NPV" : Net present values

"NTA" : Net tangible assets, which represents total equity attributable to

owners of the Company less intangible assets

"Oil & Gas Business Group

Structure"

Has the meaning ascribed to it in Section 2.1 of this Circular

"Ordinary Resolution" : The ordinary resolution to be tabled at the EGM to seek the

approval of Shareholders for the entry into the Agreement by Hexindo and, in particular, the Proposed Disposal as a major

transaction under Chapter 10 of the Listing Manual

"Participating Interest" : The undivided share, expressed as a percentage of the whole,

for the time being, of any person, in the rights, interests, obligations and liabilities under the PSC and in the Lemang Block

"Participation Agreement": Has the meaning ascribed to it in Section 1.1 of this Circular

"Parties" : Collectively, Hexindo and Jadestone, and individually, a "Party"

"**Precious**" : Precious Treasure Global Inc.

"Proposed Disposal" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Proposed REIL Disposal" : Has the meaning ascribed to it in Section 2.1 of this Circular

"Proxy Form" : The proxy form attached to the Notice of EGM which is set out

on pages P-1 to P-2 of this Circular

"PSC" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Q1 FY2022" : The first quarter of FY2022

"Redmount" : Redmount Holdings Limited

"Redmount Subsidiaries" : Has the meaning ascribed to it in Section 8.2 of this Circular

"Register of Directors'

Shareholdings"

The register maintained by the Company setting out details of the

Directors' respective shareholdings

"Register of Members" : Register of members of the Company

"Register of Substantial

Shareholders"

The register of Substantial Shareholders of the Company

"REL O&G" : REL Oil & Gas Pte Ltd, a wholly owned subsidiary of the

Company

"Related Person" : In relation to a person means each of its Affiliates, and each

Representative of that person or any of its Affiliates

"Representative" : An officer, director, commissioner, employee or agent

"Second Settlement Agreement": Has the meaning ascribed to it in Section 1.1 of this Circular

"Securities Account" : A securities account maintained by a Depositor with CDP but

does not include a securities sub-account maintained with a

Depository Agent

"Settlement and Release" : Has the meaning ascribed to it in Section 3.3.1(a) of this Circular

"SFA" : The Securities and Futures Act 2001 of Singapore, as may be

amended, modified or supplemented from time to time

"SFRS(I)" : The Singapore Financial Reporting Standards (International)

"SGX-ST" : Singapore Exchange Securities Trading Limited

"SGXNET" : The system maintained by the SGX-ST for announcements by

listed companies

"Share" : An ordinary share in the capital of the Company, and "Shares"

shall be construed accordingly

"Shareholders" : Registered holders of the Shares, except that where the

registered holder is CDP, the term "Shareholders" shall, where the context admits, mean the Depositors whose Securities

Accounts are credited with the Shares

"Shareholders' Approval" Approval of the Company's Shareholders for the entry into the

Agreement and, in particular, the Proposed Disposal

"SPE" : Super Power Enterprises Group Limited (British Virgin Islands

Registration No. 1067327), a company incorporated in the British

Virgin Islands

"SPE Forfeiture" : Has the meaning ascribed to it in Section 1.1 of this Circular

"SPE JOA" : Has the meaning ascribed to it in Section 1.1 of this Circular

"SRS" : Supplementary Retirement Scheme

"SRS Approved Banks" : Approved banks with whom SRS Investors hold their accounts

under the SRS

"SRS Investors" : Investors who have previously purchased Shares under the SRS

"Substantial Shareholder" : A person (including a corporation) who (a) has an interest or

interests in one or more voting shares in a company and (b) the total votes attached to that share, or those shares, is not less than 5% of the total votes attached to all the voting shares in the

company

"Suits" : Has the meaning ascribed to it in Section 1.1 of this Circular

"Telecour" : Telecour Limited

"Total Debt" : Has the meaning ascribed to it in Section 3.1 of this Circular

"Transfer Tax" : Has the meaning ascribed to it in Section 3.2.5(b) of this Circular

"Unconditional Date" : Has the meaning ascribed to it in Section 3.2.5 of this Circular

"VALMIN Code" : The Australasian Code for Public Reporting of Technical

Assessments and Valuations of Mineral Assets (2015 Edition) prepared by The VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy and the Australian

Institute of Geoscientists

"Waiver Disposal Condition" : Has the meaning ascribed to it in Section 4 of this Circular

"Withdrawal Notice" : Has the meaning ascribed to it in Section 1.1 of this Circular

"3Q2021" : The nine-month unaudited financial period ended 30 September

2021

# **Currencies and Units of Measurement**

"%" : Per cent or percentage

"S\$" and "cents" : Singapore dollars and cents, respectively, being the lawful

currency of the Republic of Singapore

"US\$" United States dollars, being the lawful currency of the United

States of America

The terms "Depositor", "Depository Agent" and "Depository Register" shall have the respective meanings ascribed to them respectively in Section 81SF of the SFA.

The terms "subsidiary" and "related corporations" shall have the meanings ascribed to them respectively in the Companies Act.

Words importing the singular shall, where applicable, include the plural and *vice versa* and words importing the masculine gender shall, where applicable, include the feminine and neuter genders and *vice versa*. References to persons shall include corporations.

Any reference in this Circular to "Rule" or "Chapter" is a reference to the relevant rule or chapter in the Listing Manual.

Any reference in this Circular to any enactment is a reference to that enactment as for the time being amended or re-enacted. Any word defined under the Companies Act, the SFA or the Listing Manual or any modification thereof and used in this Circular shall have the meaning assigned to it under the Companies Act, the SFA or the Listing Manual or any statutory modification thereof, as the case may be.

Any reference to any agreement or document shall include such agreement or document as amended, modified, varied, novated, supplemented or replaced from time to time.

Any reference in this Circular to Shares being allotted to a person includes allotment to CDP for the account of that Depositor.

Any reference to a time of day and date in this Circular shall be a reference to Singapore time and date, unless otherwise stated.

Any discrepancies in tables included in this Circular between the listed amounts and the totals are due to rounding; accordingly, the figures shown as totals in this Circular may not be an aggregation of the figures that precede them.

Morgan Lewis Stamford LLC has been appointed as the legal adviser to the Company as to Singapore law in relation to the preparation of this Circular only and did not advise on the Agreement and/or the Proposed Disposal. No other legal advisors were previously engaged by the Company in relation to this Circular.

Wu LLC has been appointed as the legal adviser to the Company as to Singapore law in relation to the Agreement and the Proposed Disposal but not in relation to the preparation of this Circular. No other legal advisors were previously engaged by the Company in relation to the Agreement and the Proposed Disposal.

#### CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

Certain statements contained in this Circular, which are not statements of historical fact, constitute "forward-looking statements". Some of these statements can be identified by forward-looking terms such as "expect", "believe", "plan", "intend", "estimate", "anticipate", "may", "will", "would", "could" or similar words. However, these words are not the exclusive means of identifying forward-looking statements. These statements reflect the Company's current expectations, beliefs, hopes, intentions or strategies regarding the future and assumptions in light of currently available information.

Such forward-looking statements are not guarantees of future performance or events and involve known and unknown risks and uncertainties. Accordingly, actual results may differ materially from those described in such forward-looking statements.

Shareholders should not place undue reliance on such forward-looking statements. Further, the Company disclaims any responsibility, and undertakes no obligation to update or revise any forward-looking statements contained in this Circular to reflect any change in the Group's expectations with respect to such statements after the Latest Practicable Date or to reflect any change in events, conditions or circumstances on which the Company based any such statements subject to compliance with all applicable laws and regulations and/or the rules of the SGX-ST and/or any regulatory or supervisory body or agency.

## **ENECO ENERGY LIMITED**

(Incorporated in the Republic of Singapore) (Company Registration No. 20031668R)

Directors: Registered Office:

Mr. Low Chai Chong (Chairman, Independent Non-Executive Director)

Mr. Colin Peter Moran (Executive Director)

Mr. Teo Cheow Beng (Independent Non-Executive Director)

Mr. Patrick Tan Tse Chia (Independent Non-Executive Director)

Mr. Koji Yoshihara (Non-Independent and Non-Executive Director)

4 June 2022

To: The Shareholders of Eneco Energy Limited

Dear Sir / Madam,

300 Tampines Avenue 5, #05-02, Singapore 529653

THE ENTRY INTO THE SETTLEMENT AND TRANSFER AGREEMENT DATED 23 NOVEMBER 2021 BY PT. HEXINDO GEMILANG JAYA AND, IN PARTICULAR, THE PROPOSED DISPOSAL OF PT. HEXINDO GEMILANG JAYA'S 10% PARTICIPATING INTEREST IN THE PRODUCTION SHARING CONTRACT RELATING TO THE LEMANG BLOCK TO JADESTONE ENERGY (LEMANG) PTE LTD AS A MAJOR TRANSACTION UNDER CHAPTER 10 OF THE LISTING MANUAL

#### 1. INTRODUCTION

## 1.1. The Agreement and the Proposed Disposal

As the Participating Interest in the Lemang Block has been transferred to various parties from time to time, the Company wishes to provide Shareholders with a chronological summary of the same in this Section 1.1 by way of background to the Agreement and the Proposed Disposal.

On or about 27 March 2006, PT. Hexindo Gemilang Jaya ("Hexindo"), an indirect 80.4%-owned subsidiary of the Company, and PT Indelberg Indonesia had entered into a memorandum of understanding ("MOU") pursuant to which PT Indelberg Indonesia would hold 90% of the Participating Interest in the Lemang Block and Hexindo would hold the remaining 10%. PT Indelberg Indonesia's role was to provide the necessary financial support to fund the exploration of the Lemang Block. Subsequently, however, PT Indelberg Indonesia became unwilling to provide the requisite funding and informed Hexindo that it would assign its portion of the Participating Interest in the Lemang Block to a third party, Super Power Enterprises Group Limited ("SPE"), which would fulfil its financial obligations. To this end, on 11 January 2007, PT Indelberg Indonesia and SPE had entered into an umbrella head of agreement pursuant to which SPE agreed to provide the necessary funding in proportion to its Participating Interest.

On 18 January 2007, Hexindo, PT Indelberg Indonesia and SPE had entered into a participation agreement to formalise SPE's agreement to participate in the Lemang Block (the "Participation Agreement"). Under the Participation Agreement, SPE was to be transferred 49% of the Participating Interest in the Lemang Block pending approval by the Indonesian government. On the same date, Hexindo, PT Indelberg Indonesia and Badan Pelaksana Kegiatan Usaha Hulu Minyak Dan Gas Bumi ("BPMIGAS") had entered into a production sharing contract (which has been amended from time to time) for the exploration, development and production of resources in the Lemang Block (the "PSC"). Consistent with the MOU, PT Indelberg Indonesia held 90% of the Participating Interest in the Lemang Block under the PSC, while Hexindo held the remaining

10%. BPMIGAS was a state-owned body in Indonesia which previously supervised the exploration, exploitation and marketing activities for Indonesian oil and gas before its dissolution in 2012. Further details on the Lemang Block are provided in Section 2.3 of this Circular.

On or around June 2007, the Indonesian authorities approved the transfer of 49% Participating Interest in the Lemang Block from PT Indelberg Indonesia to SPE in connection with the Participation Agreement. PT Indelberg Indonesia subsequently transferred its remaining 41% of the Participating Interest in the Lemang Block to Hexindo on or around 1 October 2009 pursuant to an agreement entered between the Company and PT Indelberg Indonesia, as approved by BPMIGAS in or around November 2010. On 9 October 2009, the Company notified SPE that it had purchased PT Indelberg Indonesia's remaining 41% Participating Interest and that Hexindo would be holding such Participating Interest on the Company's behalf. Following the foregoing transfer, Hexindo held 51% Participating Interest in the Lemang Block, while SPE held the remaining 49%.

On or around 13 October 2009, Hexindo and SPE entered into a joint operating agreement in respect of the PSC (the "SPE JOA"). On or around July 2011, however, Hexindo notified SPE that SPE had, pursuant to the terms of the SPE JOA, forfeited its 49% Participating Interest as it had defaulted on its financial obligations under the SPE JOA and Hexindo had terminated the SPE JOA as a result of such default and forfeiture (the "SPE Forfeiture"). Specifically, Hexindo had written to SPE on multiple occasions between December 2010 and April 2011 requesting SPE to fulfil its share of financial obligations under the SPE JOA, including but not limited to a performance bond and joint account costs for expenses already spent on the operation of the Lemang Block and for planned future expenditures. Under the SPE JOA, any party that fails to pay when due its participating interest share of joint account costs, including cash advances and interests, accrued pursuant to the SPA JOA shall be in default and the operator shall promptly give written notice of such default to the defaulting party. As SPE had not responded to these multiple requests, Hexindo served a notice of default upon SPE on 5 May 2011, notifying SPE that it was in breach of the SPE JOA for failing to pay its share of the joint accounts costs and calling SPE to remedy its position within sixty (60) days of the notice. As SPE had not made any payment of its share of the joint account costs as of 14 June 2011, Hexindo sent a second notice of deault to SPE on 15 June 2011 and reiterated that SPE had failed to pay its share of the joint account costs and was in default of the SPE JOA. On 4 July 2011, Hexindo served a termination notice on SPE claiming that SPE had neither fulfilled its obligations under the SPE JOA nor remedied its default within the required timeframe. In the notice, Hexindo required SPE to forfeit its entire Participating Interest in the Lemang Block to Hexindo within three (3) days of the termination notice in accordance the terms of the SPE JOA. On 7 July 2011, Hexindo served the final notice of termination on SPE and demanded that SPE make full payment by 11 July 2011, failing which SPE's Participating Interest in the Lemang Block would be automatically transferred by operation of the SPE JOA.

On 8 August 2011, Hexindo applied to BPMIGAS to seek its approval to transfer SPE's 49% Participating Interest to itself, and thereafter to Eastwin Global Investments Limited ("Eastwin"). On or around 24 August 2011 and 26 August 2011, the Indonesian authorities and BPMIGAS approved the transfer of 49% of the Participating Interest in the Lemang Block under the PSC from SPE to Eastwin. Eastwin agreed to enter into a fresh joint operating agreement with Hexindo on 19 December 2011 (the "Eastwin JOA") to perform the obligations under the PSC, with Hexindo holding 51% of the Participating Interest and Eastwin holding the remaining 49%.

In 2014, SPE challenged the legality of the SPE Forfeiture in arbitration proceedings, under the auspices of the Singapore International Arbitration Centre. The arbitration tribunal found the SPE Forfeiture to have been unlawful and rendered awards in favour of SPE as to merits and costs ("Arbitral Awards"). In or around June 2017, SPE commenced legal proceedings in Singapore ("Suits") against the Company and one of its directors at that time, claiming, amongst other things, that the defendants had procured and/or induced Hexindo to breach the SPE JOA by forfeiting SPE's 49% Participating Interest. This dispute led to a first settlement agreement being entered into on or around June 2018 amongst SPE, the Company and Hexindo (the "First Settlement")

11

https://id.wikipedia.org/wiki/Badan\_Pelaksana\_Kegiatan\_Usaha\_Hulu\_Minyak\_dan\_Gas\_Bumi#:~:text=Badan%20 Pelaksana%20Kegiatan%20Usaha%20Hulu%20Minyak%20dan%20Gas%20Bumi%20(disingkat,eksploitasi%20dan%20 pemasaran%20migas%20Indonesia.

**Agreement**"), whereby Hexindo was obliged to, *inter alia*, pay to SPE a sum of US\$10 million in full and final settlement of the Arbitral Awards, the Suits and claims that the parties may have against one another relating to the Arbitral Awards and the Suits. The abovementioned settlement sum of US\$10 million had not been paid to SPE, and subsequently, the parties negotiated for Hexindo to pay a smaller sum of US\$1,500,000 (the "**Final Settlement Sum (SPE)**") in full and final settlement of all claims that each party has or may have against one another, culminating in the parties entering into a second settlement agreement dated 17 November 2021 (the "**Second Settlement Agreement**") which superseded the First Settlement Agreement.

The salient terms of the Second Settlement Agreement are as follows:

- (1) Hexindo will pay SPE a sum of US\$1,500,000 within 5 Business Days of the date of the Second Settlement Agreement, as the Final Settlement Sum (SPE). Contemporaneously with such payment, SPE will issue a Discharge Confirmation confirming that: (a) SPE re-assigns and transfers all rights, benefits and interests that SPE has or may have over the sums due to Hexindo in connection with the Lemang Block; and (b) SPE has no further claims of any kind and in any manner whatsoever over the Lemang Block or in any manner whatsoever against Hexindo and the Company;
- (2) provided the transactions referred to in paragraph (1) above are satisfied: (a) the First Settlement Agreement is terminated; and (b) each party irrevocably (i) waives all rights and claims that it has or may have against one another, and (ii) releases and discharges the other parties from all obligations or claims it has or may have under the First Settlement Agreement and any other matter related to the Lemang Block and/or any other matter whatsoever; and
- (3) the parties are bound by confidentiality provisions.

Further details on the Second Settlement Agreement are provided in the Company's announcement dated 17 November 2021. The Final Settlement Sum (SPE) has been paid by Hexindo to SPE's nominee on 19 November 2021.

On 4 October 2015, Hexindo, Eastwin and Mandala Energy Lemang Pte Ltd ("Mandala") entered into an amended and restated joint operating agreement (as further amended from time to time and which amended and restated the Eastwin JOA) ("JOA") in relation to the conduct of exploration, development, extraction, production, transportation, marketing, abandonment and site restoration operations in the Lemang Block as contemplated under the PSC. On or around the same date, Hexindo entered into a farm-in agreement with Mandala to sell and transfer 35% of the Participating Interest to Mandala, while Eastwin entered into a separate farm-in agreement with Hexindo to sell and transfer 15% of the Participating Interest to Hexindo. Following this, Hexindo's, Eastwin's and Mandala's respective Participating Interests were 31%, 34% and 35%. To the best of the Company's knowledge, information and belief, Mandala was secured by Hexindo and Eastwin to provide funding as Hexindo and Eastwin did not have sufficient financial resources to continue with the project on their own at the point in time.

Pursuant to several farm-in agreements entered between Hexindo and Mandala on 4 October 2015, 16 September 2017 and 2 August 2018, as well as an assignment agreement dated 27 May 2018 between Eastwin and Mandala, Mandala acquired an aggregate of 90% of the Participating Interest in the Lemang Block from Hexindo and Eastwin. In connection with the foregoing transactions, Hexindo held the remaining 10% of the Participating Interest.

Mandala later entered into an asset purchase agreement with Jadestone Energy (Lemang) Pte Ltd ("Jadestone") on 27 June 2020 pursuant to which Mandala assigned and transferred to Jadestone Mandala's entire 90% Participating Interest in the PSC, the JOA, and the equivalent interest in all rights, privileges, duties and obligations related thereto (the "Assigned Participating Interest"). As disclosed in the Company's announcement on 15 December 2020 in relation to the deed of novation and amendment entered between Hexindo, Mandala and Jadestone (the "Novation Deed"), the aforementioned parties agreed to novate and amend the JOA to reflect the assignment and transfer of the Assigned Participating Interest to Jadestone, on the terms and conditions as set

out in the Novation Deed. Pursuant to the Novation Deed, Jadestone may, *inter alia*, exercise and enjoy all the rights and benefits of Mandala in respect of the Assigned Participating Interest arising under the JOA. In connection with the foregoing, as at the Latest Practicable Date, the Participating Interests of Hexindo and Jadestone are 10% and 90% respectively.

On 19 July 2021, the Company announced that Hexindo had on 15 July 2021 received a notice of exercise of withdrawal option ("Withdrawal Notice") from Jadestone. By way of context, Jadestone had issued cash call notices to Hexindo for payments relating to the JOA and the Lemang Block claiming for a total amount of US\$1,186,929 as at 30 June 2021 (which includes unpaid cash call amounts payable by Hexindo since October 2019 and late payment interest accrued thereon). However, as Hexindo disputes the payment of certain amounts to Jadestone, Hexindo had not made payment to Jadestone pursuant to such cash call notices. Consequently, Jadestone served the Withdrawal Notice on Hexindo claiming that, pursuant to the JOA, when a Withdrawal Notice is served by a non-defaulting party (i.e. Jadestone) on a defaulting party (i.e. Hexindo), the defaulting party is deemed to have proposed to withdraw from the JOA and thereafter the defaulting party is required to take steps to assign and transfer its Participating Interest under the JOA to the non-defaulting party.

On 24 November 2021, the Company announced that Hexindo and Jadestone had, on 23 November 2021, entered into a settlement and transfer agreement (the "Agreement") pursuant to which, *inter alia*, Hexindo shall transfer its 10% Participating Interest in the Lemang Block under the PSC (the "Hexindo Participating Interest") to Jadestone (the "Proposed Disposal") and each Party shall release the other Party from Claims on the terms and conditions set out in the Agreement. Please refer to Section 3 of this Circular for further details on the principal terms of the Agreement including the Proposed Disposal.

On 19 April 2022, the Parties entered into a first amendment agreement (the "First Amendment Agreement) to extend the Condition Date under the Agreement to 30 June 2022 or such other date as may be agreed between the Parties in writing. Please refer to Section 3.2.4 for further details on the First Amendment Agreement.

## 1.2. Shareholders' Approval

The Board is convening the EGM to be held by way of electronic means on 20 June 2022 at 2:00 p.m. to seek the approval of Shareholders for the entry into the Agreement by Hexindo and, in particular, the Proposed Disposal as a major transaction under Chapter 10 of the Listing Manual (the "**Ordinary Resolution**") prior to Completion.

#### 1.3. Purpose of this Circular

The purpose of this Circular is to provide Shareholders with necessary information relating to the Agreement and the Proposed Disposal, including the rationale for the Agreement and the Proposed Disposal and the financial effects of the Proposed Disposal on the Group, and to seek Shareholders' approval for the Ordinary Resolution.

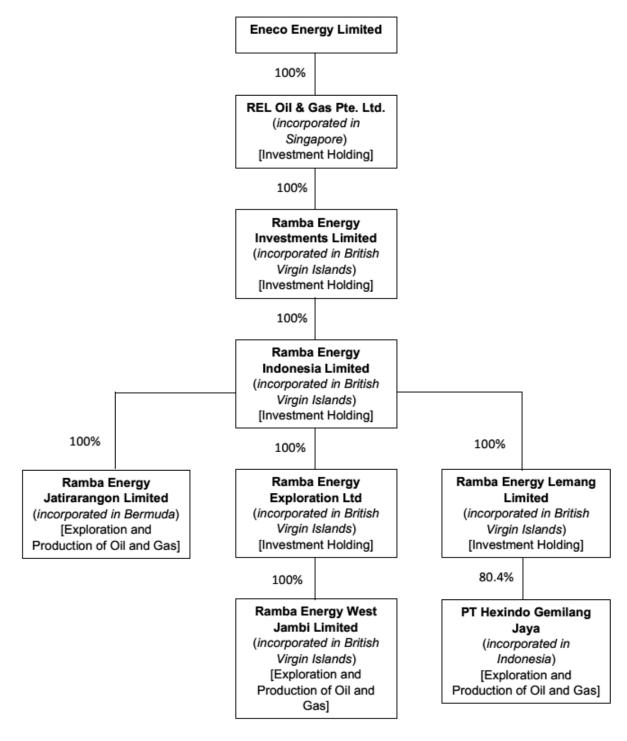
# 2. INFORMATION ON HEXINDO, JADESTONE AND THE LEMANG BLOCK

# 2.1. Information on Hexindo

Hexindo is an 80.4%-owned subsidiary of Ramba Energy Lemang Limited and its principal activities are in the exploration and production of oil and gas. Ramba Energy Lemang Limited is a wholly owned subsidiary of Ramba Energy Indonesia Limited, which is in turn wholly owned by Ramba Energy Investments Limited. Both Ramba Energy Investments Limited and Ramba Energy Indonesia Limited are primarily investment holding companies. Other wholly owned subsidiaries held by Ramba Energy Indonesia Limited include Ramba Energy Exploration Ltd and Ramba Jatirarangon Limited. Ramba Energy Investments Limited is a wholly owned subsidiary of REL Oil & Gas Pte Ltd ("REL O&G"), which is one of the Company's wholly owned principal subsidiaries whose principal activities are also investment holding.

Accordingly, the Company's effective interest in Hexindo is 80.4%.

A diagrammatic illustration of the Company's subsidiaries held through REL O&G (the "Oil & Gas Business Group Structure"), as at the Latest Practicable Date, is set out below for ease of reference.



For the avoidance of doubt, the Oil and Gas Business Group Structure would remain the same immediately after completion of the Proposed Disposal as the Proposed Disposal concerns the transfer of the Hexindo Participating Interest and not shares in Hexindo.

After completion of the Proposed Disposal, the Group will continue to be engaged in the existing logistics business (which includes the provision of transportation management and airport cargo terminal handling, and transportation and logistics services) but will not be actively involved in the business of exploration and production of oil and gas, notwithstanding that it will still possess certain oil and gas assets and liabilities. As part of the Group's ongoing efforts to restructure its business and pursuant to the Waiver Disposal Condition (further details of which are provided in Section 4 of this Circular), the Group wishes to dispose of its oil and gas assets and liabilities, focus on the growth and development of its logistics business to strengthen its market position, and look into business diversification opportunities going forward. In this regard, as disclosed in the Company's announcement dated 8 March 2022, the Company's wholly owned subsidiary, REL O&G, has on 7 March 2022 entered into a shares sale and purchase agreement with Indonusa Oil Ltd ("Indonusa") pursuant to which REL O&G will sell and Indonusa will purchase all the issued and fully paid up ordinary shares of Ramba Energy Investments Limited for a consideration of US\$1 (the "Proposed REIL Disposal"). Completion of the Proposed REIL Disposal is subject to certain conditions precedent, including the completion of the Agreement and the approval of the Board and Shareholders for the Proposed REIL Disposal. Further details of the Proposed REIL Disposal will be provided in a separate circular to be despatched to Shareholders in due course. Upon completion of both the Proposed Disposal and the Proposed REIL Disposal, the Group would have fully exited the business of exploration and production of oil and gas and would no longer possess any oil and gas assets and liabilities.

#### 2.2. Information on Jadestone

The information presented herein relating to information on Jadestone is based on information provided by Jadestone. In respect of such information, the Company has not independently verified the accuracy and correctness of the same and the Company's responsibility is limited to ensuring that such information has been accurately and correctly extracted and reproduced in this Circular in its proper form and context.

Jadestone is a wholly owned Singapore-incorporated affiliate of Jadestone Energy plc, an oil and gas company incorporated under the laws of England and Wales and listed on the AIM market of the London Stock Exchange. Jadestone was incorporated on 19 June 2020 to acquire and hold the 90% Participating Interest in the Lemang Block.

Jadestone is currently the operator of the Lemang Block pursuant to the JOA.

As previously mentioned in Section 1.1 of this Circular, as at the Latest Practicable Date, the Participating Interests of Hexindo and Jadestone in the PSC are 10% and 90% respectively.

# 2.3. Information on the Lemang Block

The Lemang Block is an area located in the Jambi and Riau Provinces, Onshore South Sumatra, Indonesia. The Lemang Block includes the Akatara gas field, which was previously developed as an oil producing asset. The asset has been substantially de-risked with 11 wells drilled into the structure, plus three years of oil production history, up until the field ceased oil production in December 2019 after reaching its economic limit for oil production. The Akatara gas field is wholly located in the Jambi province and is currently being developed with a view to commercialisation.

The figure below, which has been extracted from the Independent Qualified Person's Report (as set out in Appendix A of this Circular), shows the geographical location of the Akatara gas field and the Lemang Block on Sumatra Island.

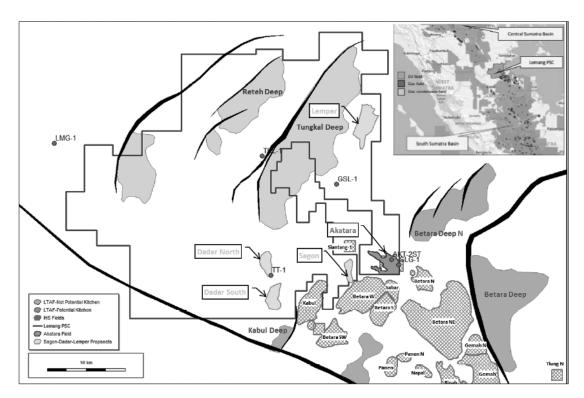


Figure 1-1: Geographical Location of the Akatara Field and the Lemang PSC, Onshore Sumatra, Indonesia

Source: Figure 1-1, Independent Qualified Person's Report, Page 15

Pursuant to the PSC and JOA (as amended from time to time), the Company intended to explore and produce oil resources in the Lemang Block as a source of revenue for the Group.

Rule 1014(2) of the Listing Manual states, *inter alia*, that if the major transaction relates to an acquisition or disposal of a mineral, oil or gas asset of a mineral, oil or gas company, the circular to shareholders must contain (a) a qualified person's report that is prepared by an independent qualified person; and (b) a statement that no material changes have occurred since the effective date of the qualified person's report. The effective date of the qualified person's report must not be more than 6 months from the date of publishing the circular.

The Company commissioned THREE60 Energy (Singapore) Pte. Ltd., which is an independent qualified person in accordance with the requirements of the Listing Manual, to prepare the Independent Qualified Person's Report (as set out in Appendix A of this Circular) on the petroleum resources and their associated values for the Akatara Gas Development Project located within the Lemang Block under the PSC. The Independent Qualified Person's Report is dated 3 January 2022, with an effective date of 31 December 2021. As at the Latest Practicable Date, no material changes have occurred since the effective date of the Independent Qualified Person's Report.

Based on the Independent Qualified Person's Report, a summary of the contingent resources for the Lemang Block under the PSC, with an effective date of 31 December 2021, is as follows:

Category	Gross Attributable to Licence <sup>1</sup>	Working Interest Attributable to Issuer <sup>2</sup>	Net Entitlement Attributable to Issuer <sup>3, 4</sup>	Risk Factors <sup>5</sup>	Remarks				
Contingent	Contingent Resources – Akatara Gas Development <sup>6,7</sup> – Project Maturity Sub-class "Development Pending"								
Gas Conti	ingent Resources	(Bscf <sup>8</sup> )							
1C	34.2	3.4	3.0	Note PRMS	Planned development of Non				
2C	59.2	5.9	4.7	project	Associated Gas (NAG) resources in UTAF and LTAF reservoirs. Subject				
3C	74.3	7.4	5.7	maturity status	to regulatory approval and FID.				
Condensa	ate Contingent Re	esources (Mstb <sup>9</sup> )							
1C	582	58	52	Note PRMS	Associated condensate yields				
2C	1,025	103	77	project (separated wet gas	(separated wet gas) from the				
3C	1,472	147	93	maturity status	planned Akatara Gas Development.				
Liquid Per	troleum Gas Con	tingent Resource	es (MT <sup>10</sup> )						
1C	332.6	33.3	29.6	Note PRMS	Associated liquid petroleum gas				
2C	543.5	54.4	43.0	project (LPG) extraction fr	(LPG) extraction from the planned				
3C	662.1	66.2	50.8	maturity status	Akatara Gas Development.				

Source: Table 4-3, Independent Qualified Person's Report, Page 48

#### Notes:

1. Tabulated volumes are gross attributable to licence and include the other contractor's share (Jadestone's 90% working interest) and the Indonesian government's share of the contingent resources.

- 2. Tabulated volumes are working interest volumes for the Company's 10% contractor participation in the PSC. These exclude Jadestone's volumes but are not net to the Indonesian government's entitlement to the contingent resources.
- 3. Tabulated volumes are net entitlement volumes for the Company's 10% participation in the PSC. These exclude both Jadestone's and the Indonesian government's entitlements to the contingent resources. Net entitlement contingent resources form the true volumes attributable to the Company as per the terms and conditions of the PSC for the Asset.
- 4. Note that the Company's working interest may be reduced to 9% if the local Indonesian government exercises its 10% back-in right under the PSC at the time of Akatara Gas Development Project sanction. The 2C net entitlement volumes at 9% working interest are Gas: 4.2 Bscf, Condensate: 69 Mstb, and LPG: 38.9 MT, respectively.
- 5. The reporting of contingent resources is on an unrisked basis. Assessment of risk related to contingent resources development is made qualitatively by assigning resources to one of the SPE PRMS 2018<sup>2</sup> project maturity sub-classes. The Independent Qualified Person estimates a probability of development of 80%.
- 6. The contingent resources are classified project maturity sub-class "Development Pending" as there remain contingencies on the final investment decision to undertake the gas development project, in addition to final approval of the development by the parties to the PSC and the Indonesian government.

\_

The "SPE PRMS 2018" refers to the 2018 Petroleum Resources Management System prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) and reviewed and jointly sponsored by the World Petroleum Council (WPC), the American Association of Petroleum Geologists (AAPG), the Society of Petroleum Evaluation Engineers (SPEE), the Society of Exploration Geophysicists (SEG), Society of Petrophysicists and Well Log Analysts (SPWLA) and the European Association of Geoscientists & Engineers (EAGE). The SPE PRMS 2018 is accessible at the following URL: <a href="https://www.spe.org/en/industry/petroleum-resources-management-system-2018/">https://www.spe.org/en/industry/petroleum-resources-management-system-2018/</a>.

- 7. 1C: Low; 2C: Best; 3C: High estimated contingent resources pertaining to the Akatara Gas Development discussed above.
- 8. Bscf: Billions of standard cubic feet of gas.
- 9. Mstb: Thousands of stock tank barrels of condensate.
- 10. MT: Thousands of metric tonnes of liquid petroleum gas or natural gas liquids.

### 3. PRINCIPAL TERMS OF THE AGREEMENT INCLUDING THE PROPOSED DISPOSAL

## 3.1. The Proposed Disposal – Transfer of the Hexindo Participating Interest

As disclosed in Section 1.1, as at the Latest Practicable Date, the Participating Interests of Hexindo and Jadestone are 10% and 90% respectively.

Pursuant to the Agreement, the Parties have negotiated in good faith for the full and final settlement of the monies and amounts due and payable by Hexindo in connection with the Hexindo Participating Interest and the Lemang Block generally, whether pursuant to the JOA or otherwise (and whether payable by Hexindo to Jadestone in its capacity as operator or holder of the Participating Interest) ("**Total Debt**") and all other Claims of any kind whatsoever that the Parties have or may have against one another under the JOA or the PSC, and to release each other from their respective rights and obligations under the JOA and any other agreement, undertaking or deed between the Parties relating to the Lemang Block, upon the terms and conditions of the Agreement. As disclosed in the Company's 24 November 2021 announcement and as at the Latest Practicable Date, the Total Debt which is due and payable by Hexindo to Jadestone relating to its Participating Interest is US\$1,357,726.99.

The Total Debt of US\$1,357,726.99 relates to cash calls by Jadestone, a breakdown of which is set out in Appendix 1 of the Agreement and replicated in the table below for ease of reference:

Cash call date	Description	Total Debt (US\$)
30 September 2019	Cash call – default	95,156.44
1 November 2019	Cash call – default	162,734.61
29 November 2019	Cash call – default	89,221.87
31 December 2019	Cash call – default	148,941.38
31 January 2020	Cash call – default	75,394.97
28 February 2020	Cash call – default	87,599.08
1 April 2020	Cash call – default	43,886.67
30 April 2020	Cash call – default	79,799.34
1 June 2020	Cash call – default	40,535.78
1 July 2020	Cash call – default	67,294.49
31 July 2020	Cash call – default	18,931.11
1 September 2020	Cash call – default	56,209.75
1 October 2020	Cash call – default	45,253.02
9 February 2021	Cash call – default	71,417,27
4 March 2021	Cash call – default	20,221.79
1 April 2021	Cash call – default	41,873.86
30 April 2021	Cash call – default	35,498.32
31 May 2021	Cash call – default	19,357.23
1 July 2021	Cash call – default	19,978.12
2 August 2021	Cash call - default	59,866.66
1 September 2021	Cash call – default	18,442.16
1 October 2021	Cash call – default	21,673.06

Cash call date	Description	Total Debt (US\$)
1 November 2021	Cash call – default	38,440.00
Total:		1,357,726.99

In connection with the foregoing and subject to Shareholders' Approval, Hexindo shall sell and transfer the Hexindo Participating Interest to Jadestone free and clear of any Encumbrance.

#### 3.2. Conditions Precedent

- 3.2.1. The obligations of the Parties to complete the transfer of the Hexindo Participating Interest and release the other Party from Claims as set out in the Agreement are conditional upon the following conditions precedent being satisfied or waived, in accordance with the terms of the Agreement (collectively, the "Conditions Precedent"):
  - (a) Company's Shareholders' Approval is obtained for the Agreement (including the Proposed Disposal);
  - (b) Hexindo's shareholders' approval is obtained for the Agreement and the Proposed Disposal;
  - (c) in connection with the Second Settlement Agreement (further details of which are provided in Section 1.1 of this Circular), a discharge confirmation (the "**Discharge Confirmation**") is executed and delivered by SPE to Hexindo and Jadestone, confirming that:
    - (i) SPE has transferred and re-assigned to Hexindo all rights, benefits and interests which were or have been transferred or assigned to, or in any other manner whatsoever vested in, SPE by Hexindo, by way of security or otherwise, over the sums due to Hexindo in connection with the Lemang Block; and
    - (ii) SPE has no further Claims of any kind and in any manner whatsoever over any of the Lemang Block, the PSC or the JOA, or in any manner whatsoever against Hexindo, the Company and/or Jadestone; and
  - (d) receipt by Jadestone of the written approval by the relevant government authorities in Indonesia as may be required for the transfer of the Hexindo Participating Interest by Hexindo to Jadestone ("Government Approvals"), which the Parties agree will be applied for by Jadestone after the Conditions Precedent listed above have been satisfied or waived.
- 3.2.2. For further context to Section 3.2.1(c) above, SPE was to issue the Discharge Confirmation pursuant to the Second Settlement Agreement. SPE has since issued the Discharge Confirmation and the Condition Precedent set out in Section 3.2.1(c) above has been satisfied. As at the Latest Practicable Date, all the Conditions Precedents save for the Company's Shareholders' Approval (under Section 3.2.1(a)) and the Government Approvals (to be procured by Jadestone under Section 3.2.1(d)) have been satisfied.
- 3.2.3. In the event that the Company's Shareholders' Approval or Hexindo's shareholders' approval for the Proposed Disposal is subject to conditions, the said approvals are only deemed obtained if the conditions are acceptable to the Company and/or Hexindo, acting reasonably, and if any of the Government Approvals are subject to conditions affecting Jadestone and/or Hexindo, the said approvals are only deemed obtained if the conditions are acceptable to the party(ies) affected, acting reasonably. Subject to the termination rights in the Agreement (further details of which are set out in Section 3.2.4 below), the Parties agree that if any of the Conditions Precedent cannot be satisfied or waived, as the case may be, despite all reasonable efforts of the Parties, then the Parties shall use reasonable endeavours to vary and/or supplement the Agreement in order to reach an alternative amicable and mutually agreed solution.

- 3.2.4. Under the Agreement, if any of the Conditions Precedent set out in Sections 3.2.1 (a) to (c) above are not satisfied or waived by the party or parties entitled to do so on or before the Condition Date, then either Party may terminate the Agreement by written notice to the other Party at any time after the Condition Date. On 19 April 2022, the Parties entered into the First Amendment Agreement to extend the Condition Date under the Agreement to 30 June 2022 or such other date as may be agreed between the Parties in writing (the "Extended Condition Date"). The Extended Condition Date will provide the Parties with more time to satisfy the remaining Conditions Precedent, which would otherwise have lapsed on the original Condition Date of 22 April 2022. Except for the extension of the original Condition Date, the Agreement remains unchanged and in full force and effect.
- 3.2.5. The Agreement becomes unconditional when all the Conditions Precedent are satisfied or waived (the "**Unconditional Date**"), and the following transactions will take place:
  - (a) on and with effect from the Final Settlement Date (being no more than ten (10) Business Days following the Unconditional Date or such other date mutually agreed to by the Parties in writing), Hexindo irrevocably assigns and transfers Hexindo's Participating Interest to Jadestone;
  - (b) contemporaneously with the above and by the Final Settlement Date, Jadestone will pay to the Company's account, as directed by Hexindo, a sum of U\$\$369,959.11, being the final settlement sum of U\$\$500,000 ("Final Settlement Sum") less the amount otherwise payable by Hexindo as transfer tax (arising in connection with the transfer of the Hexindo Participating Interest from Hexindo to Jadestone) amounting to U\$\$130,040.89 payable to the Indonesian authorities as required by Indonesian laws ("Transfer Tax"). The Transfer Tax, which (for the avoidance of doubt) would otherwise be payable by Hexindo, will be remitted by Jadestone directly to the Indonesian authorities on behalf of Hexindo. The Transfer Tax equates to 7% of the consideration received by Hexindo for the Hexindo Participating Interest, being the effective sum of U\$\$1,857,726.99 (comprising the Total Debt plus the Final Settlement Sum) (the "Consideration"). The Total Debt will be waived by Jadestone. Further details on how the Consideration sum was determined and arrived at are set out in Section 3.4 of this Circular.
- 3.2.6. The Final Settlement Sum was negotiated on a willing-buyer-willing-seller basis. In negotiating and agreeing to such sum, the Company and Hexindo considered the following factors:
  - (a) the Company wishes to dispose of its oil and gas business pursuant to the Waiver Disposal Condition (further details of which are set out in Section 4 of this Circular);
  - (b) the value of the Hexindo Participating Interest (further details of which are set out in Section 5 of this Circular);
  - (c) the Group does not have the required financial resources to continue with the investment in the Lemang Block under the PSC, which was substantial and continuing with monthly cash calls (of approximately US\$30,000 US\$40,000 per month). Entry into the Agreement and Completion of the Proposed Disposal would relieve the Group of such expenses;
  - (d) the futility of securing another purchaser who would be willing to acquire a minority interest in the Lemang Block, given that Jadestone holds 90% of the Participating Interest; and
  - (e) Jadestone was the only willing buyer for the Hexindo Participating Interest.

## 3.3. Mutual Settlement and Termination

- 3.3.1. In addition, subject to the Conditions Precedent being satisfied or waived, the Parties have further agreed under the Agreement that, *inter alia*:
  - (a) the settlement and release as set out in the Agreement and in this Section 3.3 (the "Settlement and Release") is in full and final settlement of the Total Debt and all other Jadestone Claims and all Hexindo Claims; and
  - (b) subject to Jadestone's receipt of the Government Approvals, Jadestone shall indemnify Hexindo from and against any claim made by Mandala against Hexindo directly related to the Total Debt (the "Limited Indemnity") on the following conditions:
    - (i) the aggregate liability of Jadestone for any claim or claims in respect of the Limited Indemnity shall not exceed US\$985,281.24;
    - (ii) Hexindo is barred from bringing a claim under the Limited Indemnity until it can concurrently deliver to Jadestone a final, written decision of an arbitral tribunal appointed under the Rules of the Singapore International Arbitration Centre, in favour of Mandala with respect to the Total Debt; and
    - (iii) Hexindo notifies Jadestone of the claim by Mandala against Hexindo within the twelve (12) month period following the Final Settlement Date.
- 3.3.2. In addition, with effect from the Final Settlement Date but subject always to Hexindo and Jadestone performing their respective obligations under the Agreement, the Parties have agreed, *inter alia*, that:
  - (a) the JOA is terminated, the Withdrawal Notice shall cease to have effect and each Party irrevocably waives all rights (including, without limitation, any accrued rights and future rights) that it has or may have under the JOA and irrevocably releases and discharges the other Party from all obligations (including, without limitation, any accrued obligations and future obligations) it has or may have thereunder;
  - (b) Hexindo irrevocably releases and discharges each Jadestone Group Member from any and all Hexindo Claims, waives any and all such Hexindo Claims, and covenants and undertakes not to make, and shall procure that no Hexindo Group Member shall make, any Hexindo Claim against any Jadestone Group Member;
  - (c) Jadestone irrevocably releases and discharges each Hexindo Group Member from any and all Jadestone Claims, waives any and all such Jadestone Claims, and covenants and undertakes not to make, and shall procure that no Jadestone Group Member shall make, any Jadestone Claim against any Hexindo Group Member;
  - (d) other than the payment of the Final Settlement Sum by Jadestone to Hexindo, and such other amounts as may be due from one Party to the other as set out in the Agreement, (i) no further sum or sums of money of any kind whatsoever is or are due or payable by any Jadestone Group Member to any Hexindo Group Member relating to any matter in connection with the Lemang Block, and (ii) no further sum or sums of money or obligation of any kind whatsoever is or are due or payable or to be performed by any Hexindo Group Member to any Jadestone Group Member relating to any matter in connection with the Lemang Block; and
  - (e) Hexindo has no Participating Interest or other interest of any kind whatsoever over the Lemang Block or in the PSC, and is not liable to Jadestone for any amount, expense or costs of any kind whatsoever relating to any matter in connection with the Lemang Block or the PSC or the JOA.

- 3.3.3. Unless Hexindo fails to perform or comply with any terms of the Agreement, the Parties further agree that interest will cease to accrue on the Total Debt (as of the date of the Agreement), and Jadestone will not and will ensure that the Jadestone Group Members will not:
  - (a) take any steps to recover any outstanding amount owing by Hexindo relating to the Lemang Block by attachment, set-off, execution or otherwise (including by way of the issuance of any legal proceedings in any court of any jurisdiction against Hexindo and/or any of the other Hexindo Group Members);
  - (b) take any steps to enforce any security or agreement relating to the subject matter of the Agreement against Hexindo or any other Hexindo Group Member; or
  - (c) petition for (or vote in favour of any resolution for) or take or support any steps (including but not limited to issuing demands or statutory demands) with a view to initiating any liquidation (including any winding up of companies and bankruptcy of individuals) or any voluntary arrangement or assignment for the benefit of creditors of Hexindo or any other Hexindo Group Member,

but the terms and conditions of the JOA and the PSC will otherwise continue in full force and effect, until the Parties are released and discharged in accordance with Section 3.3.2 above. For the avoidance of doubt, if the transactions of the Settlement and Release as set out in the Agreement are not performed or completed by any Party, then unless otherwise mutually agreed by the Parties in writing, the terms and conditions of the JOA and the PSC will continue in full force and effect as if the Agreement had not been entered into.

#### 3.4. Consideration

- 3.4.1. As abovementioned, the Consideration sum of US\$1,857,726.99 is an aggregation of the Total Debt and the Final Settlement Sum.
- 3.4.2. The Consideration was arrived at following arm's length negotiations between the Parties on a willing-buyer-willing-seller basis and taking into account, *inter alia*;
  - (a) a comparative transaction, as identified and elaborated upon in the Independent Qualified Person's Report and further details of which are provided in Section 3.5.3 of this Circular below;
  - (b) the unaudited book value of the Hexindo Participating Interest of US\$4.012 million (or S\$5.461 million<sup>(1)</sup>) based on the latest available unaudited condensed interim financial statements of the Group for 3Q2021 at the time of signing the Agreement;
  - (c) the unaudited net tangible asset value of the Hexindo Participating Interest of US\$4.012 million (or S\$5.461 million<sup>(1)</sup>) for 3Q2021;
  - (d) the unaudited net loss attributable to the Hexindo Participating Interest before taxation of US\$0.293 million (or S\$0.392 million<sup>(2)</sup>) for 3Q2021;
  - (e) the valuation of the petroleum resources and their associated values for the Akatara Gas Development Project located within the Lemang Block (the "Asset") in the Independent Qualified Person's Report; and
  - (f) the fact that if the Group does not dispose of the Hexindo Participating Interest, the Group will continue to receive monthly cash calls (for expenses in relation to operating the Lemang Block based on Hexindo's 10% Participating Interest) and such cash calls are approximately US\$30,000 US\$40,000 per month.

#### Notes:

- (1) For the purposes of this Circular, we have assumed an exchange rate of US\$1.00: S\$1.3611 for translation of balance sheet items.
- (2) For the purposes of this Circular, we have assumed an exchange rate of US\$1.00: S\$1.3389 for translation of profit and loss items.

#### 3.5. Valuation

- 3.5.1. The Independent Qualified Person has assessed the value of Hexindo's Participating Interest in the Asset using multiple methods, further details of which are set out in Section 4.8 of the Independent Qualified Person's Report and below.
- 3.5.2. On an *income-based assessment (discounted cash flow)*, the Independent Qualified Person has placed the range of profiles in a discounted cash flow model to extract the gross, working interest and net entitlement volumes and values for the Akatara Gas Development Project. The discounted cash flow model applies assumptions on timing, prices (gas, liquid petroleum gas, and condensate) and discount factors to determine the economic cut-off of the contingent resources and the associated volume and value.

A summary of the values for the contingent resources is presented in Table 4-4 under Section 4.8 of the Independent Qualified Person's Report and is replicated below for ease of reference. The net present values ("NPV") pertain to the Company's net entitlement within the PSC at different discount rates. A detailed description of the valuation, to VALMIN Code standards, is presented in Appendix 3 to the Independent Qualified Person's Report.

### Contingent Resources (Akatara Gas Development Project) 1

Contingent Resources		Net Present Va	alue <sup>2</sup> (discount r US\$ N	-	king Interest	
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25
1C	15.5	10.9	7.4	4.9	2.9	1.4
2C	23.2	15.8	10.8	7.1	4.5	2.6
3C	29.0	19.2	12.8	8.4	5.4	3.1

Contingent Resources	Resources US\$ MM <sup>3</sup>						
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25	
1C	15.5	10.8	7.4	4.9	2.9	1.4	
2C	22.2	15.2	10.3	6.8	4.3	2.4	
3C	27.5	18.3	12.2	8.0	5.1	2.9	

Source: Table 4-4, Independent Qualified Person's Report, Page 50

#### Notes:

- Contingent resources values relate to the Company's net entitlement within the PSC and are
  for the planned Akatara Gas Development Project. The Petroleum Resources Management
  System project maturity sub-class "Development Pending". First gas is planned for the first
  quarter of 2024. Contingent resources values are unrisked.
- 2. The Company's 10% net working interest in the Asset is presented in the upper table. Note, however, the lower table presents the case whereby the Company's interest reduces to 9%, based on the local Indonesian government exercising its 10% back-in right under the PSC at the time of development sanction.

3. US\$ MM: Millions of United States Dollars.

The table above presents the full project life-cycle valuation of the Akatara Gas Development Project.

- 3.5.3. Besides the income-based assessment (discounted cash flow) model, Section 4.8 of the Independent Qualified Person's Report notes the following additional considerations when taking into account the valuation of the Asset:
  - (a) Market-based valuation (comparative transaction) the Asset was sold by the previous operator (Mandala) to the new operator (Jadestone) on 29 June 2020, with the purchase price being disclosed as:<sup>3</sup>
    - (i) an initial cash payment of US\$12 million for 90% of the operating interest;
    - (ii) an incremental payment of US\$5 million once the project commences production (2024); and
    - (iii) contingent payments of up to US\$26.7 million if several "upsides" (as set out in Appendix 3 (Page 83) to the Independent Qualified Person's Report) are realised.

In view of the above, the Independent Qualified Person's Report states that a reasonable market-based comparative transaction valuation for the Asset at the commencement of production is set at US\$17 million for a 90% interest in the Asset, which equates to US\$18.9 million at 100% interest and, thus, US\$1.9 million for the Company's 10% interest (i.e. Hexindo's 10% Participating Interest).

- (b) Cost-based valuation (cash call positioning) if historical and current unpaid cash calls are taken into consideration, and the possibility that the Asset is defaulted to the operator (Jadestone) due to non-payment, a reasonable range of valuations (as prescribed under the Independent Qualified Person's Report) would be:
  - (i) On default<sup>4</sup> US\$0 million as the operator (Jadestone) takes the defaulted Hexindo Participating Interest;
  - (ii) Full project basis (as of end-2021) US\$5.8 million based on full project NPV15 at 9% working interest (US\$7.1 million) that assumes local government entity back-in (10% gross) at production commencement and deduction of current outstanding cash calls for US\$1.4 million; and
  - (iii) Full project basis (at first production in 2024) the value is undetermined but the outstanding cash call position under Section 3.5.3(b)(ii) above as of end-2021 would increase significantly up to the point of first production in 2024 to include around US\$1 million in net additional operating expenditure and US\$9.7 million as Hexindo's 10% share of development capital expenditure costs. The Independent Qualified Person has opined that this case would not proceed as the operator (Jadestone) would enact Section 3.5.3(b)(i) above.
- (c) The Independent Qualified Person's Report concludes as follows:

"In conclusion, the range in valuation is broad and based on perception of different business scenarios. THREE60 Energy opines that a reasonable fair market value of Eneco's interest in the Asset is **US\$ 1.9 [million]** considering the recent, arms-length comparative transaction for the Asset between a willing buyer and a willing seller."

-

<sup>3</sup> https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/

On the assumption that Hexindo's Participating Interest is defaulted to Jadestone for non-payment pursuant to the Withdrawal Notice. Further details of the Withdrawal Notice are set out in Section 1.1 of this Circular.

3.5.4. In view of the foregoing, the Board is of the view that the Consideration sum of US\$1,857,726.99 is a reasonable assessment of the value of the Hexindo Participating Interest and is consistent with the value of a recent comparative transaction as set out in the Independent Qualified Person's Report.

# 4. RATIONALE FOR THE AGREEMENT AND THE PROPOSED DISPOSAL

For the reasons specified in Section 1.1 of this Circular (particularly in view of the Withdrawal Notice) and to facilitate the Settlement and Release as set out in Section 3.3 of this Circular, the Parties have entered into the Agreement in full and final settlement of the Total Debt and all other Jadestone Claims and all Hexindo Claims.

As also disclosed in Section 3.4.2(f) of this Circular, if the Group retains the Hexindo Participating Interest, the Group will continue to receive monthly cash calls (for expenses in relation to operating the Lemang Block based on Hexindo's 10% Participating Interest) and such cash calls are approximately US\$30,000 – US\$40,000 per month. Completion of the Proposed Disposal would relieve the Group of such expenses.

Moreover, as disclosed in the Company announcement dated 9 January 2022, the waiver granted by the SGX-ST on 6 January 2022 for the lifting of the Company's voluntary suspension and the resumption of trading in the Company's securities in accordance with Rule 1304 of the Listing Manual is subject to certain conditions which include, but is not limited to, the completion of the disposal of the Group's oil and gas business (the "Waiver Disposal Condition"). In view of the Waiver Disposal Condition and as part of the Group's ongoing efforts to restructure its business, the Group wishes to dispose of its oil and gas assets and liabilities, focus on the growth and development of its logistics business to strengthen its market position, and look into business diversification opportunities going forward. In connection with the Waiver Disposal Condition, as disclosed in Section 2.1 above and in the Company's announcement dated 8 March 2022, REL O&G has on 7 March 2022 entered into a shares sale and purchase agreement with Indonusa for the Proposed REIL Disposal. Further details of the Proposed REIL Disposal will be provided in a separate circular to be despatched to Shareholders in due course.

## 5. FINANCIAL INFORMATION

## 5.1. Use of proceeds

Taking into consideration the Final Settlement Sum of US\$500,000, the estimated net proceeds after deducting the Transfer Tax of US\$130,040.89 pertaining to the Proposed Disposal would be US\$369,959.11 (the "**Net Proceeds**").

The Company intends to use 100% of the Net Proceeds for general working capital requirements. The Group does not have specific plans for the allocation or utilisation of the Net Proceeds for working capital requirements as yet. In view of the ongoing COVID-19 pandemic and the resulting market uncertainty, the Company wishes to take a cautious approach and retain the Net Proceeds as a buffer for any potential working capital needs that may arise in the course of its business operations.

## 5.2. Book value of the Hexindo Participating Interest

Based on the latest unaudited consolidated financial statements of the Group for Q1 FY2022 announced on 12 May 2022, the book value of the Hexindo Participating Interest is S\$2.335 million (US\$1.727 million). The book value of the Hexindo Participating Interest was determined by taking the Consideration sum of US1.857,726.99 less the Transfer Tax of US\$0.13 million. The Consideration sum of US\$1,857,726.99 represents a premium of approximately 7.5% to, and a premium of approximately US\$0.13 million over, the book value of the Hexindo Participating Interest excluding costs to sell.

The book value of the Hexindo Participating Interest can also be ascertained by taking the value of the assets classified as held-for-sale of S\$2.612 million less the liabilities directly associated with assets held-for-sale of S\$2.112 million and adding the Total Debt (or "cash call advanced from a joint venture partner", as disclosed in the audited consolidated financial statements of the Group for FY2021) of S\$1.835 million (US\$1,357,726.99).

The Company's investment in the Lemang Block (by way of the Hexindo Participating Interest) did not necessitate any impairment in FY2019. However, there were impairments of US\$4.012 million (S\$5.579 million) and US\$2.231 million (S\$2.998 million) in FY2020 and FY2021 respectively. In FY2020, an impairment loss of US\$4.012 million (S\$5.579 million) was made to the carrying amount of the Lemang Block under the PSC in the books as it was higher than its recoverable amount as at 31 December 2020. The recoverable amount was determined with reference to the sale transaction of the 90% Participating Interest in the Lemang Block under the PSC by Mandala to Jadestone, which was completed in December 2020. In FY2021, an impairment loss of US\$2.231 million (S\$2.998 million) was recognised based on the net consideration expected from the sale of the Hexindo Participating Interest to Jadestone.

The impairment loss of S\$2.998 million (US\$2.231 million) in FY2021 was derived as follows:

	USD million	SGD million
Consideration of sale	1.858	2.511
Transfer Tax at 7%	-0.130	-0.176
Net consideration less costs to sell	1.728	2.335
Net asset value as at 31 Dec 2021	-3.959	-5.333
Impairment required as at 31 Dec 2021	-2.231	-2.998

If the impairment loss of S\$2.998 million was not recognised in FY2021, a loss of the same value would have been recognised as a loss on disposal at the point of completion of the Proposed Disposal.

### 5.3. NTA value of the Hexindo Participating Interest

Based on the latest announced unaudited consolidated financial statements of the Group as at 31 March 2022, the NTA value of the Hexindo Participating Interest is S\$2.335 million (US\$1.727 million). The Consideration represents a premium of approximately 7.5% to the NTA value of the Hexindo Participating Interest.

# 5.4. Net profit or loss attributable to the Hexindo Participating Interest

Based on the latest announced unaudited consolidated financial statements of the Group for Q1 FY2022, there is no net profit or loss attributable to the Hexindo Participating Interest before taxation.

# 5.5. No net gain or loss on disposal as a result of the recognised unaudited impairment loss

The Proposed Disposal will result in an audited impairment loss (recognised in accordance with SFRS(I) 5 "Non-current Assets Held for Sale and Discontinued Operations" and as disclosed in the audited consolidated financial statements of the Group for FY2021) of approximately S\$2.998 million (US\$2.231 million) to take into account the Proposed Disposal, including: (i) oil and gas properties; (ii) investment in exploration and evaluation assets; and (iii) other receivables, at the lower of its carrying amount and fair value less costs to sell, on the assumption that the Conditions Precedent are satisfied on or before 31 December 2021.

As a result of the impairment loss which has been recognised in the audited consolidated financial statements of the Group for FY2021, the Proposed Disposal will not result in any net gain or loss on disposal when the Proposed Disposal is completed.

### 6. FINANCIAL EFFECTS OF THE PROPOSED DISPOSAL

6.1. The pro forma financial effects of the Proposed Disposal, based on the unaudited consolidated financial statements of the Group as at 31 March 2022, are set out below. The pro forma financial effects are presented for illustration purposes only and do not necessarily reflect the actual results and financial performance and position of the Group after the Proposed Disposal. No representation is made as to the actual financial position and/or results of the Company or the Group after completion of the Proposed Disposal.

### 6.2. NTA

Assuming the Proposed Disposal had been effected on 31 March 2022, the financial effect on the NTA of the Group will be as follows:

	Before the Proposed Disposal	After the Proposed Disposal
Consolidated NTA attributable to the Shareholders of the Company (S\$'000)	1,743	1,743
Number of issued Shares (excluding treasury shares) ('000)	646,867,923	646,867,923
Net tangible assets per Share (Singapore cents)	0.27	0.27

The NTA of the Group after the Proposed Disposal (i) includes the extinguishment of liabilities and net of settlement amount with SPE and (ii) remains the same as before the Proposed Disposal as the financial effects of the Proposed Disposal has already been recognised and disclosed in the audited consolidated financial statements of the Group for FY 2021 by way of the audited impairment loss abovementioned in Section 5.5.

## 6.3. EPS

Assuming the Proposed Disposal had been effected on 1 January 2022 (being the beginning of the most recently announced unaudited condensed interim financial statements of the Group for Q1 FY2022), the financial effect on the EPS of the Group will be as follows:

	Before the Proposed Disposal	After the Proposed Disposal
Net loss attributable to shareholders after tax (S\$'000)	67,000	67,000
Numberof issued Shares (excluding treasury shares) ('000)	646,867,923	646,867,923
Loss per Share (Singapore cents)	0.01	0.01

# 7. RELATIVE FIGURES FOR THE PROPOSED DISPOSAL UNDER CHAPTER 10 OF THE LISTING MANUAL

7.1. The relative figures in relation to the Proposed Disposal are computed on the applicable bases set out in Rule 1006 of the Listing Manual, based on the latest announced unaudited consolidated financial statements of the Group for Q1 FY2022.

Rule 1006	Bases of Calculation	Relative Figure
(a)	Net asset value of the assets to be disposed of, compared with the Group's net liabilities value. This basis is not applicable to an acquisition of assets.	42.8% <sup>(1)</sup>
(b)	The net profit or loss attributable to the assets acquired or disposed of, compared with the Group's net profits.	0% <sup>(2)</sup>
(c)	The aggregate value of the consideration given or received, compared with the Company's market capitalisation based on the total number of issued shares excluding treasury shares.	14.6% <sup>(3)</sup>
(d)	The number of equity securities issued by the Company as consideration for an acquisition, compared with the number of equity securities previously in issue.	Not applicable <sup>(4)</sup>
(e)	The aggregate volume or amount of proved and probable reserves to be disposed of, compared with the aggregate of the Group's proved and probable reserves. This basis is applicable to a disposal of mineral, oil or gas assets by a mineral, oil and gas company, but not to an acquisition of such assets. If the reserves are not directly comparable, the Exchange may permit valuations to be used instead of volume or amount.	Not applicable <sup>(5)</sup>

# Notes:

- (1) The net asset value attributable to the Hexindo Participating Interest is S\$2.335 million and the Group's net liabilities value is S\$5.462 million for Q1 FY2022 respectively. The relative figure computed pursuant to Rule 1006(a) is therefore a negative figure.
- (2) There is no net profit or loss attributable to the Hexindo Participating Interest before taxation and the Group has no net profit or loss for Q1 FY2022 respectively.
- (3) The aggregate value of the Consideration is US\$1,857,726.99 (approximately S\$2.511 million) (comprising the Total Debt plus the Final Settlement Sum).

The Company requested for a voluntary suspension of trading with effect from 9 March 2020 pursuant to Rule 1303(3) of the Listing Manual. The market capitalisation of the Company of S\$17.14 million is computed based on (i) the volume-weighted average price of the Company's Shares of S\$0.0265 per share on 28 February 2020, being the last market day when the Company's shares were traded prior to the suspension of trading; and (ii) the total number of the Company's Shares (excluding treasury shares and subsidiary holdings) of 646,867,923 as at the date of this Circular.

- (4) Rule 1006(d) of the Listing Manual is not applicable to a disposal of assets.
- (5) The Lemang Block is the main oil and gas asset of the Group. The resource volumes carried are discovered (i.e. proven) but have yet to mature to reserves due to a number of contingencies which are being addressed by Jadestone such as the signing of a gas sales agreement in December 2021. Other contingencies include the final investment decision by the Parties, obtaining final approval from the government to sanction gas development in the Lemang Block and whether the local Indonesian government would be exercising its 10% back-in right under the PSC, which would reduce Hexindo's Participating Interest from 10% to 9%. The Independent Qualified Person has, therefore, taken the view that it would be prudent to maintain the resource volumes as contingent resources (at least until the various contingencies have been addressed and/or Jadestone as the operator officially declares certified reserves). Once the contingencies have been finalised and/or determined, the resources identified as "1C" (low estimate contingent resources) in the Independent Qualified Person's Report should mature to "1P" (proved reserves), and the resources identified as "2C" (best estimate contingent resources) in the Independent Qualified Person's Report should mature to "2P" (proved plus probable reserves).

- 7.2. As the absolute relative figure computed pursuant to Rule 1006(a) exceeds 20%, the Proposed Disposal constitutes a "major transaction" under Chapter 10 of the Listing Manual.
- 7.3. Based on the latest announced audited consolidated financial statements of the Group for FY2021, the book value of the Hexindo Participating Interest was approximately S\$2.335 million (US\$1.727 million). The Proposed Disposal is therefore expected to result in a gain on disposal of approximately S\$0.18 million (US\$0.13 million) excluding costs to sell, as previously disclosed in Section 5.2 of this Circular.
- 7.4. As the relative figure computed pursuant to Rule 1006(a) is a negative figure, and the Proposed Disposal constitutes a disposal of an asset by an issuer (where either or both the asset or the issuer has negative net asset value), the operative provision of Practice Note 10.1 of the Listing Manual is paragraph 4.4(c).
- 7.5. With reference to paragraph 4.4(c) of Practice Note 10.1 of the Listing Manual, the Proposed Disposal constitutes a disposal of an asset by an issuer with negative net asset value where: (i) the absolute relative figure computed on the basis of each of Rule 1006(b) and Rule 1006(c) of the Listing Manual does not exceed 20%; and (ii) the Proposed Disposal will result in a gain on disposal of approximately S\$0.18 million (US\$0.13 million) excluding costs to sell, which represents approximately greater than 100% of the consolidated net profits of the Group for Q1 FY2022 of S\$0 for Q1 FY2022.
- 7.6. With reference to paragraph 4.6 of Practice Note 10.1 of the Listing Manual read with Rule 1014, as the absolute relative figure computed on the basis of Rule 1006(a) of the Listing Manual exceeds 20% and the Proposed Disposal will not result in a loss on disposal, the Proposed Disposal does not fall within all the applicable situations in paragraphs 4.3 and 4.4 of Practice Note 10.1 of the Listing Manual, and Rule 1014 shall apply to the Proposed Disposal.
- 7.7. In view of the above, the Proposed Disposal is a "major transaction" and is therefore subject to the approval of the Shareholders in a general meeting pursuant to Rule 1014(2) of the Listing Manual.

# 8. DIRECTORS' AND SUBSTANTIAL SHAREHOLDERS' SHAREHOLDINGS

# 8.1. Directors' interests

As at the Latest Practicable Date, the Directors' interests in Shares as recorded in the Register of Directors' Shareholdings are as follows:

	Direct Interest No. of Shares (%) <sup>(1)</sup>		<b>Deemed Interest</b>		<b>Total Interest</b>	
Directors			No. of Shares	<b>(%)</b> <sup>(1)</sup>	No. of Shares	<b>(%)</b> <sup>(1)</sup>
Low Chai Chong	0	0	6,134,100 <sup>(2)</sup>	0.95	6,134,100	0.95
Colin Peter Moran	1,031,906	0.16	0	0	1,031,906	0.16

#### Notes:

- (1) Based on the Existing Share Capital comprising 646,867,923 Shares.
- (2) Mr. Low Chai Chong is deemed to be interested in the 6,134,100 Shares held by his spouse, Ms. Tam Siew Foong.

## 8.2. Substantial Shareholders' interests

As at the Latest Practicable Date, the interests of Substantial Shareholders in Shares as recorded in the Register of Substantial Shareholders are as follows:

	Direct Inte	rest	Deemed Int	erest	Total Inte	rest
Substantial Shareholders	No. of Shares	<b>(%)</b> <sup>(1)</sup>	No. of Shares	(%) <sup>(1)</sup>	No. of Shares	(%)(1)
Aditya Wisnuwardana Seky Soeryadjaya <sup>(2)</sup>	0	0	116,656,053	18.03	116,656,053	18.03
Edward Seky Soeryadjaya <sup>(3)</sup>	0	0	107,871,400	16.68	107,871,400	16.68
Mohammad Soetrisno Bachir <sup>(3)</sup>	0	0	107,871,400	16.68	107,871,400	16.68
Precious Treasure Global Inc. <sup>(3)</sup>	0	0	107,871,400	16.68	107,871,400	16.68
Redmount Holdings Limited <sup>(4)(5)</sup>	0	0	107,871,400	16.68	107,871,400	16.68
Telecour Limited	107,699,200	16.65	0	0	107,699,200	16.65
Clement Wang Kai(6)	0	0	68,000,000	10.51	68,000,000	10.51
Wing Harvest Limited	68,000,000	10.51	0	0	68,000,000	10.51
Hisao Ishiyama <sup>(7)</sup>	0	0	96,800,000	14.96	96,800,000	14.96
Eneco Investment Pte. Ltd.	96,800,000	14.96	0	0	96,800,000	14.96

#### Notes:

- (1) Based on the Existing Share Capital comprising 646,867,923 Shares.
- (2) Mr. Aditya Wisnuwardana Seky Soeryadjaya has a deemed interest in the 3,505,201 Shares registered in the name of JP Morgan Nominees Private Limited of which 172,200 Shares are held on trust by Redmount Holdings Limited ("Redmount"), 5,451,652 Shares registered in the name of DB Nominees (Singapore) Pte Ltd, and a deemed interest in the 107,699,200 Shares held by Telecour Limited ("Telecour") pursuant to Section 7(4) of the Companies Act, through his position as the sole director and shareholder of Telecour.
- (3) Both Mr. Edward Seky Soeryadjaya ("Mr. Soeryadjaya") and Mr. Mohammad Soetrisno Bachir ("Mr. Bachir") control Precious Treasure Global Inc. ("Precious") in equal proportion of shareholdings. Precious controls 100% of the total issued share capital of Redmount. Pursuant to Section 7(4) of the Companies Act, Mr. Soeryadjaya and Mr. Bachir are deemed interested in the Shares held by Redmount.
- (4) Redmount holds 100% of the total issued share capital of York Hill Group Limited, Luciano Group Limited, Chimsy Holdings Limited, Glenville Group Limited and Benegain Holdings Limited (collectively, the "Redmount Subsidiaries"). An aggregate of 107,699,200 Shares have been transferred from the Redmount Subsidiaries to Telecour, who now holds the Shares in trust for and on behalf of Redmount.
- (5) Redmount, pursuant to a trust deed dated 4 February 2016, has a deemed interest in the 107,699,200 Shares registered in the name of Telecour and 172,200 Shares registered in the name of JP Morgan Nominees Private Limited, that are held in trust for Redmount.
- (6) Mr. Clement Wang Kai is the sole director and sole shareholder of Wing Harvest Limited.
- (7) Eneco Investment Pte. Ltd. is wholly owned by Eneco Investment Inc., which is in turn wholly owned by Mr. Hisao Ishiyama.

## 8.3. Interests of Directors and Substantial Shareholders

Save for their respective shareholdings in the Company (if any), none of the Directors or Substantial Shareholders has any interest, direct or indirect, in the Agreement and the Proposed Disposal.

#### 9. RECOMMENDATION BY THE DIRECTORS

After having considered and reviewed, *inter alia*, the terms, rationale for and benefits of the Agreement and the Proposed Disposal, including the reasons set out in Section 4 of this Circular, the Directors are of the opinion that the Agreement and, in particular, the Proposed Disposal are in the interests of the Company and accordingly recommend that Shareholders vote in favour of the Ordinary Resolution.

Shareholders who may require specific advice should consult his or her stockbroker, bank manager, solicitor, accountant or other professional adviser(s).

#### 10. EXTRAORDINARY GENERAL MEETING

The EGM, notice of which is set out on pages N-1 to N-3 of this Circular, will be held by way of electronic means on 20 June 2022 at 2:00 p.m. for the purpose of considering and, if thought fit, passing with or without modifications, the resolution set out in the Notice of EGM.

#### 11. ACTION TO BE TAKEN BY SHAREHOLDERS

# 11.1. EGM to be convened by way of electronic means

The EGM is being convened, and will be held, by way of electronic means pursuant to the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020. This Circular (together with the Notice of EGM and the Proxy Form) may be accessed at the Company's website at the URL www.enecoenergy.com, and is also available on SGXNET at the URL https://www.sgx.com/securities/company-announcements. A printed copy of this Circular (together with the Notice of EGM and the Proxy Form) will NOT be despatched to Shareholders.

# 11.2. Alternative arrangements relating to attendance at the EGM

Alternative arrangements relating to attendance at the EGM via electronic means (including arrangements by which the meeting can be electronically accessed via live audio-visual webcast or live audio-only stream), submission of questions to the Chairman of the EGM in advance of, or live at, the EGM, addressing of substantial and relevant questions at or prior to the EGM and voting live at the EGM by Shareholders themselves or their duly appointed proxies (other than the Chairman of the EGM) via electronic means or voting by appointing the Chairman of the EGM as proxy at the EGM, are set out in the notes to the Notice of EGM.

# 11.3. Circular, Notice of EGM and Proxy Form

Printed copies of this Circular, the Notice of EGM and the enclosed Proxy Form will not be sent to Shareholders. This Circular together with the Notice of EGM and the enclosed Proxy Form may be accessed at the Company's website at the URL www.enecoenergy.com and are also available on SGXNET at the URL https://www.sgx.com/securities/company-announcements.

#### 11.4. Submission of Questions

### 11.4.1. Submission of Questions in advance of the EGM

Shareholders may submit questions related to the resolution to be tabled for approval at the EGM in advance of the EGM at the URL https://conveneagm.sg/enecoenergy2022egm/ by 2:00 p.m. (Singapore Time) on Sunday, 12 June 2022. The Company will address all substantial and relevant questions (determined by the Company in its sole discretion) received from Shareholders prior to the EGM by publishing its responses to such questions on the Company's website at the URL www.enecoenergy.com and on SGXNET prior to the EGM.

#### 11.4.2. Submission of Questions live at the EGM

Shareholders and, where applicable, appointed proxies may also ask the Chairman of the EGM questions related to the resolutions to be tabled for approval at the EGM, live at the EGM, by submitting questions via the online platform hosting the live audio-visual webcast and the live audio-only stream. Shareholders and, where applicable, appointed proxies who wish to ask the Chairman of the EGM questions, live at the EGM, must pre-register at the URL https://conveneagm.sg/enecoenergy2022egm/ by 2.00 p.m. (Singapore Time) on Thursday, 16 June 2022. Following successful verification, an email with instructions on how to join the EGM will be sent to the Shareholders via email by 12:00 p.m. (Singapore Time) on Saturday, 18 June 2022. The Company will address all substantial and relevant questions (determined by the Company in its sole discretion) received from Shareholders, live at the EGM, during the EGM through the live audio-visual webcast and the live audio-only stream. The Company will publish the minutes of the EGM (including its responses to substantial and relevant questions received from Shareholders which were addressed during the EGM) on the Company's website at the URL www.enecoenergy. com and on SGXNET within one (1) month after the date of the EGM.

### 11.5. **Voting**

Shareholders (whether individual or corporate) who pre-register to observe and/or listen to the EGM proceedings and wish to vote on the resolutions to be tabled for approval at the EGM may:

- (a) (where such Shareholders are individuals) vote live at the EGM via electronic means, or (where such Shareholders are individuals or corporates) appoint proxies (other than the Chairman of the EGM) to vote live at the EGM via electronic means on their behalf; or
- (b) (where such Shareholders are individuals or corporates) appoint the Chairman of the EGM as their proxy to vote on their behalf at the EGM in accordance with the instructions as set out in the relevant Proxy Forms.

## 11.5.1. Voting live at the EGM

Shareholders and, where applicable, appointed proxies who wish to vote live at the EGM must pre-register at the URL https://conveneagm.sg/enecoenergy2022egm/ by 2.00 p.m. (Singapore Time) on Thursday, 16 June 2022. Upon successful authentication, each such member of the Company will receive an email with instructions to access the live audio-visual webcast or the live audio-only stream of the EGM proceedings by 12.00 p.m. (Singapore Time) on Saturday, 18 June 2022.

# 11.5.2. Submission of Proxy Forms

The instrument appointing the Chairman of the EGM as proxy must be submitted to the Company in the following manner:

- (a) if sent by post, be lodged at the office of the Share Registrar, Tricor Barbinder Share Registration Services (A division of Tricor Singapore Pte. Ltd.), at 80 Robinsons Road #11-02, Singapore 068898; or
- (b) if submitted electronically, be submitted via email to sg.is.proxy@sg.tricorglobal.com,

in either case not less than 72 hours before the time appointed for the EGM.

A Shareholder who wishes to submit a Proxy Form must first download (where necessary), complete and sign the Proxy Form, before submitting it by post to the address provided above, or before scanning and sending it by email to the email address provided above. In the alternative, a Shareholder may download, complete and authorise the Proxy Form by way of the affixation of an electronic signature, before sending it by email to the email address provided above.

In appointing the Chairman of the EGM as proxy, a Shareholder must give specific instructions as to voting, or abstentions from voting, in the Proxy Form, failing which the appointment of the Chairman of the EGM as proxy will be treated as invalid.

### 11.5.3. CPF/SRS Investors

## CPF/SRS Investors:

- (a) may vote live at the EGM via electronic means if they are appointed as proxies by their respective CPF agent banks or SRS operators, and should contact their respective CPF agent banks or SRS operators if they have any queries regarding their appointment as proxies; or
- (b) may appoint the Chairman of the EGM as proxy, in which case they should approach their respective CPF agent banks or SRS operators to submit their votes at least seven (7) working days before the date of the EGM.

# 11.6. Depositor

A Depositor shall not be regarded as a Shareholder entitled to appoint the Chairman of the EGM to vote on his behalf at the EGM unless he is shown to have Shares entered against his name in the Depository Register, as certified by CDP, 72 hours before the time appointed for holding the EGM.

# 12. SERVICE AGREEMENT

No person is proposed to be appointed as a director of the Company in connection with the Agreement and/or the Proposed Disposal. Accordingly, no service agreement is proposed to be entered into between the Company and any such person.

# 13. CONSENT

THREE60 Energy (Singapore) Pte. Ltd., the Independent Qualified Person, has given and has not withdrawn its written consent to the issuance of this Circular with the inclusion herein of the Independent Qualified Person's Report as set out in Appendix A of this Circular and all references to its name in the form and context in which they appear in this Circular and to act in such capacity in relation to this Circular.

## 14. DIRECTORS' RESPONSIBILITY STATEMENT

The Directors collectively and individually accept full responsibility for the accuracy of the information given in this Circular and confirm after making all reasonable enquiries, that to the best of their knowledge and belief, this Circular constitutes full and true disclosure of all material facts about the Agreement, the Proposed Disposal, the Company and its subsidiaries, and the Directors are not aware of any facts the omission of which would make any statement in this Circular misleading.

Where information in this Circular has been extracted from published or otherwise publicly available sources or obtained from a named source, the sole responsibility of the Directors has been to ensure that such information has been accurately and correctly extracted from those sources and/or reproduced in this Circular in its proper form and context.

### 15. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents are available for inspection on Mondays to Fridays during normal business hours from 9.00 a.m. to 5.00 p.m. at the registered office of the Company at 300 Tampines Avenue 5, #05-02, Singapore 529653 for a period of three (3) months from the date of this Circular:

- (a) the Constitution of the Company;
- (b) the Agreement; and
- (c) the Independent Qualified Person's Report as set out in Appendix A of this Circular.

Please write in to info@enecoenergy.com prior to making any visits to arrange for a suitable time slot for the inspection.

Yours faithfully, For and on behalf of the Board of Directors

Gwee Chee Kiang
Chief Executive Officer
ENECO ENERGY LIMITED



QUALIFIED PERSON'S REPORT AND VALUATION – LEMANG PSC, INDONESIA

**JANUARY 3, 2022** 

For: Eneco Energy Limited





# Revision and Amendment Register

# Ref: THREE60SUBS/INTER/08-2021/022

DATE	PAGE NUMBER	PROCEDURE SECTION	REVISION DETAILS	REVISION NUMBER
17/09/2021			Draft Compilations	A-D
8/10/2021			Final for mid-year 2021 Assessment	0
3/1/2022			Updated for year-end 2021	1

REV	DATE	DESCRIPTION	ISSUED BY	CHECKED BY	APPROVED BY
Rev 1	3/1/2022	Final	MSR	FR	MSR

The report represents THREE60 Energy's professional judgement and should not be considered a guarantee or prediction of results. THREE60 Energy has made every effort to ensure that the interpretations, conclusions and recommendations presented herein are accurate and reliable in accordance with good industry practice and its own quality management procedures. It should be understood that any evaluation, particularly one involving exploration and potential future petroleum developments, may be subject to significant variations over short periods of time as new information becomes available. THREE60 Energy cannot and does not guarantee the accuracy or correctness of any interpretation made by it of any of the data, documentation and information provided by the Company or others and shall not be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of its officers, agents or employees. THREE60 Energy does not warrant or guarantee, through the Services, this report or otherwise, any geological or commercial outcome.

 $\label{eq:Qualified Person's Report and Valuation - Lemang PSC, Indonesia} Qualified Person's Report and Valuation - Lemang PSC, Indonesia$ 













Our Ref : THREE60SUBS/INTER/08-2021/022

Date : January 3, 2022

To : Eneco Energy Limited, attn: Colin Moran – Executive Director

300 Tampines Avenue 5, #05-02 Tampines Junction,

Singapore, 529653

## SUBJECT: QUALIFIED PERSON'S REPORT AND VALUATION - LEMANG PSC, INDONESIA

Dear Sir,

In response to the Project Proposal ("Proposal") dated August 31, 2021 with Eneco Energy Limited ("Eneco" or the "Company"), THREE60 Energy ("THREE60 Energy") has completed a Qualified Person's Report ("QPR") to provide an independent review of Petroleum Resources and their associated values for the Akatara Gas Development Project (the "Asset"), located within the Lemang Production Sharing Contract ("PSC"), Sumatra, Indonesia.

This report is issued by THREE60 Energy under the appointment by Eneco and is produced as part of the services detailed therein and subject to the terms and conditions of the signed Proposal. This report is addressed to Eneco. The report is only capable of being relied on by the Company and any third parties under and pursuant to (and subject to the terms of) the Proposal.

The Asset that is evaluated in this report with the respective working interest held by Eneco is as presented in **Table 1** and shown in **Figure 1**:

Asset Name	Eneco Working Interest	Development Status	License Expiry Date	Type of Resource
Lemang PSC	10% <sup>1)</sup>	Oil production ceased.  Gas commercialisation pending.	January 18, 2037	Oil Gas and Condensate

#### Note:

1) Eneco's participation in the Asset is via its subsidiary PT. Hexindo Gemilang Jaya ("Hexindo").

Table 1: Eneco Energy Limited's Working Interest in the Lemang PSC and Asset Details

#### **Undertaking and Standard**

This QPR is based on data and information available up to early December 2021 and the effective date for the evaluation reported herein is **December 31**, **2021** (the "**Effective Date**"). The Services have been performed by a THREE60 Energy team of professional petroleum engineers, geoscientists and economists and is based on the data supplied through Eneco, the previous operator (Mandala Energy), and the current operator (Jadestone Energy).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia





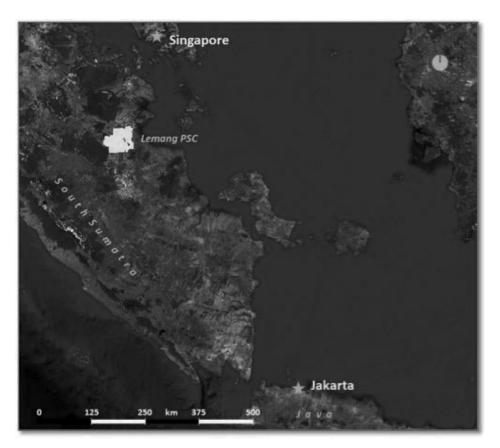


Figure 1: Location of the Indonesian Asset Evaluated in this Report

Standard geological and engineering techniques accepted by the petroleum industry were used in estimating recoverable hydrocarbons. These techniques rely on engineering and geo-scientific interpretation and judgement; hence, the petroleum resources included in this evaluation are estimates only and should not be construed to be exact quantities. It should be recognised that such estimates of hydrocarbon resources may increase or decrease in the future if there are changes to the technical interpretation, economic criteria or regulatory requirements. As far as THREE60 Energy is aware, there are no special factors that would affect the operation of the Asset and which would require additional information for their proper appraisal.

THREE60 Energy has applied the definitions and guidelines set out in the 2018 Petroleum Resources Management System prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) and reviewed and jointly sponsored by the World Petroleum Council (WPC), the American Association of Petroleum Geologists (AAPG), the Society of Petroleum Evaluation Engineers (SPEE), the Society of

Qualified Person's Report and Valuation - Lemang PSC, Indonesia













Exploration Geophysicists (SEG), Society of Petrophysicists and Well Log Analysts (SPWLA) and the European Association of Geoscientists & Engineers (EAGE) – abbreviated to the "SPE PRMS 2018" (REF: 1).

A summary of the SPE PRMS 2018 classes and categories and a glossary of terms and abbreviations are presented in the appendices to this report.

#### Geoscience and Reservoir Engineering

Our approach has been to review the previous operator's (Mandala Energy) technical interpretation of their base case geoscience and engineering data for the field for reasonableness and to review the ranges of uncertainty pertaining to the SPE PRMS 2018 recoverable resource classes of:

**Contingent Resources** - sub-categories of Low ("1C"), Best ("2C") and High ("3C) Contingent Resources.

The current operator, Jadestone Energy, has confirmed that the previous assessments of Reserves that related to the production of oil from the Akatara Field are no longer valid, as the oil field ceased production in December 2019. Further, Jadestone Energy confirmed that there has been no material updates to the geoscience and reservoir engineering assessments since THREE60 Energy's (formally as LEAP Energy) review of the Asset at the end of 2018 (REF: <sup>2</sup>). This QPR provides an update to the previous reporting that has focussed on the revised commercial aspects (costs, prices and economics) within an updated schedule for the pending gas development only (the "Akatara Gas Development"), which is scheduled for production commencement in early 2024.

## **Economic Screening**

THREE60 Energy has updated the Asset's economic inputs and assumptions to confirm reasonableness and has modified their assumptions, where necessary, to determine the economic status of the recoverable resources for the Akatara Gas Development. This included review of the new operator's views on future capital expenditures ("CAPEX"), operating expenses ("OPEX"), abandonment expenses ("ABEX"), hydrocarbons sales prices, and the interpretation of the terms and conditions of the PSC within a discounted cash flow model ("DCF"). Petroleum Resources have been truncated at the Economic Limit, whereby and after which the Asset no longer produces at a profit. This is defined by the OPEX from operating the Asset exceeding the revenue generated by selling the hydrocarbons. **Appendix 3** presents details of the valuation to the Australasian Code for Public Reporting of Technical Assessments and Valuations by the Mineral Asset Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists – abbreviated to the "VALMIN CODE 2015" (REF: <sup>3</sup>).

Qualified Person's Report and Valuation – Lemang PSC, Indonesia



SPE PRMS 2018 : https://www.spe.org/en/industry/petroleum-resources-management-system-2018/

LEAP Energy, 2019. Reserves and Contingent Resources Assessment for the Lemang PSC, for Mandala Energy Lemang Pte. Ltd, February 22, 2019, pp104 (REF: LEAP\_INTER\_09\_2018\_100).

VALMIN CODE 2015 : <u>https://www.valmin.org/docs/VALMIN\_Code\_2015\_final.pdf</u>



#### **Basis of Opinion**

The results presented herein reflect our informed judgement based on accepted standards of professional investigation, but is subject to generally recognised uncertainties associated with the interpretation of petrophysical, geological, geophysical and engineering data. The services have been conducted within our understanding of petroleum legislation, taxation and other regulations that currently apply to the Asset. However, THREE60 Energy is not in a position to attest to the property title, financial interest relationships or encumbrances related to the property. No site visit was performed to the Asset location.

The report represents THREE60 Energy's professional judgement and should not be considered a guarantee or prediction of results. It should be understood that any evaluation, particularly one involving exploration and future petroleum developments, may be subject to significant variations over short periods of time as new information becomes available. THREE60 Energy cannot and does not guarantee the accuracy or correctness of any interpretation made by it of any of the data, documentation and information provided by Eneco or others in accordance with the Proposal. THREE60 Energy does not warrant or guarantee, through the Services, this report or otherwise, any geological or commercial outcome.

In preparing the QPR, THREE60 Energy has used reasonable skill and reasonable care to be expected of a consultant carrying out services of the type set out in the Proposal. THREE60 Energy is responsible for this report and declares that it has taken all reasonable care to ensure that the information contained in the QPR is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its importance.

#### **Summary of Contingent Resources**

A summary of Contingent Resources evaluated by THREE60 Energy for the Lemang PSC is provided in **Table 2**, with an **effective date of December 31, 2021**. Under Contingent Resources, we tabulate:

- i) Gross Attributable to Licence that include all Contractors' share (including operator Jadestone Energy's 90% Working Interest) and the Indonesian Government's share;
- ii) Working Interest Attributable to Eneco's 10% Contractor participation in the PSC. These exclude Jadestone Energy's entitlement but are not net to the Indonesian Government's share; and
- iii) Net Entitlement Attributable to Eneco's 10% Contractor participation in the PSC. These exclude both Jadestone Energy's and the Indonesian Government's entitlements.

Note that no Reserves are attributable to the Lemang PSC as the oil production ceased in December 2019 and the Akatara Gas Development has two key contingencies to be hurdled prior to classification to Reserves:

- 1) final investment decision (FID) to undertake the gas development project; and
- 2) approval of the development by the Joint Venture partners and the Indonesian Government.

THREE60 Energy notes that the current operator announced on December 1, 2021 the signing of a Gas Sales Agreement (GSA) with PT. Perusahaan Listrik Negara (PT. PLN) the National electricity company (<a href="https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/">https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/</a>). Jadestone Energy has also completed a front-end engineering design (FEED) update to progress the gas and associated liquid petroleum gas (LPG) and condensate development for the Akatara Gas Development.

 $\label{eq:Qualified Person's Report and Valuation - Lemang PSC, Indonesia} Qualified Person's Report and Valuation - Lemang PSC, Indonesia$ 













Category	Gross Attributable to Licence <sup>1</sup>	Working Interest Attributable to Issuer <sup>2</sup>	Net Entitlement Attributable to Issuer <sup>3, 4</sup>	Risk Factors <sup>5</sup>	Remarks							
Contingent Resources – Akatara Gas Development <sup>6,7</sup> – <i>Project Maturity Sub-class "Development Pending"</i>												
Gas Contingent Resources (Bscf 8)												
1C	34.2	3.4	3.0	Note PRMS	Planned development of Non							
2C	59.2	5.9	4.7	project	Associated Gas (NAG) resources in UTAF and LTAF reservoirs. Subject							
3C	74.3	7.4	5.7	maturity status	to regulatory approval and FID.							
Condensa	ate Contingent Re	esources (Mstb <sup>9</sup> )	)									
1C	582	58	52	Note PRMS	Associated condensate yields							
2C	1,025	103	77	project	(separated wet gas) from the							
3C	1,472	147	93	maturity status	planned Akatara Gas Development.							
Liquid Pe	troleum Gas Con	tingent Resource	es (MT <sup>10</sup> )									
1C	332.6	33.3	29.6	Note PRMS	Associated liquid petroleum gas							
2C	543.5	54.4	43.0	project	(LPG) extraction from the planned							
3C	662.1	66.2	50.8	maturity status	Akatara Gas Development.							

#### Notes:

- Tabulated volumes are Gross Attributable to Licence and include the other Contractor's share (operator Jadestone Energy's 90% Working Interest) and the Indonesian Government's share of the Contingent Resources.
- Tabulated volumes are Working Interest volumes for Eneco's 10% Contractor participation in the PSC. These exclude Jadestone Energy's volumes but are not net to the Indonesian Government's entitlement to the Contingent Resources.
- Tabulated volumes are Net Entitlement volumes for Eneco's 10% participation in the PSC. These exclude both
  Jadestone Energy's and the Indonesian Government's entitlements to the Contingent Resources. Net Entitlement
  Contingent Resources form the true volumes attributable to Eneco as per the terms and conditions of the PSC for the
  Asset.
- 4. Note that Eneco's working interest may reduce to 9% if the local Indonesian government exercises its 10% back-in right under the PSC at the time of Akatara Gas Development Project sanction. The 2C Net entitlement volumes at 9% working interest are Gas: 4.2 Bscf, Condensate: 69 Mstb, and LPG: 38.9 MT, respectively.
- Our reporting of Contingent Resources is on an unrisked basis. Assessment of risk related to Contingent Resources
  development is made qualitatively by assigning resources to one of the SPE PRMS 2018 Project Maturity Sub-classes.
  THREE60 Energy estimates a Probability of Development (Pd) of 80%.
- 6. The Contingent Resources are classified Project Maturity Sub-class "Development Pending" as there remain contingencies on the final investment decision (FID) to undertake the gas development project, in addition to final approval of the development by the Joint Venture partners and the Indonesian Government.
- 7. 1C: Low; 2C: Best; 3C: High estimated Contingent Resources pertaining to the Akatara Gas Development discussed above.
- 8. Bscf: Billions of standard cubic feet of gas.
- 9. Mstb: Thousands of stock tank barrels of condensate.
- 10. MT: Thousands of metric tonnes of LPG or natural gas liquids.

Table 2: Summary of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021

 $\label{eq:Qualified Person's Report and Valuation - Lemang PSC, Indonesia} Qualified Person's Report and Valuation - Lemang PSC, Indonesia$ 













#### Valuation of Resources

Per the requirements of the VALMIN CODE 2015 standards, THREE60 Energy has assessed the value of Eneco's interest in the Asset using multiple methods (see **Appendix 3** for details).

#### Income-Based Assessment (Discounted Cash Flow)

THREE60 Energy has reviewed and amended the previous operator's assessments of potential production forecasting for the near-term Akatara Gas Development to be conducted within the Asset. Further, THREE60 Energy has placed the range of profiles in a discounted cash flow (DCF) model to extract the Gross, Working Interest and Net Entitlement volumes and values for that Project. The DCF model applies assumptions on timing, prices (gas, LPG, and condensate) and discount factors to determine the economic cut-off of the Contingent Resources and the associated volume and value.

A summary of the values for the Contingent Resources is presented in **Table 3**, with an **effective date of December 31**, **2021**. Net Present Values (NPVs) pertain to Eneco's Net Entitlement within the PSC at different discount rates.

#### Contingent Resources (Akatara Gas Development Project) 1

Contingent Resources		Net Present Va	alue <sup>2</sup> (discount r US\$ N	,	king Interest		
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25	
1C	15.5	15.5 10.9		4.9 2.9		1.4	
2C	23.2	15.8	10.8	7.1	4.5	2.6	
3C	29.0	19.2	12.8	8.4	5.4	3.1	

Contingent Resources		Net Present V	alue <sup>2</sup> (discount US\$ N	•	ing Interest			
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25		
1C	15.5	15.5 10.8 7.4		4.9	2.9	1.4		
2C	22.2	15.2	10.3	6.8	4.3	2.4		
3C	27.5	18.3	12.2	8.0	5.1	2.9		

#### Notes:

- Contingent Resources values relate to Eneco's Net Entitlement within the PSC and are for the planned Gas Development Project. PRMS Project Maturity Sub-class "Development Pending". First gas is planned for Q1 2024. Contingent Resources values are unrisked.
- 2. Eneco's 10% net working interest in the Asset is presented in the upper table. Note, however, the lower table presents the case whereby Eneco's interest reduces to 9%, based on the local Indonesian government exercising its 10% back-in right under the PSC at the time of development sanction.
- 3. US\$ MM: Millions of United States Dollars.

Table 3: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021

 $\label{eq:Qualified Person's Report and Valuation - Lemang PSC, Indonesia} Qualified Person's Report and Valuation - Lemang PSC, Indonesia$ 





The table above presents the full project life-cycle valuation of the Akatara Gas Development Project; however, there are other considerations that can be taken into account on the valuation of the Asset as detailed below.

#### Market-Based Valuation (Comparative Transaction)

The Asset was sold by the previous operator (Mandala Energy) to the new Operator (Jadestone Energy) on June 29, 2020, with the purchase price being disclosed (<a href="https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/">https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/</a>) as:

- a) Initial Cash Payment US\$ 12.0 MM for 90% operated interest;
- b) Incremental Payment US\$ 5.0 MM once the project commences production (2024); and
- c) Contingent Payments of up to US\$ 26.7 MM if several "upsides" are realised (see Appendix 3).

In essence, a reasonable Market-based Comparative Transaction valuation for the Asset at the commencement of production is set at US\$ 17.0 MM for 90% interest, which equates to US\$ 18.9 MM at 100% interest and, thus, US\$ 1.9 MM for Eneco's 10% interest.

## Cost-Based Valuation (Cash Call Positioning)

If historical and current unpaid cash calls are taken into consideration, and the possibility that the Asset is defaulted to the Operator due to non-payment, a reasonable range of valuations would be:

- a) On default US\$ 0.0 MM (zero) as the Operator takes Eneco's defaulted interest;
- b) Full Project Basis (as of end-2021) US\$ 5.8 MM based on full project NPV15 at 9% working interest (US\$ 7.1 MM) that assumes local government entity back-in (10% gross) at production commencement and deduction of current outstanding cash calls for US\$ 1.4 MM.
- c) Full Project Basis (at first production in 2024) undetermined but note that the outstanding cash call position per b) above as of end-2021 would increase significantly up to the point of first production in 2024 to include ~US\$ 1 MM in net additional OPEX and US\$ 9.7 MM as Eneco's 10% share of development CAPEX costs. THREE60 Energy opines that this case would not proceed as the Operator would enact point a) above.

In conclusion, the range in valuation is broad and based on perception of different business scenarios. THREE60 Energy opines that a reasonable fair market value of Eneco's interest in the Asset is **US\$ 1.9 MM** considering the recent, arms-length comparative transaction for the Asset between a willing buyer and a willing seller.

#### **Professional Qualifications**

THREE60 Energy is an independent consultancy specialising in petroleum reservoir assessment and asset evaluation. THREE60 Energy is independent of Eneco Energy Limited and is remunerated by way of a fee that is neither linked to the value of Eneco nor their entitlement to Petroleum Resources volumes. Neither THREE60 Energy nor any of its directors, staff or sub-consultants who contributed to the report has any interest in Eneco, their subsidiaries, or any of their assets or securities.

Qualified Person's Report and Valuation – Lemang PSC, Indonesia













#### Consent for Use and Distribution

THREE60 Energy hereby consents to the publication and use of: (i) the QPR; and (ii) its name, by Eneco, in both electronic and paper form, including Eneco's website, in the form and context in which it appears. As at the date of this letter, THREE60 Energy has not withdrawn this consent.

This report relates specifically and solely to the subject Asset and is conditional upon various assumptions that are described herein. The report, of which this letter forms part, must therefore be read in its entirety. This report may only be used in accordance with the purpose stated in the Proposal, except with permission from THREE60 Energy. The report must not be reproduced or redistributed, in whole or in part, to any other person than the addressees or published, in whole or in part, for any other purpose without the express written consent of THREE60 Energy. The reproduction or publication of any excerpts is not permitted without the express written permission of THREE60 Energy.

#### **Date and Signature**

I, Dr. Mike Reeder, of 1 Leonie Hill Road, #28-02 Singapore 239191 hereby certify that:

- I am an employee of THREE60 Energy Pte. Ltd. (previously known as LEAP Energy) and supervised the preparation of the Qualified Person's Report and Valuation – Lemang PSC, Indonesia. The effective date of this evaluation is **December 31, 2021**.
- THREE60 Energy and I are independent of Eneco Energy Limited, their subsidiaries, their respective directors, senior management, and advisers.
- 3. I attended Royal Holloway, University of London with a Bachelor's of Science (First Class Honours) degree (1994) and Southampton University with a Doctorate of Philosophy in Geology (2000).
- 4. I am Holder of the title Certified Petroleum Geologist (CPG #6310) awarded by the Department of Professional Affairs (DPA) of the American Association of Petroleum Geologists (AAPG). I am an upstanding member of the AAPG (since 1999) and also a member of the SPE (since 2003, chairman of SPE Singapore Section 2012-2018).
- I have 23 years' experience in the Petroleum Industry and over 15 years of experience in valuation of oil and gas assets. I hold the necessary requirements to provide professional services in the capacity of Qualified/Competent Person.

SIGNED:

Dr. Mike Reeder

THREE60 Energy
Director of Commercial Advisory
Certified Petroleum Geologist (DPA AAPG #6310)

Date: January 3, 2022

Qualified Person's Report and Valuation – Lemang PSC, Indonesia Page 10











# **List of Contents**

List	of Co	ntents	11
List	of Fig	jures	13
List	of Ta	bles	14
1	Lem	ang PSC – Akatara Field	15
	1.1	Field Introduction	15
	1.2	Exploration and Appraisal History	15
	1.3	License Terms and Commitments	16
	1.4	Fiscal Terms	17
	1.5	Historical Oil Development	17
	1.6	Future Gas Development	18
	1.7	Available Datasets	19
2	Subs	surface Asset Evaluation	23
	2.1	Geophysics	23
	2.2	Petrophysics	25
	2.3	Fluid Contact Assumptions	26
	2.4	Reservoir Geology	30
	2.5	Reservoir Static Model and Volumetric Assumptions	30
	2.6	UTAF Gas Initially-In-Place Results	33
3	Rese	ervoir Engineering	34
	3.1	Pressure and Temperature	34
	3.2	PVT Properties and Fluid Dataset	34
	3.3	Rock-Fluid Properties (RCAL, SCAL, Compressibility)	37
	3.4	Dynamic Reservoir Behaviour and Modelling	37
	3.5	Akatara Gas Development Project	38
4	Com	mercial and Resources Assessment	44
	4.1	Terms and Conditions of the Lemang PSC	44
	4.2	Price Assumptions	44

 $\label{eq:Qualified Person's Report and Valuation - Lemang PSC, Indonesia} Qualified Person's Report and Valuation - Lemang PSC, Indonesia$ 











	4.3	Project Costs	45
	4.4	Other Commercial Factors	47
	4.5	Commercial Evaluation	47
	4.6	Contingent Resources	47
	4.7	Development and Commercial Status of Contingent Resources	49
	4.8	Valuation of Resources	49
Apper	ndix 1:	Akatara Field Petrophysical Summations	52
Apper	ndix 2:	UTAF Non-Associated Gas Resources Mapping	57
Apper	ndix 3:	Valuation to VALMIN CODE 2015 Standards	80
	Incom	e-Based Assessment (Discounted Cash Flow)	81
	Marke	t-Based Valuation (Comparative Transaction)	82
	Cost-l	Based Valuation (Cash Call Positioning)	83
	Opinio	on on Fair Market Valuation	84
Apper	ndix 4:	Glossary of Terms and Abbreviations	85
Apper	ndix 5:	SPF Petroleum Resources Management System	92

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











# List of Figures

Figure 1: Location of the Indonesian Asset Evaluated in this Report	4
Figure 1-1: Geographical Location of the Akatara Field and the Lemang PSC, Onshore Sumatra, Indonesia	
Figure 1-2: Fiscal Terms and Revenue Split	17
Figure 1-3: Illustration of Akatara Oil Development Limited to Wells Approved in POD (Max. 13 Wells)	18
Figure 1-4: Coverage of Akatara 3D Seismic Survey	
Figure 2-1: Seismic-to-Well Ties (Previous Operator)	
Figure 2-2: Horizon Picking made on the Akatara 3D Seismic (Previous Operator)	
Figure 2-3: Akatara Pressure Data and Interpretation of Possible Free-Water Levels for UTAF and LTAF F1 Gas Reservoirs	
Figure 2-4: Akatara Pressure Data Coloured by Well (Zoomed-in on UTAF Interval)	
Figure 2-5: Cross-plot of Acoustic Impedance Versus Net Porosity*Thickness for the UTAF B-B3 Gas Reservoir	
Figure 3-1: Condensate-Gas Ratio Relationship to Pressure for Condensate Yield	
Figure 3-2: Conceptual Non-Associated Gas Development (MBAL Model)	
Figure 3-3: LPG Plant Concept Process Flow	40
Figure 3-4: MBAL Model Output for NAG - Low Estimate Case (THP at 200 and 500 psig)	41
Figure 3-5: MBAL Model Output for NAG – Best Estimate Case (THP at 200 and 500 psig)	41
Figure 3-6: MBAL Model Output for NAG – High Estimate Case (THP at 200 and 500 psig)	
Figure 3-7: Gas Rate and Cumulative Cases for the NAG Development (Raw Feed Volumes to LPG Inlet) (200	psig)42
Figure 3-8: Condensate Rate and Cumulative Cases for the NAG Development (to be Separated at LPG Inlet) (	200 psig)
Figure 4-1: Fiscal Terms and Revenue Split	
Figure A2-1: UTAF B-B3 Top-structure Map with Fluid Contact Assumptions	57
Figure A2-2: UTAF B-B3 Seismic Attribute Used for Reservoir Delineation	58
Figure A2-3: UTAF B-B3 Low & Mid-Case Net Porosity*Thickness Map	59
Figure A2-4: UTAF B-B3 High-Case Net Porosity*Thickness Map	60
Figure A2-5: UTAF B Low Estimate Hydrocarbon-leg Porosity*Thickness Map	61
Figure A2-6: UTAF B Best Estimate Hydrocarbon-leg Porosity*Thickness Map	62
Figure A2-7: UTAF B High Estimate Hydrocarbon-leg Porosity*Thickness Map	63
Figure A2-8: UTAF B Low Estimate Equivalent Gas Pore Volume (HCPV) Map	64
Figure A2-9: UTAF B Best Estimate Equivalent Gas Pore Volume (HCPV) Map	65
Figure A2-10: UTAF B High Estimate Equivalent Gas Pore Volume (HCPV) Map	66
Figure A2-11: UTAF B4 Depth Structure Map and Resource Assessment Assumptions	
Figure A2-12: UTAF B4 Low Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-13: UTAF B4 Mid Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-14: UTAF B4 High Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-15: UTAF C Depth Structure Map and Resource Assessment Assumptions	
Figure A2-16: UTAF C Low Estimate Equivalent Gas Pore Volume (HCPV) Map	72
Figure A2-17: UTAF C Mid Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-18: UTAF C High Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-19: UTAF E Depth Structure Map and Resource Assessment Assumptions	75
Figure A2-20: UTAF E Seismic Attribute Used for Reservoir Delineation	
Figure A2-21: UTAF E Low Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-22: UTAF E Best Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A2-23: UTAF E High Estimate Equivalent Gas Pore Volume (HCPV) Map	
Figure A3-1: VALMIN CODE 2015 Valuation Approaches	80

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











# **List of Tables**

Table 1: Eneco Energy Limited's Working Interest in the Lemang PSC and Asset Details	3
Table 2: Summary of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021	
Table 3: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021	
Table 1-1: Akatara Field: Well Information Summary	
Table 1-2: Well-log Data Availability	19
Table 1-3: Seismic Data Availability	20
Table 1-4: Akatara Field: Reservoir Engineering Data Availability	21
Table 2-1: Summary of Petrophysical Model of Akatara Field	
Table 2-2: Reservoir Summation Property Run Summary	
Table 2-3: Reservoir Summation Definition	
Table 2-4: Gas Initially-In-Place Volumetrics Computed for Akatara UTAF Reservoirs	33
Table 3-1: Well DST Pressure and Temperature Summary	
Table 3-2: UTAF B Gas Composition Based on DST Samples	35
Table 3-3: Gas Sample PVT Summary	35
Table 3-4: LTAF Associated Gas Composition Based on DST Samples	36
Table 3-5: PVT Laboratory Result for Oil Sampled in Akatara-2, LTAF F3	37
Table 3-6: Scheduling of Akatara Gas Development Project	
Table 3-7: MBAL Outputs for Raw (Feed) NAG Gas and Condensate at LPG Plant Inlet	42
Table 3-8: Remaining Recoverable Gas and Condensate Resources at PSC End	
Table 4-1: Brent Forecast – Average of Published Forecasts from Third-parties for Q3 2021 (US\$ Real)	45
Table 4-2: LPG Price Forecast – Based on Tagging to Brent Price (US\$ Real)	45
Table 4-3: Summary of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021	48
Table 4-4: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021	50
Table A1-1: Reservoir Summation in Well Selong-1	52
Table A1-2: Reservoir Summation in Well Akatara-1	52
Table A1-3: Reservoir Summation in Well Akatara-2	53
Table A1-4: Reservoir Summation in Well Akatara-A3	53
Table A1-5: Reservoir Summation in Well Akatara-A4	54
Table A1-6: Reservoir Summation in Well Akatara-B2	54
Table A1-7: Reservoir Summation in Well Akatara-B3	
Table A1-8: Reservoir Summation in Well Akatara-BWI1	55
Table A1-9: Reservoir Summation in well Akatara-C1	55
Table A1-10: Reservoir Summation in well Akatara-C2ST1	
Table A1-11: Reservoir Summation in well Akatara-D1	
Table A3-1: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021	82

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











# 1 Lemang PSC – Akatara Field

## 1.1 Field Introduction

The Akatara Field is located in the south-eastern part of the Lemang PSC, onshore Sumatra Island, Indonesia. The block, with a current total area of 2,541 km², is located in two provinces; Jambi and Riau. The Akatara Field is wholly located in the Jambi province. **Figure 1-1** shows the geographical location of the Akatara Field and Lemang PSC block on Sumatra Island.

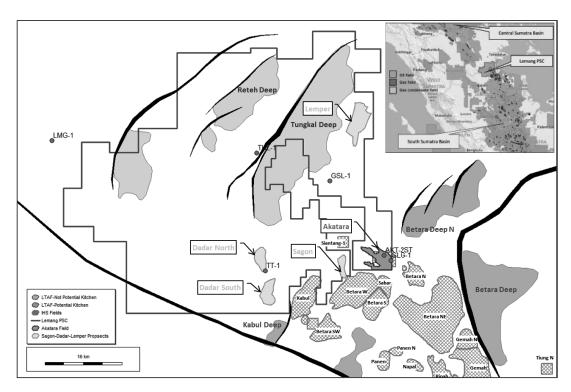


Figure 1-1: Geographical Location of the Akatara Field and the Lemang PSC, Onshore Sumatra, Indonesia

# 1.2 Exploration and Appraisal History

The initial petroleum survey and exploration activities in the region were conducted between 1906 and 1912, following successes in the South Sumatra Basin since as early as 1885. Geologists mapped multiple surface structures that existed within the province and, in 1914, the first discovery was made near the Akatara area at the Kluang Field.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Further exploration activities in Jambi in 1922 discovered the Betung Field, and continued with the Bajubang Field in 1927, followed with the Tempino and Kenali Asam Fields in 1931. Other fields, such as Meruo Senami, Sungai Lilin, Setiti, Sungai Gelam, and Sengeti were discovered shortly thereafter.

The next regional focussed exploration period began when TOTAL conducted geological and geophysical activities in the late 1960s. Approximately 1,800 line-km of 2D seismic data were acquired in the region, followed by drilling of 11 exploration wells, two of which were in the original Lemang Block (Tebing Tinggi-1 in 1971 and Lemang-1 in 1974).

The third period of exploration was pursued by Santa-Fe (Devon Energy) in 1993, resulting in a number of discoveries including the Geragai, Makmur, Lambur, Gemah, Nipah Fields, amongst others. In 2002, Petrochina acquired Santa-Fe and conducted exploitation activities in the previously-discovered fields and discovered new structures, such as the Marmo Field, the Betara Field complex (West, South, Southwest, Northeast) and the Sabar Field.

In mid-2003, in-line with licence obligations, Petrochina relinquished a part of the exploration area, including the present-day Lemang PSC, to the Indonesia Government. The PSC was awarded to PT. Hexindo Gemilang Jaya (a subsidiary of Eneco Energy) through a direct tender procedure on January 18, 2007 and they resumed exploration activities shortly thereafter. The PSC commitments included 2D and 3D seismic acquisition and resulted in the discovery of hydrocarbons in the Akatara Field by 3 exploration wells; namely Selong-1 (2012), Akatara-1 (2013) and Akatara-2 (2013).

Initially, oil and gas were reported from the shallow marine deposited sands of the Upper Talang Akar Formation (UTAF) B zone, at approximately 4,650 feet true vertical depth sub sea-level (ftTVDSS). However, recent recompletion of the Akatara-2 well has resulted in dry gas only from those same UTAF B zones and, hence, the inference of UTAF B oil as described in the original plan of development (POD) appears to be inaccurate and resulted from mechanical issues during the drill stem test (DST). During testing of the Lower Talang Akar Formation (LTAF) zones, oil was successfully recovered from the fluvial channel sands, and these stacked zones became the focus of an oil development, with shallower gas in the UTAF forming a secondary development opportunity.

#### 1.3 License Terms and Commitments

The Lemang PSC was executed by the Indonesian Government (BP Migas), PT. Hexindo Gemilang Jaya and PT. Indelberg Indonesia on January 18, 2007, with the Working Contract area of 4,237.82 km². Mandala Energy acquired the operatorship from PT. Hexindo Gemilang Jaya on May 16, 2017. Subsequently, PT. Hexindo Gemilang Jaya farmed down a further 6% working interest to Mandala Energy on July 2, 2019. Finally, Jadestone Energy acquired the full 90% interests of Mandala Energy on June 29, 2020.

The current Participating Interest holders of the PSC are as follows:

Jadestone Energy : 90%
 PT. Hexindo Gemilang Jaya (subsidiary of Eneco) : 10%

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



## 1.4 Fiscal Terms

The revenue split and calculation of PSC Contractor entitlement according to the PSC terms and are depicted in **Figure 1-2**. Further commercial terms are discussed in **Section 4**. Note that the cost recovery cap is 90% after 10% first tranche petroleum (FTP). Also note that cross cost-recovery (between oil and gas) is allowed in this PSC.

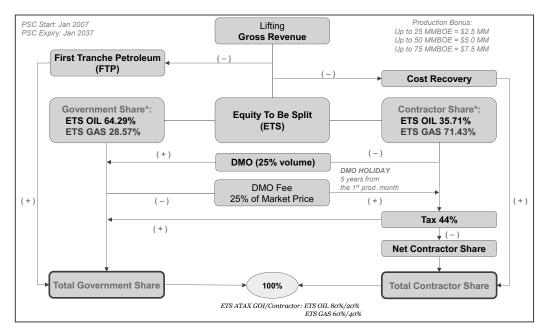


Figure 1-2: Fiscal Terms and Revenue Split

## 1.5 Historical Oil Development

The historical development of oil in the Akatara Field was outlined in the approved Plan of Development (POD) document, which included the workover of three exploration wells (Selong-1, Akatara-1 and Akatara-2) to oil producers (abandoning the tested gas intervals) and drilling of ten new wells from four pads/drill centres; namely, the initially constructed pad A and, B and two (2) new pads, C and D.

A refinement to the POD, with the aim to optimise and accelerate the oil field development, called for the initial completion of the Selong-1 and Akatara-2 wells as oil producers and the future completion of the Akatara-1 well as a gas producer. In addition, the plan also included accelerated development well drilling from pad C and D. **Figure 1-3** shows an illustration of the field development plan with a total of seven drilling pads but only the well count as approved in the oil POD.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



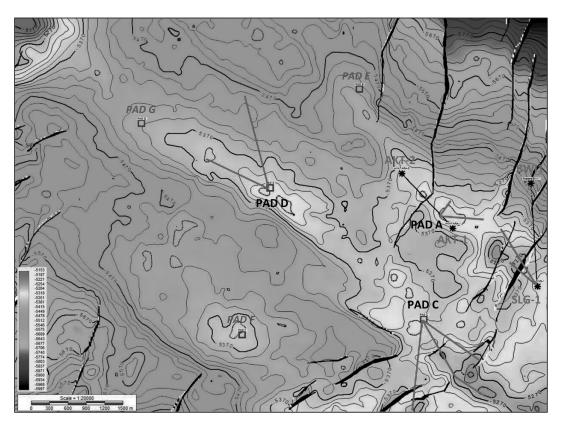


Figure 1-3: Illustration of Akatara Oil Development Limited to Wells Approved in POD (Max. 13 Wells)

In total, two oil development phases were conducted within the field, which essentially covered the scope of development as per the approved POD. This included the construction of the C and D pads, workover of Selong-1 and Akatara-2, Phase 1 drilling of wells Akatara-A3, -A4, -B2, and -B3 in late 2016 to late 2017 and Phase 2 drilling of wells Akatara-C1, -C2ST1 and -D1 in mid-to-late 2018. Further, the Akatara-BWI1 well was drilled in 2017 for pressure maintenance / water disposal. Although a potential third phase of oil development was considered (via pads E, F and G), this was not undertaken and the oil field ceased production in December 2019.

# 1.6 Future Gas Development

Jadestone Energy, as the new operator, has shifted focus to development of gas in Akatara as soon as the necessary approvals are in place. Wells Akatara-1 and -C2ST1 have been reserved for future gas production and Akatara-B3 and -D1 wells are to be converted to gas producers. Jadestone Energy's schedule notes commencement of commercial gas production in Q1 2024. Jadestone Energy announced the signing of the

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Akatara Gas Sales Agreement on December 1, 2021. The buyer of the gas is the National electricity company, PT. Perusahaan Listrik Negara, (PT. PLN). The Final Investment Decision (FID) is expected to be made in early 2022 and capital expenditure for facilities will commence in Q1 2022.

#### 1.7 Available Datasets

# 1.7.1 Well Log Dataset

An overview of basic well information, well logs and other data is given in Table 1-1 and Table 1-2.

NO	LOG TYPF		WELL										UNIT
NO	LOGITPE	SLG-1	SLG-1 AKT-1 AKT-2 AF			AKT-B2	AKT-B3	AKT-A3	AKT-A4	AKT-C1	AKT-C2ST1	AKT-D1	
1	TD (TVDSS)	6432	6174.4	7090	6062	5672.6	5823	5766.4	5700.8	5653.15	5607.2	5670.8	feet
2	TD (MD RKB)	6389	6390	6624.8	8138	6020	6760	5820	6273	6859	7965	5707	feet
3	RKB-MSL	37	37	37	36.03	35.91	35.83	34.06	34.31	34.92	34.9	35.25	feet
4	CALIPER LOG	C	AL	CALX			CALCFM			DCAV	DCAV	DCAV	inch
5	GAMMA RAY LOG	GR	GR	GR			GRCFM			GR	GR	GR	gAPI
6	DEEP RESISTIVTY LOG	RD	RD	M2RX			RPCELM			P40H	P40H	P40H	ohm.m
7	MEDIUM RESISTIVITY LOG	RMLL	M2R1 8	& M2R2					-				ohm.m
8	SHALLOW RESISTIVITY LOG	RS	M2R3, N	/12R6, &			RPCEHM			P34H	P34H	P34H	ohm.m
9	RESISTIVITY IMAGING LOG	RB	ST.H	-			-			-		-	deg
10	SPONTANEOUS POTENTIAL LOG	SPSBDH	SP	DH			-			-		-	mV
11	DENSITY LOG		ZDNC				BDCFM			ROBB	ROBB	ROBB	g/cm3
12	DENSITY CORRECTION LOG		ZCOR				DRHFM			DRHB	DRHB	DRHB	g/cm3
13	NEUTRON LOG		CNCF				NPCKLNFN	1		TNPH	TNPH	TNPH	%
14	PHOTELECTRIC FACTOR LOG		PE				-			PEB	PEB	PEB	b/e
15	P-WAVE		DT24QI		- DTCO - DTCO						μs/ft		
16	INTEGRATED TRAVELTIME (ACCOUSTIC SLOWNESS)	Т	TQI	-		- DTSH - DTSH						μs/ft	
17	MAGNETIC RESONANCE EXPLORER LOG		MREX									PU	
18	BIT SIZE		BIT					Bit!	Size				inch

Table 1-1: Akatara Field: Well Information Summary

Conventional core data were acquired in Akatara-1 whilst sidewall cores were taken in Selong-1, Akatara-2 and -A3.

WELL	LAS	MUDLOG	GEOCHEM	BIOSTRAT PALEON	REPORT	PETROGRAPH RCAL/SCAL	DST	RFT	SWC Description	Conventional Core	Water Analysis	XRD	LWD SERVICE	YEAR	TD (FT MD)
Selong-01	√	<b>√</b>	√	<b>√</b>	√	√	√	√	V	-	√	<b>√</b>	BAKER HUGES	2012	6432
Akatara-01	√	<b>√</b>	√	<b>√</b>	√	√	√	√	V	√	-	<b>√</b>	BAKER HUGES	2013	6350
Akatara-02ST	√	<b>√</b>	√	<b>√</b>	√	√	√	-	-	-	√	-	BAKER HUGES	2013	7090
Akatara-BWI1	√	<b>√</b>	-	-	√	-	-	√	-	-	-	<b>√</b>	BAKER HUGES	2017	8138
Akatara-B2	√	<b>√</b>	-	-	√	-	-	√	-	-	-	<b>√</b>	BAKER HUGES	2017	6020
Akatara-B3	√	<b>√</b>	-	-	√	-	-	√	-	-	√	<b>√</b>	BAKER HUGES	2017	6760
Akatara-A3	√	<b>√</b>	-	-	√	√	-	√	√	-	-	√	BAKER HUGES	2017	5820
Akatara-A4	√	√	-	-	√	-	-	<b>√</b>	-	-	-	√	BAKER HUGES	2017	6273
Akatara-C1	√	√	-	-	√	-	-	<b>√</b>	-	-	-	-	SCHLUMBERGER	2018	6859
Akatara-C2ST1	√	√	-	-	√	-	-	<b>√</b>	-	-	√	-	SCHLUMBERGER	2018	7965
Akatara-D1	V	√	1	-	V	_	-	V		-	-	-	SCHLUMBERGER	2018	5707

Table 1-2: Well-log Data Availability

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Most of the results of routine core analysis and SCAL data including capillary pressure and electrical analysis are on samples from UTAF reservoir. Usable data from LTAF reservoir is only from the sidewall core samples of Akatara-A3.

# 1.7.2 Geophysical Data

Seismic data availability is outlined in Table 1-3.

Seismic Data (Two-Way Time, TWT)							
Type of Dataset	Description						
3D Seismic	97 km² survey acquired in 2013.  Processed in phases between 2013 and 2016 by CGG.  Pre-Stack Time Migration, Full-Stack (as well as partial Near-, Mid-, Far- and Ultra Far-Stacks) were delivered.						
3D Seismic Inversion	Pre-Stack Amplitude versus Offset (AV) inversion runs on the 3D seismic. Output volumes: P-Impedance (P-AI), S-Impedance (S-AI), Compressional to Shear Velocity ratio (VpVs) and Lambda*Rho (LR).						

Table 1-3: Seismic Data Availability

Coverage of the Akatara 3D seismic survey is shown in Figure 1-4.

# 1.7.3 Reservoir Engineering Data

**Table 1-4** shows the reservoir engineering data and analysis available, and used as the foundation to the reservoir management and input into the dynamic simulation studies. This included a suite of modular dynamic test (MDT) and repeat formation test (RFT) pressure data, pressure/volume/temperature (PVT) data and drill stem test (DST) data for each of the wells.

# 1.7.4 Commercial Data

In THREE60 Energy's previous year-end 2018 assessment, Mandala Energy supplied their discounted cash flow (DCF) model for review. The DCF spreadsheet included modelling of the terms and conditions of the PSC, in addition to Mandala Energy's assumptions relating to:

- i) oil (then in production) and gas production forecasts;
- ii) oil, gas, LPG and condensate prices;
- iii) historical and forecasted operating expenses (OPEX) and capital expenditure (CAPEX); and
- iv) anticipated abandonment costs (ABEX).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Akatara 3D seismic data acquired 2013, processed on Nov 2013.
 1st pass (preliminary) result received March 2014.
 The preliminary result interpreted and used for initial development wells planning.
 Full processing result received on June 2016.
 The final result shows significant improvements. Hence used current/latest 3D seismic data for development wells planning optimization.

Figure 1-4: Coverage of Akatara 3D Seismic Survey

Well	Pressure (MDT/RFT)	PVT	DST
Akatara-1	X	x	х
Akatara-2		x	х
Selong-1	х	х	х
Akatara-BWI1	х	х	
Akatara-A3	х	х	х
Akatara-A4	х	х	
Akatara-B2	х	х	х
Akatara-B3	х	х	
Akatara-C1	х	х	х
Akatara-C2ST1	х	х	х
Akatara-D1	х	Х	х

Table 1-4: Akatara Field: Reservoir Engineering Data Availability

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



THREE60 Energy has adapted that same model to include updates to the economic assessment that now considers:

- i) exclusion of oil as production ceased in December 2019;
- ii) re-scheduling of the Akatara Gas Development for production commencement in Q1 2024;
- iii) updated gas price based on a Gas Sales Agreement (GSA) with PT. PLN (<a href="https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/">https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/</a>), in addition to assessments of liquids sales prices for LPG and condensate; and
- iv) revised CAPEX, OPEX and ABEX costs as presented by Jadestone Energy in a third-party FEED study.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











# 2 Subsurface Asset Evaluation

## 2.1 Geophysics

In line with industry practice, the available 3D seismic data has been used to perform time structure mapping of the field followed by time-to-depth conversion. Due to significant processing efforts, the 3D seismic dataset across the Akatara Field appears to be of good quality and with good reflector continuity. Nevertheless, the frequency content is relatively low, around 20 Hz at reservoir level. Considering this frequency spectrum and the typical velocity at reservoir level (around 10,000 to 10,500 ft/sec based on sonic logs and checkshot), the tuning thickness ( $1/4^{th}$  wavelet) is around 100 ft at best, whilst sands thinner than ca. 50 ft are not expected to give any meaningful amplitude response. Given that most of the individual sands in Akatara are around 10-30 ft thickness, seismic amplitudes are therefore not expected to yield robust sand mapping for individual reservoirs but could possibly indicate sand trends for larger stratigraphic packages (e.g., UTAF B-B4 package, LTAF F1-F3 package).

Using available acoustic logs and checkshots, the previous operator generated synthetic seismic traces for all of the available wells. Given the limitations of the seismic data itself, seismic-to-well ties appear remarkably good with correlation coefficient (R²) reportedly between 0.7 and 0.8 (**Figure 2-1**). This means there is a robust basis for seismic structure mapping: events mapped from the 3D seismic can confidently be related to markers picked in the wells.

A total of 7 seismic horizons have been picked on the Akatara 3D seismic data. Based on the displays and data provided, the previous operator's interpretations appear reasonable and give good seismic structure control, at least within the main non-associated gas intervals of UTAF B and the oil zones within the LTAF F. Significant heterogeneity indicative of complex stacking of channel bodies is suggested by the seismic response deeper down in the LTAF (LTAF G and LTAF H units).

No less than 102 faults, mostly NE-SW trending normal faults, were picked on the Akatara 3D seismic. The fault interpretation also does not look unreasonable. Most of the faulting is towards the East, Southeast and Southwest of the field, the central part of the block (pad D and pad F areas) appears relatively unfaulted (**Figure 2-2**).

Recognising the architecture complexity and variability of the UTAF and LTAF reservoirs, the previous operator relied heavily on seismic attributes to delineate sand trends in the field. In line with industry best practice, they made use of conditioned CDP-gather data from the 3D seismic over Akatara Field to perform a pre-stack seismic inversion. Outputs from the inversion include P-Impedance, S-Impedance, Vp/Vs ratio and Lambda\*Rho (LR).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



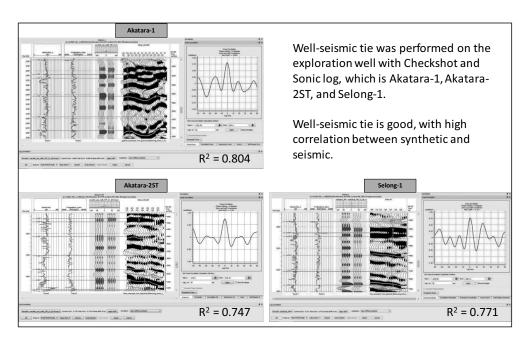


Figure 2-1: Seismic-to-Well Ties (Previous Operator)

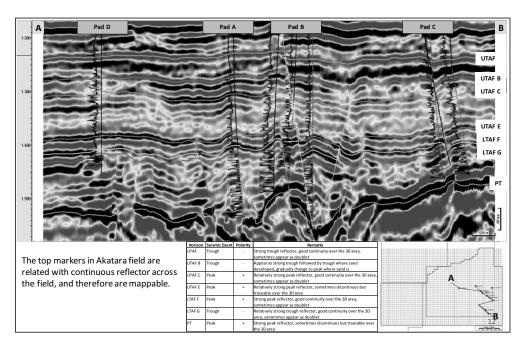


Figure 2-2: Horizon Picking made on the Akatara 3D Seismic (Previous Operator)

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Mandala Energy applied an "average velocity field" to depth convert the TWT seismic interpretations made in Akatara Field. This "average velocity field" appears to be a simple polynomial trend of increasing velocity with depth, fitted to the time-depth pairs at the various well markers (which in turn are derived from the seismic-to-well ties). Based on the available data, the overburden velocity appears relatively uniform and the wells give no indication of significant lateral velocity variations. Based on this observation, the use of a single function time-to-depth conversion method appears reasonable and robust and has been adapted for our assessment.

Overall, the geophysical interpretation work for Akatara Field appears to conform to industry standards and mapping results may be deemed acceptable as a basis for reservoir static modelling and quantification of inplace resources.

# 2.2 Petrophysics

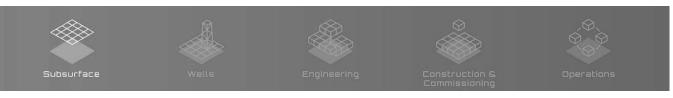
A comprehensive petrophysical dataset in line with modern industry standards was acquired by previous operators for the wells. A petrophysical evaluation of key wells was performed including net-sand and net-reservoir flagging, computation of porosity, logs and log derived water saturation. **Table 2-1** below shows a summary of petrophysical model and selected parameters used in our evaluation of the Akatara Field.

Log-evaluated Parameter	Model/value	Remarks
Lithology	Sand-Shale using Linear GR index and Density-Neutron	
Porosity	Density – hydrocarbon corrected	Calculated from histogram analysis. Porosity estimation using zonal density-neutron log response
Water Saturation	Archie with a=1; m=1.8, n=1.8	Evaluation considers a range in formation water salinity between 9-19 kppm (LTAF) and 13-27 kppm (UTAF)

Table 2-1: Summary of Petrophysical Model of Akatara Field

Available formation-water salinity data indicates a range in possible salinity. In the LTAF, water samples and Pickett plot suggest salinity in the range of 8 thousands parts per million (kppm) to 18 kppm whilst in the UTAF formation water appears slightly more saline, in the range of 11 to 27 kppm. In reflection of this, water-saturation logs have been computed for a salinity range in the LTAF of 9 kppm low, 13 kppm base, 19 kppm high and a slightly higher salinity range in UTAF of 13/19/27 kppm for low/base/high. Petrophysical sums and averages have been computed per reservoir zone as tabulated in **Appendix 1**. The cut-offs used for the reservoir summation of the five (5) wells are shown below in **Table 2-2** and **Table 2-3**.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



PROPERTIES	CUT-OFF	NET SAND	NET RES	NET PAY
Vsh	0.55	Х	Х	Х
Phit	0.10		Х	Х
Swt	0.80			Х

Table 2-2: Reservoir Summation Property Run Summary

GROSS : Thickness from Top to Bottom (m)

NET : Thickness after Vsh and Phit Cut Off

NTG : Net Reservoir/Gross (m)

PHIT\_AVG : Average Total Porosity in Net Reservoir Zone (v/v)

SW : Average Water Saturation in Net Pay

Table 2-3: Reservoir Summation Definition

# 2.3 Fluid Contact Assumptions

Determination of the range in possible fluid contacts for input into in-place volumetric assessment is based on integrated interpretation of RFT pressure data and log and sample evidence of hydrocarbon or formation water occurrence. Interpretation of pressure gradients is completed in consideration of available PVT and formation-water salinity data (9 to 12 kppm formation water at 22 °F yields a gradient of around 0.419 psi/ft). Besides RFT pressures, P\* from DST data in Akatara-1 and -2 were also utilised in the analysis.

**Figure 2-3** shows an overview of the RFT pressure data coloured by lithology and fluid fill interpreted from wireline logs at the sample location. A brief discussion of key observations is given below:

# 2.3.1 UTAF B-B3

Pressure points in the main UTAF B-B3 gas sand line up on a gas gradient of around 0.05 to 0.08 psi/ft. There appears very good alignment between the Selong-1 and Akatara-1 points, despite those two penetrations being on different sides of a fault and also with Akatara-2 pressure interpreted from DST (P\*). The more recently acquired UTAF B pressure points in Akatara-BWI1, -A4, -B2 and -B3 also line up on a similar gas gradient but at slightly lower pressure. Whilst pressures acquired in Akatara-C2ST1 and -D1 plot yet again at slightly lower pressure. Using a gas gradient of 0.06 psi/ft, the pressure separation between the Selong-1/Akatara-1/Akatara-2, Akatara-BWI1/Akatara-A4/Akatara-B2/Akatara-B3 and Akatara-C2ST1/Akatara-D1 gradients is around +/-5 psi.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



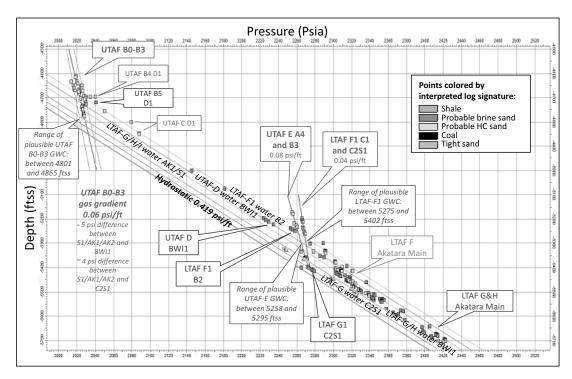
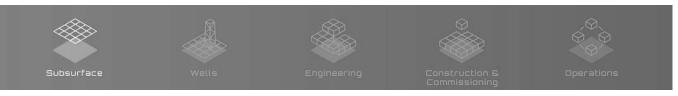


Figure 2-3: Akatara Pressure Data and Interpretation of Possible Free-Water Levels for UTAF and LTAF F1 Gas Reservoirs

We are not exactly sure what is the cause of these slight separations in pressure but find it impossible to assign them to geologically meaningful compartments. For example (refer to **Figure 2-4**), Akatara-1 lines up on the same gradient as Selong-1 whilst the Akatara-A and -B wells, at lower pressure, are in between Akatara-1 and Selong-1. Similarly, Akatara-C2ST1 and -D1 which plot on the least elevated pressure gradient (i.e., least pressure for a given depth), have the Akatara-C1 well (on the most elevated pressure-gradient i.e., highest pressure for a given depth) in between.

The previous operator interpreted the Akatara-C2ST1 well as potentially in a separate pool with its own pressure and Gas-Down-To (GDT). For our Low Estimate Case assumption of contacts we adopt this view. However, for reasons mentioned above, we rather attribute those observed subtle differences in pressure to the limits of accuracy of the pressure gauges deployed in acquiring the data and we take the view that most likely, the main UTAF B-B3 sands are in a single compartment that is pressure connected over geologic time. There is no water leg penetration to date for UTAF B and, unfortunately, it appears that the nearest observed water leg to UTAF B namely UTAF D in Akatara-BWI1 has a pressure gradient that crosses *above* the lowest known gas in UTAF B, indicating that UTAF D water leg cannot be in communication with UTAF B gas.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



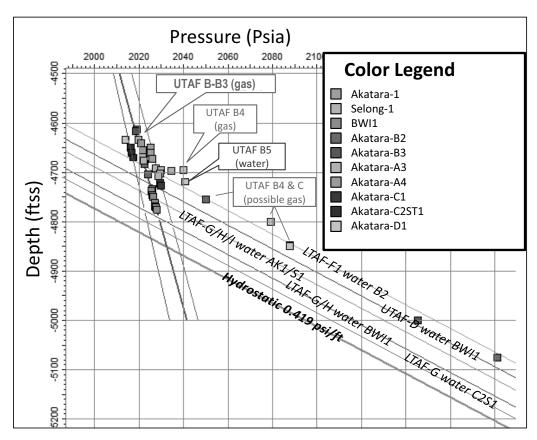


Figure 2-4: Akatara Pressure Data Coloured by Well (Zoomed-in on UTAF Interval)

Therefore, THREE60 Energy uses the intersection of the anticipated hydrostatic line (0.419 psi/ft at 0 overpressure) with the average of the Akatara-1/Selong-1 and Akatara-BWI1 gas gradients to define a possible (High Estimate Case) limit of the gas in UTAF B-B3. That is, we define the High Estimate Case pGWC at 4,865 ftTVDSS. We use the GDT in as the lowest limit of "proven gas" (Low Estimate Case) for UTAF B-B3. Lower limit of Best Estimate Case gas is then taken halfway the GDT and pGWC. When those contacts are plotted on the UTAF B structure maps (see maps in **Appendix 2**), it is clear that gas fill is below structure spill. It is therefore believed there is some element of stratigraphic trapping in the UTAF B-B3, i.e., to the far west of the block (where seismic amplitudes dim) it is anticipated there is an eventual sand pinchout.

To allow for a comparison with legacy interpretations of fluid type and contact assessment of the UTAF B-B3 (e.g., those presented in the Akatara Field POD), it is necessary to comment on the drilling and flow-test results of Akatara-2. Initial testing of Akatara-2 during the exploration stage reportedly recovered oil from parts of the UTAF B (DST3) and the Akatara Field POD consequently interpreted parts of UTAF B as oil reservoirs. However, recompletion of UTAF B in Akatara-2 during the development stage has failed to recover any more

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



oil and instead flowed dry gas only. The previous operator believed that the oil recovered from Akatara-2 during the pre-POD DST3 may actually have originated from the deeper LTAF via flow across a leaking packer. Moreover, additional drilling results (especially Akatara-BWI1 penetrating UTAF B-B3 in a downdip position) have not shown any evidence of oil in the UTAF. Therefore, our assessment concludes that the UTAF B-B3 reservoirs are Non-Associated Gas (NAG) only.

# 2.3.2 UTAF B4 and UTAF C

Pressure data from these reservoirs (Figure 2-3 and Figure 2-4) show these are not in vertical communication, neither with each other nor with the main UTAF B-B3 gas sands. Whilst gas presence in UTAF B4 is proven by the Akatara-D1 flow test, pressure points are too scattered to define gas gradients. As far as contact definition, we therefore assessed the UTAF B4 and UTAF C reservoirs as individual 4-way dip closures (refer to **Appendix 2**).

#### 2.3.3 UTAF E

The UTAF E gas points in wells Akatara-A4 and -B3 line up on a gas gradient of around 0.076 psi/ft. Like for the UTAF B, there are no pressure points in the UTAF E water leg. Therefore, we have used the intersection of the UTAF D aquifer pressure line (0.419 psi/ft at 46 overpressure) with the UTAF E gas gradient to compute a High Estimate Case GWC at 5,295 ftTVDSS. GDT in Akatara-A4 (5,239 ftTVDSS) is considered the lowest limit of Low Estimate Case ("proven gas") for UTAF E. Lower limit of Best Estimate Case gas is then taken halfway the GDT and pGWC.

# 2.3.4 LTAF F and LTAF G

LTAF F1 reservoir gas points (from wells Akatara-C1 and -C2ST1) line up on a gradient of 0.04 psi/ft (Figure 2-3). Considering the range of observed water gradients in nearby reservoirs (LTAF F1 in Akatara-B3, LTAF G1 in Akatara-C2ST1) the possible range in pFWL for LTAF F1 is between 5,275 and 5,402 ftTVDSS. Similar to the UTAF gas reservoirs, we have taken the deepest pressure-derived pFWL (5,402 ft TVDSS) as a High Estimate Case GWC, GDT as the lowest limit of Low Estimate Case ("proven gas") and halfway method as the Lower limit of Best Estimate Case gas.

Unfortunately, pressure points taken in deeper oil and gas reservoirs of LTAF appear scattered and interpretation of fluid contacts appears far from straightforward. Mandala Energy had conducted a thorough review of possible fluid contacts across the different stratigraphic and fault compartments of the LTAF F3 and LTAF G in Akatara, integrating pressure interpretation with pFWL assessment through matching of water-saturation logs with a saturation-height function (SHF). Their interpretation appears not unreasonable albeit it is noted that the SHF used in log matching takes the form of a Leverett-J (with porosity and permeability as input). Given the uncertainty in porosity-permeability relationship in LTAF, SHF-to-Sw log matching will inevitably carry uncertainty.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



# 2.4 Reservoir Geology

A brief description of the key geological aspects of each of the key reservoirs in the Akatara Field is as follows, stratigraphically from bottom to top:

- The Upper Talang Akar Formation (UTAF) consists of sandstones intercalated with siltstones and shales with relatively good lateral reservoir continuity. The depositional environment is interpreted as shallow to marginal marine depositional environment (estuarine channels/bars, tidal flat sediments, occasional shoreface deposits). Regional flooding shales separate the UTAF into a series of stacked shoaling-up successions called UTAF B to -B6, UTAF C, UTAF D and UTAF E. For the UTAF B to B3 interval, seismic attribute studies performed by the previous operator suggest a NNE-SSW orientation of the shoreline with the best reservoir development on the East side of the field (pads A, B and C) and a risk of deteriorating reservoir towards the West (pad D area). These inferences are corroborated by drilling results to date.
- The Lower Talang Akar Formation (LTAF) consists of sandstones interbedded with siltstones and shales and occasional coal layers. Lateral variability is higher than in the UTAF. Log character, core interpretation (Akatara-1 Core #3 & #4) and reflector architecture seen on seismic suggest stacking of channel-levee systems in a lower coastal plain depositional environment. Regional flooding shales and coal layers separate the LTAF into the LTAF F1 to F3, LTAF G, LTAF H and LTAF I. Indications from seismic attribute studies performed by Mandala Energy are that the dominant channel orientation may be from NNW to SSE.

#### 2.5 Reservoir Static Model and Volumetric Assumptions

The previous operator built static reservoir models for the purpose of resource assessment for the Akatara Field covering virtually all of the UTAF and LTAF reservoirs with discovered hydrocarbons. The models have been used to provide input into dynamic simulation of sectors of the field and to aid in development well planning.

THREE60 Energy observed that the static modelling methodology and workflows deployed are in line with latest industry standards. Structure modelling is completed with the latest available seismic and well data. Geocellular layering is fine enough to capture relevant reservoir detail. In the UTAF reservoirs, especially the UTAF B which is believed to be a stack of shallow-marine sands with lateral facies gradations following jigsaw geometry, reservoirs are modelled as sheet-sands but with varying thickness away from wells guided by seismic inversion results (using extracted Acoustic Impedance attribute maps). In the deeper UTAF E and LTAF reservoirs, which comprise a lower coastal plain setting with labyrinth reservoir architecture, channel-levee objects are populated stochastically anchored to wells and guided away from wells by seismic attribute-estimated channel-sand probability and channel-orientation.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



As far as verifying the resource mapping and in-place hydrocarbon estimates, THREE60 Energy have concentrated on the UTAF interval where the bulk of the gas resources are located. The LTAF oil reservoirs were excluded as production ceased in December 2019.

Paragraphs below describe in our process of in-place volumes verification: the detailed assessment of the UTAF gas reservoirs and the more cursory verification for the LTAF oil and associated gas reservoirs.

# 2.5.1 UTAF Petroleum Initially-In-Place Verification

Our verification of in-place volumes for UTAF gas reservoirs involved the following steps:

- 1. Review wells and structure. Determine trap type and define resource polygons where needed. In the case of the UTAF B-B3 where the structure does not close below the lowest known gas, resource polygons were defined on the basis of seismic amplitude maps (Acoustic Impedance) which suggest a thinning and eventual pinchout of the reservoir towards the far west of the field. Similarly, seismic amplitudes (Lambda\*Rho) were used to define a tentative sand-outline polygon for the UTAF E around the Akatara Central and West portion as again the structure does not close.
- 2. Review pressure and well log data, delineate range in contacts. Inference of fluid contacts from pressure and log data has been described in Section 2.3.
- Generate a simple 3D structure framework model. The framework model defines gross reservoir distribution and in combination with the fluid contacts, GRV. Our framework modelling used depthstructure maps and welltops from the previous operator, which were considered reasonable.
- 4. Generate Net-Porosity\*Thickness maps (interpolate well sums per zone). Net reservoir thickness was computed from the well logs using the net-reservoir flagging as described in Section 2.2. Net-reservoir Porosity was also computed from the well logs. Net-reservoir Porosity\*thickness values per reservoir zone where then interpolated in between the wells. Where warranted by the data, the interpolation of Net-Porosity\*Thickness was guided by seismic attributes. In the case of the main UTAF B-B3 gas sand, interpolation was guided by an Acoustic Impedance (AI) seismic attribute (Figure 2-5). This approach is similar to Mandala Energy's use of AI to constrain their static model. In the case of UTAF E, porosity\*thickness mapping was also guided by an inverted seismic attribute (Lambda\*Rho).
- 5. Generate Net-Pay Saturation maps (interpolate well avg per zone). Maps of Water Saturation (Sw) were generated via interpolation of pore volume weighed zone-average hydrocarbon leg Sw, computed from the well logs in each well with evaluated petrophysics. Low- Mid and High estimates reflect the range in formation-water salinity discussed in Section 2.2. Where supported by the data (i.e., evident from cross-plots of zone-average data), a negative relationship between porosity and Sw was used in the creation of water saturation maps.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



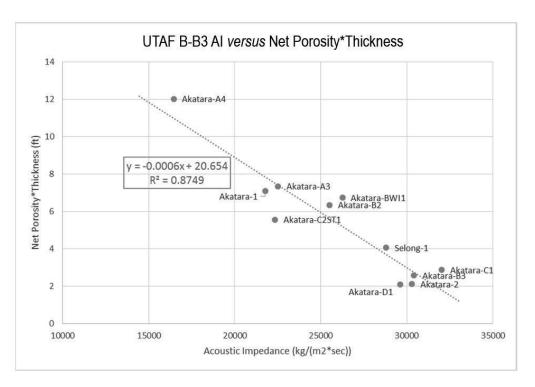


Figure 2-5: Cross-plot of Acoustic Impedance Versus Net Porosity\*Thickness for the UTAF B-B3 Gas Reservoir

- 6. Compute Low, Mid and High-case volumetric. Volumetric was computed using the structure framework model and the property mapping done within it. Our range in volumetric cases reflect uncertainty in fluid contacts as described in **Section 2.3** and above and also the uncertainty in reservoir property (specifically Sw). Generally:
  - a. Low Estimate Case = Lowest Known Gas (LKG) + pessimistic Sw;
  - b. Best Estimate Case = halfway contact + mid-case Sw; and
  - c. High Estimate Case = pFWL + optimistic Sw.
- 7. Fluid properties were based on assessment of available PVT data. UTAF B and UTAF C gas expansion factor was taken as 1.48 rbl/Mscf whilst UTAF E FVF is assumed to be 1.25 rbl/Mscf.
- 8. Generate net Hydrocarbon-leg PoreVolume (porosity\*thickness over the gas leg) and HCPV (equivalent gas column) maps and review/QC against well data. Volume-height maps are automatically generated from the volumetric results to provide the required QC. We have ensured that the high end of the range in HCPV from our maps did not dramatically exceed or fall short of the highest HCPV seen in wells (computed from logs).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



A complete set of structure and property maps that illustrate our verification of UTAF in-place hydrocarbon volumes is included in **Appendix 2**. Volumetric results are presented and **Section 2.6** below.

# 2.6 UTAF Gas Initially-In-Place Results

Gas has been encountered in the UTAF as non-associated gas, as well as the deeper LTAF F1 reservoir where a gas cap overlies the (depleted) oil leg. Our estimates of discovered Gas Initially-In-Place (GIIP) for UTAF (NAG) and LTAF F1 (gas-cap GIIP) reservoirs are tabulated in **Table 2-4**. Note that gas quantities reported in this table are Gross i.e., 100% within PSC block area and inclusive of non-hydrocarbon impurities.

Reservoir	Comportment	Free GIIP (Bscf)						
Reservoir	Compartment	Low	Best	High				
UTAF B-B3	Seismic bright	37.3	61.7	84.2				
UTAF B-B3	Seismic dim	5.6	15.1	31.4				
UTAF B4	All	1.8	2.6	3.0				
UTAF C	All	1.2	2.1	5.3				
	Central	2.1	3.6	4.5				
UTAF E	West	0.0	0.6	1.8				
	Akatara-D1	0.0	0.8	1.0				
LTAF F1	Akatara-C1 & -C2ST1 (gas cap)	8.1	14.6	15.4				
	TOTAL	56.1	101.1	146.6				

Table 2-4: Gas Initially-In-Place Volumetrics Computed for Akatara UTAF Reservoirs

Stock Tank Oil Initially-In-Place (STOIIP) volumes for the LTAF have been excluded from this updated QPR, as there will be no further targeting of oil production from the Akatara Field. A small amount of associated gas (AG) is noted with the LTAF F3 reservoir – however, these have also been excluded from the PIIP assessments.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



# 3 Reservoir Engineering

Paragraphs below describe the key reservoir engineering data and assumptions made in the resource assessment of the Akatara Field.

## 3.1 Pressure and Temperature

A summary of available pressure and temperature data for the Akatara Field, including UTAF B gas and LTAF oil reservoirs, is given in **Table 3-1**.

Description	Akatara-1 Directional		Akatara-2 Side Track			ng-1 tical	Akatara-1	Akatara-C2ST1		Akata	Akatara-B3	
DST Number	#4 UTAF B1	#3 LTAF F3	#4 UTAF B4	#5 UTAF B1	#2 LTAF F1	#3 UTAF B1	UTAF B-B3	UTAF B- B3	LTAF F1	UTAF B & B4	UTAF C	LTAF F3
Top Interval Zone ft	4,693	6,218	5,403	5,320	5,375	4,735	4,678	6,454	7,370	4,728	4,879	6,267
Bottom Interval Zone ft	4,708	6,233	5,412	5,330	5,385	4,751	4,722	6,494	7,430	4,736	4,881	6,273
Gauge Datum ft	4,543	6,083	5,270	5,188	5,360	4,405	4,646	7,516	7,516	4,557	4,614	6,257
Reservoir Depth ft	4,701	6,226	5,408	5,325	5,380	4,743	4,700	6,474	7,400	4,732	4,880	6,270
Gauge Datum ftSS	4,500	5,305	4,597	4,527	4,957	4,352	4,643	5,323	5,323	4,522	4,579	5,345
Reservoir Depth ftSS	4,659	5,435	4,715	4,644	5,337	4,700	4,697	4,693	5,284	4,697	4,845	5,369
Temp gradient °F/ft	0.018	0.030	0.022	0.021	0.020	0.030	0.043	0.047	0.047	0.022	0.022	0.025
Pressure Gradient psi/ft	0.097	0.330	0.097	0.097	0.330	0.097	0.073	0.052	0.083	0.059	0.059	0.081
Max Temp °F	215	247	225	215	240	225	208	222	249	228	239	249
Pi/P* psi	2,014	2,277	2,021	2,015	2,140	2,000	2,019	2,633	2,285	2,172	2,192	2,274
Est Res Temp °F	218	251	228	217	248	237	210	192	247	232	245	250
Est Res Press psi	2,209	2,320	2,032	2,026	2,266	2,034	2,023	2,004	2,246	2,183	2,207	2,276
Est Res Press psia	2,044	2,334	2,047	2,041	2,280	2,048	2,038	2,018	2,260	2,197	2,222	2,291

Table 3-1: Well DST Pressure and Temperature Summary

# 3.2 PVT Properties and Fluid Dataset

UTAF B gas sample database is summarised in **Table 3-2**; reported composition is also listed. All samples are separator (surface) samples from DST except for two (2) bottomhole samples in Akatara-C2ST1 which were taken from MDT. The DST samples later were recombined using surface measured GOR in lab. All samples were found to contain low amount of  $CO_2$  (~2.7%) and  $N_2$  (~2%).  $H_2S$  is reported to be nil (0).

Gas samples were reviewed and analysed using PETEX PVTP™ software. A straight line in Hoffman-Standing plot indicates that the fluid samples are in equilibrium.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



V/eii Name		\$ELO	NG-1			AKATARA-1		AKATARA-2						AKATAF	%-C2 \$T1
Test		D\$1	T#2		D\$T#4	Re-perfora	Re-perforated zone#2		p zone#2	Re-Comp zone#3		Re-Comp zone#4		MDT	
Perforation interval		4735"-47	751" MD		4693'47'88' MD	46784	728" MD	5402"-5	411" MD	536 1"-53	70° MD	53 201-5	330. MD	6454'6494' MD	
Formation	UTAF B UTAF B UTAF B UTAF (sample #1) (sample #2) (sample #3) (sample		UTAFB (sample #4)	UTAF B (sample #1)	UTAF B (sample #1)	UTAF B (sample #2)	UTAF B (sample #1)	UTAF B (sample #2)	UTAFB3 (sample #1)	UTAF B3 (sample #2)	UTAFB4 (sample #1)	UTAF B4 (sample #2)	UTAFB (sample #1)	UTAF B (sample #2)	
Component	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %
H <sub>2</sub> S Hy drogen Sulphide	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CO-Carbon Dlox ide	2.766	2.765	2.786	2.766	2.730	2.731	2.706	2.669	2.649	2.625	2.524	2.675	2.658	2.575	2.735
N <sub>2</sub> Nitrogen	1.840	1.826	1.802	1.814	1.900	1.830	1.831	1.956	2.272	2.388	2.344	2.138	2.510	1.561	1.707
C1 Methane	70.251	70.814	69.809	69.923	70.420	69.338	69.142	67.883	67.445	67.230	67.212	67.630	67.320	66.247	65.500
C <sub>2</sub> Ethane	10.043	9.851	9.946	9.908	9.730	9.778	9.833	9.592	9.555	9.610	9.626	9.487	9.485	9.679	9.746
C <sub>2</sub> Propane	9.867	9.622	9.869	9.828	9.570	10.008	9.961	9.991	9.905	9.980	9.949	10.038	9.995	10.559	10.810
IC <sub>4</sub> I-Butane	1.690	1.644	1.741	1.735	1.710	1.838	1.851	1.945	1.940	1.934	1.931	1.958	1.959	2.107	2.169
nC4 n-Butane	2.218	2.160	2.340	2.331	2.320	2.514	2.564	2.712	2.718	2.735	2.745	2.726	2.729	3.006	3.086
IC <sub>5</sub> I-Pentane	0.558	0.550	0.656	0.649	0.650	0.758	0.796	0.946	0.973	0.956	0.966	0.965	0.969	1.117	1.134
nC <sub>s</sub> n-Pentane	0.398	0.394	0.491	0.487	0.480	0.581	0.619	0.751	0.783	0.791	0.801	0.762	0.768	0.933	0.936
Ca Hexanes	0.226	0.227	0.327	0.327	0.310	0.399	0.440	0.724	0.789	0.794	0.811	0.737	0.750	0.622	0.698
C <sub>7</sub> Heptanes	0.102	0.104	0.163	0.162	0.130	0.165	0.192	0.525	0.596	0.592	0.610	0.550	0.540	0.855	0.809
Ca Octanes	0.035	0.036	0.061	0.061	0.050	0.048	0.051	0.268	0.327	0.322	0.335	0.289	0.274	0.579	0.536
C <sub>2</sub> Nonanes	0.005	0.005	0.008	0.008	0.000	0.009	0.010	0.038	0.048	0.042	0.047	0.044	0.043	0.138	0.113
C10 Decanes	0.001	0.001	0.001	0.001	0.000	0.003	0.004	0.000	0.000	0.001	0.000	0.001	0.000	0.022	0.021
C <sub>11</sub> Undecanes	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
C <sub>12</sub> Dode canes Plus	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total (Mole %)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 3-2: UTAF B Gas Composition Based on DST Samples

EOS modelling was performed on all samples, with simplified composition (C7+). Gas formation volume factor is then calculated using Peng-Robinson model, which ranges from 1.392 to 1.404 rbl/Mscf at reservoir pressure and temperature (2,025 psi & 234 °F). No lab measured dew point was available for quality check on phase diagram. **Table 3-3** shows a summary of PVT properties for UTAF B gas. Based on the average of the sample data, the expected Condensate Gas Ratio (CGR) for UTAF B gas production is 20.1 stb/MMscf and its range is 14.8-28.4 stb/MMscf. However, this CGR was obtained at lab pressure and temperature consistent with separator conditions where these samples were collected. A slightly different range of 9.1-14.6 stb/MMscf with an average value of 12.7 stb/MMscf was obtained for CGR when the modelled samples were flashed to standard surface condition in PVT software.

	Sampl	e Information	1	Lab Data							Eos	S Model (at 202	5 psi, 234F	7)	
Well	Date	Sample#	Type	Depth	Pres	Tres	Plab	Tlab	GOR (lab)	CGR(lab)	Gas FVF (Bg)	Eg	GOR***	CGR(lab)	
weii	Date	Sample#	Туре	ft.MD	psia	F	psia	F	SCF/STB	STB/MMSCF	rb/Mscf	scf/cf	SCF/STB	STB/MMSCF	
		TS-133307	Separator Gas 1				154.7	80	67600	14.793	1.404	126.885	109556	9.128	
	12/22/2012	523	Separator Liquid 1				154.7	- 00	07000	14.755	1.404	120.003	105550	5.120	
	(9A M)	TS-160103	Separator Gas 2**				N/A	N/A	N/A						
Selong-1		0623	Se parator Liquid 2**	4735-4751	2025	234	14/2	14/25	14/2						
(DST#3)	12/22/2012 (3PM)	TS-147002*	Separator Gas 3	(UTAF-B)	202		234	224.7	88	59400	16.835	1.391	128.082	68434	14.613
		0629*	Separator Liquid 3				22.4.7		33400	10.005	1301	120.002	00454	14.015	
		TS-59004	Separator Gas 4				224.7	88	59500	16.807	1.392	127.948	70143	14.257	
		518	Separator Liquid 4				22.4.7		33300	10.007	1.352	127.540	70143	14.237	
Akatara-1 (DST#4)	4/21/2013 (10AM)	A-0873*	Surface Gas	4693-4708 (UTAF-B)	N/A	N/A	N/A	N/A	N/A						
		A00567	Separator Gas 1				154.7	97	42680	23.430					
Akatara-1	10/07/2018	15505-1B	Separator Liquid 1	4678-4722	2026	222	154.7	9/	42080	23.430					
(DST#2)	(6A M)	A00137	Separator Gas 2	(UTAF B)	2020	222	154.7	97	35211	28.400					
		15175-1B	Separator Liquid 2				154.7	31	33211	20.400					
*phase diagra	m plot is evei leble								62167	20.1			82711	12.7	

xxx recombined compostion is not available

xxx The model and DVT was flashed to notice a standard conditions of organizated temperature (14.73 pc) a 50 Dept.

Table 3-3: Gas Sample PVT Summary

From the PVT data we have then developed an experimental CGR to pressure trend, which is presented in Figure 3-1.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



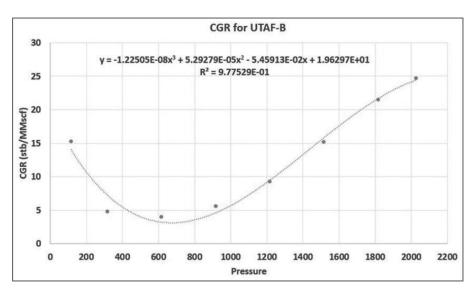


Figure 3-1: Condensate-Gas Ratio Relationship to Pressure for Condensate Yield

For LTAF reservoirs, the database of valid (non-contaminated) gas samples is listed in **Table 3-4** together with sample gas composition.

We	II Name	AKAT	ARA-2	SELONG-1	AKATARA-B3						
Test		Re-Comp	zone#1	Re-Comp zone#3	DST#2						
Per	foration Interval	6217'-62	232' MD	5374'-5384' MD		6267'-6	273' MD				
Formation		LTAF F3 LTAF F3 (sample #1) (sample #2		LTAF F1 (sample #2)	LTAF F3 (sample #1)	LTAF F3 LTAF F3 (sample #2)		LTAF F3 (sample #4)			
Cor	nponent	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %			
H <sub>2</sub> S	Hydrogen Sulphide	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
CO	Carbon Dioxide	4.681	4.643	4.711	4.970	4.945	5.040	5.011			
N <sub>2</sub>	Nitrogen	1.677	1.991	3.287	2.330	2.195	2.244	2.243			
C <sub>1</sub>	Methane	51.815	51.430	51.441	69.115	69.313	70.348	70.422			
C <sub>2</sub>	Ethane	9.863	9.829	12.438	8.829	8.895	8.796	8.824			
C <sub>3</sub>	Propane	19.119	19.233	18.164	9.752	9.640	9.306	9.253			
iC4	i-Butane	3.919	3.950	3.383	1.688	1.675	1.502	1.500			
nC <sub>4</sub>	n-Butane	4.815	4.860	4.197	2.075	2.078	1.800	1.792			
iC <sub>5</sub>	i-Pentane	1.501	1.502	1.043	0.537	0.542	0.424	0.423			
nC <sub>5</sub>	n-Pentane	1.040	1.040	0.704	0.369	0.375	0.288	0.287			
Св	Hexanes	0.825	0.815	0.395	0.215	0.217	0.161	0.159			
C <sub>7</sub>	Heptanes	0.482	0.466	0.164	0.091	0.093	0.070	0.067			
C <sub>8</sub>	Octanes	0.227	0.211	0.049	0.029	0.031	0.021	0.019			
C <sub>9</sub>	Nonanes	0.036	0.030	0.022	0.000	0.000	0.000	0.000			
C <sub>10</sub>	Decanes	0.000	0.000	0.002	0.000	0.000	0.000	0.000			
C <sub>11</sub>	Undecanes	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
C <sub>12</sub>	Dodecanes Plus	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Tot	al (Mole %)	100.00	100.00	100.00	100.00	100.00	100.00	100.00			

Table 3-4: LTAF Associated Gas Composition Based on DST Samples

Qualified Person's Report and Valuation – Lemang PSC, Indonesia



Again, contaminants level is low (around 4.7% CO<sub>2</sub>, N<sub>2</sub> between 1.7 to 3.3%). A GOR value of 464 scf/stb is assumed in generating associated gas profile using simplified decline curve analysis. This value was seen on Akatara-2 production data (producing from LTAF F3 reservoir) and PVT report, as shown in **Table 3-5**.

For the LTAF F1 Non-Associated Gas (NAG) in Akatara-C2ST1, flow-test results indicate a CGR ranging from 26 to 48 stb/MMscf. By analogy and in absence of sample data, a similar CGR is assumed for the Associated Gas (AG) in LTAF F3 (Akatara-B3) and the UTAF E NAG (Akatara-A4 and -B3).

	Separator Test Results											
Separator	Conditions	Formation Volume Factor	Total Solution Gas/Oil Ratio	Tank Oil Gravity ( °API at 60 °F )								
psig	°F	(A)	(B)									
50	100	1.346	464	34.3								

Table 3-5: PVT Laboratory Result for Oil Sampled in Akatara-2, LTAF F3

# 3.3 Rock-Fluid Properties (RCAL, SCAL, Compressibility)

Given the limited SCAL data available, relative permeability curves as used in the assessment of recovery potential are based on analogue experience and good engineering practice.

#### 3.4 Dynamic Reservoir Behaviour and Modelling

In this section we describe the anticipated dynamic production behaviour of the reservoirs i.e., reservoir drive, production behaviour and estimated recovery efficiency. Descriptions and estimates can be based on dynamic simulation models, analytical models or analogues depending on field maturity, available data and models. Oil assessments have been excluded from this updated QPR.

#### 3.4.1 UTAF and LTAF Gas Reservoirs

Considering the subsurface reservoir specifics of the Akatara Field gas reservoirs i.e., confined sand extent as indicated by the seismic attribute mapping combined with significant faulting, these reservoirs are anticipated to deplete with limited aquifer support, if any. Based on the observed reservoir properties, reservoir pressure and anticipated backpressure during production, the previous operator estimates a recovery factor of 65% to 75%. UTAF B gas production test results of Selong-1, Akatara-1 and Akatara-2 suggest that the wells initial deliverability is approximately 15 MMscfd due to the limitation of the 2-7/8" tubing. Mandala Energy had constructed a material balance (MBAL) model for Akatara Field NAG and gas cap resources and their modelling results indicated similar deliverability.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



We have also constructed an MBAL model for the Akatara Field NAG and gas cap resources to estimate recovery efficiency and generate production forecasts. Setup of the MBAL model is as per the reservoir descriptions and GIIP estimates detailed in **Section 2.5**. To reflect the differences in observed reservoir properties between the seismically bright and dim parts of UTAF B-B3 reservoir, the MBAL model includes those as different tanks with a limited transmissibility connection. Setup details of the MBAL model are summarised in **Figure 3-2**.

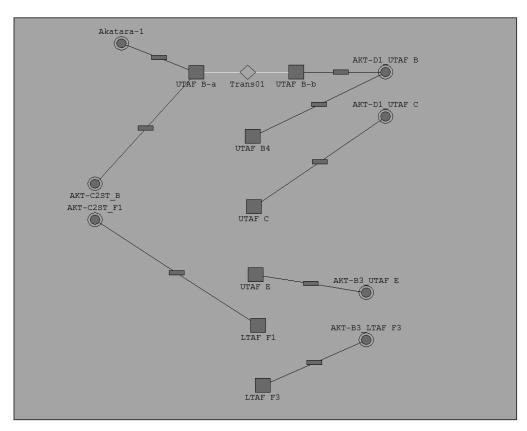


Figure 3-2: Conceptual Non-Associated Gas Development (MBAL Model)

## 3.5 Akatara Gas Development Project

The appraisal and development drilling of the Akatara Field has discovered sizable gas resources. These are being actively pursued by Jadestone Energy for commercialisation. The Akatara Gas Development Project is considered part of the approved POD which provides the regulatory approval to develop all Akatara Field gas resources, including Associated Gas (AG) and Non-Associated Gas (NAG).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



The operator's plan is to develop the NAG from UTAF B, C and E reservoirs. Gas would be produced by means of re-utilizing existing wells Akatara-1 (UTAF B), -B3 (UTAF E and LTAF F3), -C2ST1 (UTAF B and LTAF F1), and -D1 (UTAF B4 and UTAF C), some of which are already prepared for gas production with of packers isolating the various oil and gas zones and SSDs over the target gas zones. Gas will be produced through a 2-7/8" tubing string. A schematic model of the production within the material balance (MBAL) model, is presented in **Section 3.4**.

#### 3.5.1 Gas Development Concept

Jadestone Energy commissioned a front-end engineering and design (FEED) study to develop the gas and condensate resources from the UTAF and LTAF reservoirs. The report utilises a Liquefied Petroleum Gas (LPG) plant to process the wet gas from the Akatara Field to produce the following specifications:

- Associated Condensate (~10.5 stb per MMscf of feed gas at the inlet separator but variable over gas field production life);
- Lean Sales Gas (after ~17% shrinkage, reduction of 2 MMscfd fuel usage and with a gross heating value (GHV) of 1,094 BTU/scf). The targeted sales gas rate is 20.5 Billion British Thermal Units per day (BBTU/d) per the signed GSA (equivalent to ~18.9 MMscf/d);
- 3. LPG (yield of ~6.59 MT per MMscf of feed gas); and
- 4. Condensate from the LPG extraction process (yield of approximately 2 stb per MMscf of processed lean).

A schematic of the planned LPG plant is presented in Figure 3-3.

# 3.5.2 Scheduling of Gas Development

THREE60 Energy has applied Jadestone Energy's estimated first gas date of January 1, 2024 as the commencement date, which builds upon previous work completed by Mandala Energy that presented an earlier start date of production by 27 months (October 1, 2021). The scheme applies three zones in two wells for the initial production. This is followed in October 2024 and April 2025 by a further two zones. Jadestone Energy carries the requirement for two new wells in May and June 2025 at a cost of US\$ 3.5 MM each; however, although these have been included in their conceptual planning, details regarding placement and target reservoirs has not been finalised. Finally, the final two zones come onstream in either October 2027 (Low estimate) or October 2028 (Best and High estimates). **Table 3-6** shows the scheduling:

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



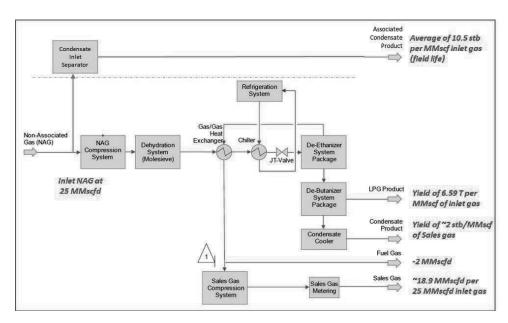


Figure 3-3: LPG Plant Concept Process Flow

Well	Reservoir		Start Date			
vveii	Reservoir	Low	Best	High		
Akatara-1	UTAF B	Jan-24				
Akatara-C2ST1	UTAF B		Jan-24			
Akatara-C2ST1	LTAF F1	Jan-24				
Akatara-D1	UTAF B	Oct-24				
Akatara-B3	UTAF E		Apr-25			
New Well 1 1)	N/A		May-25			
New Well 2 1)	N/A	Jun-25				
Akatara-B3	LTAF F3	Oct-27 Oct-28				
Akatara-D1	UTAF C	Oct-27	Oct	:-28		

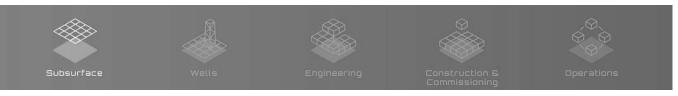
**Note:** New wells 1 and 2 have not been modelled in the current MBAL assessment and are deemed wells to assure deliverability from 2025.

Table 3-6: Scheduling of Akatara Gas Development Project

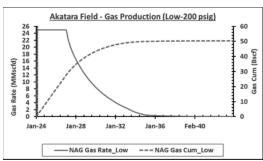
# 3.5.3 Gas Production Forecasting

THREE60 Energy has used the material balance model for UTAF B – LTAF F1 NAG and LTAF F3 gas-cap reservoirs as described in **Section 3.4.1** to estimate recovery and generate production forecasts. Sensitivities have been run for the LPG plant inlet gas forecasting that relates to the tubing head pressure (THP) to which

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



the reservoirs are depleted. It is noted that the THP at the LPG plant inlet will be 200 psig (per the process flow). THREE60 Energy has run a sensitivity at 500 psig and the MBAL outputs are presented in **Figure 3-4** to **Figure 3-6**.



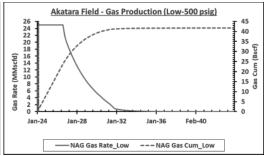
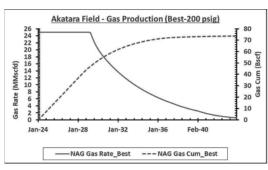


Figure 3-4: MBAL Model Output for NAG – Low Estimate Case (THP at 200 and 500 psig)



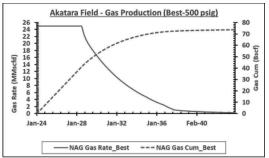
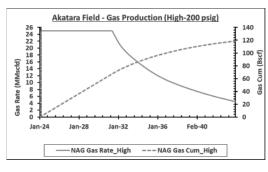


Figure 3-5: MBAL Model Output for NAG – Best Estimate Case (THP at 200 and 500 psig)



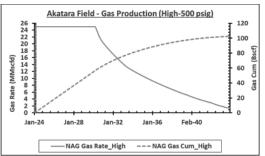


Figure 3-6: MBAL Model Output for NAG – High Estimate Case (THP at 200 and 500 psig)

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











Condensate yield from the NAG production has been calculated using a condensate-gas ratio (CGR) to pressure relationship developed from the PVT data as described in **Section 3.2** (Figure 3-1).

THREE60 Energy has selected the 200 psig cases for the conceptual development as that compression to THP = 200 psig will be part of the LPG facilities design. The output raw (feed) gas and condensate to the LPG inlet are presented in **Table 3-7**, **Figure 3-7** and **Figure 3-8**.

Case	Low E	stimate	Best Estimate		High Estimate	
THP	500 psig	200 psig	500 psig	200 psig	500 psig	200 psig
GIIP (Bscf)	56.4 101.7		147.4			
Recovery Factor (%)	74%	89%	72%	87%	70%	81%
Gas EUR (Bscf)	42.0	50.8	74.0	88.7	102.9	119.0
Condensate EUR (Mstb)	556.3	602.5	995.5	1,062.2	1,475.1	1,536.3
Gas Plateau End Date	Jul-26	Dec-26	June-28	Mar-29	Feb-30	May-31
Gas Plateau Length (months)	31	36	54	63	74	88

#### Notes:

Gas volume estimates are gross i.e., including contaminants and inserts ( $CO_2$  ( $\sim$ 2.7%) and  $N_2$  ( $\sim$ 2.0%)). Volumes are total Estimated Ultimate Recoverable (EUR) gas and condensate for the full life of wells (i.e. they are not limited to PSC expiry date of January 17, 2037 or truncated by economic cut-off and LPG plant shrinkage).

Table 3-7: MBAL Outputs for Raw (Feed) NAG Gas and Condensate at LPG Plant Inlet

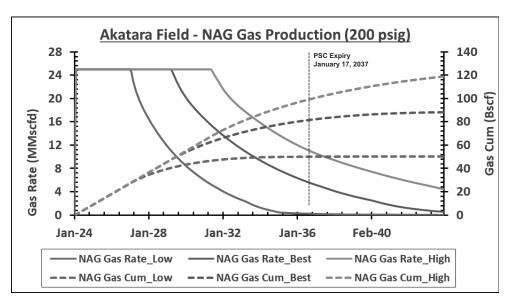


Figure 3-7: Gas Rate and Cumulative Cases for the NAG Development (Raw Feed Volumes to LPG Inlet) (200 psig)

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



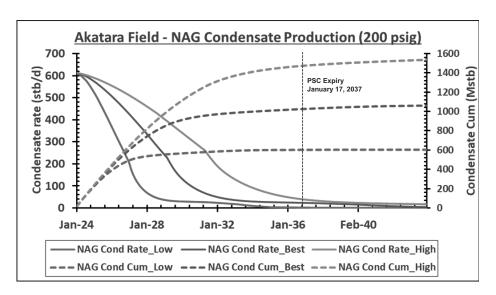


Figure 3-8: Condensate Rate and Cumulative Cases for the NAG Development (to be Separated at LPG Inlet) (200 psig)

Profiles have been used to populate the discounted cash flow (DCF) model in order to estimate the net entitlement gas Contingent Resources attributable to Eneco's participating interest in the PSC (see **Section 4**).

#### 3.5.4 Unrecovered Gas Resources at PSC End

The production forecasts above show that in the Best- and especially the High Estimate cases, gas production at PSC end (January 2037) is still material. We have estimated unrecovered gas and condensate volumes at PSC end (**Table 3-8**). Opportunities to accelerate gas and condensate production in case of a High subsurface outcome could be investigated in future. For now, any gas recovery potential beyond PSC end has been excluded from the totals, as there is no commercial certainty that the PSC will be extended after January 2037.

UTAF and LTAF Unrecovered Gas & Condensate Resources at end of PSC									
	Low Best High								
Free Gas (Bscf)	0.2	6.2	18.7						
Condensate (Mstb)	1.8	35.5	62.1						

Table 3-8: Remaining Recoverable Gas and Condensate Resources at PSC End

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



# 4 Commercial and Resources Assessment

# 4.1 Terms and Conditions of the Lemang PSC

The terms and conditions of the Lemang PSC are depicted in **Figure 4-1**. These have been modelled in an economic model that was provided by the previous operator to THREE60 Energy. We have reviewed, amended (where applicable) and adopted the model as presented.

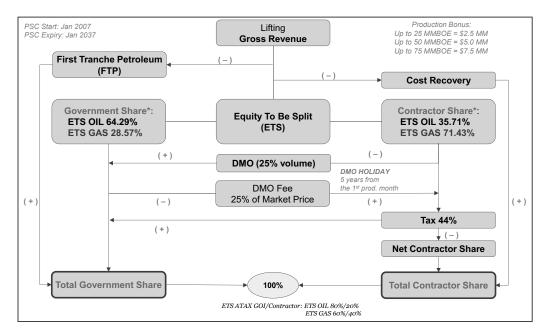


Figure 4-1: Fiscal Terms and Revenue Split

#### 4.2 Price Assumptions

#### 4.2.1 Dry Gas Price

On December 1, 2021, Jadestone Energy announced the signing of a GSA between Jadestone Energy and PT. Perusahaan Listrik Negara (PT. PLN) the Indonesian State electricity provider for the purchase price of US\$ 5.60/MMBTU (Million British Thermal Units, see <a href="https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/">https://www.jadestone-energy.com/akatara-gas-sales-agreement-signed/</a>). Dry gas from the Akatara Field has a Gross Heating Value (GHV) of 1,094 BTU/scf and

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



will be provided at 20.5 BBTU/d starting Q1 2024, with annual take-or-pay quantity set at 90% and maximum daily quantity set at 110% of DCQ.

#### 4.2.2 Condensate Price

THREE60 Energy has applied the price of condensate at the Indonesian Crude Price (ICP) that has a US\$ 5.00/stb discount to Brent oil price. THREE60 Energy has applied a forecast for Brent oil based on the average of third-party published forecasts from banks, financial institutions and consultancies that are updated on a quarterly basis (Q3 2021). This is presented in **Table 4-1**.

Third-Party (US\$/stb)	2021	2022	2023	2024	2025	2026	2027+
Sproule (Canada)	73	69	65	62	62	62	62
Deloitte (USA)	72	66	59	59	59	59	59
GLJ (Canada)	73	68	64	64	64	64	64
McDaniel (Canada)	75	68	63	60	60	60	60
DNB Markets (Norway)	75	69	77	80	80	80	80
AVERAGE	73.6	67.9	65.6	65.0	65.0	65.0	65.0

#### Note:

Oil prices are subject to 2% escalation per annum from 2022 in the economic model.

A discount of US\$ 5.00/stb is applied to Brent prices to obtain the ICP price for condensate.

Table 4-1: Brent Forecast – Average of Published Forecasts from Third-parties for Q3 2021 (US\$ Real)

# 4.2.3 Liquid Petroleum Gas (LPG) Price

LPG prices are based on an assumption at two-thirds (66.7%) of the Brent price with reference to Aramco Contract Price ("CP"). A discount of 10% to CP is applied that assumes the buyer's transportation cost by taking the LPG at the Akatara Field plant gate. The 2021 price forecast price is US\$ 513.5 /MT (based on US\$ 570.5 \* 90%) and the forecast is presented in **Table 4-2**.

Third-Party	2021	2022	2023	2024	2025	2026	2027+
Brent Oil Price (US\$ /stb)	73.6	67.9	65.6	65.0	65.0	65.0	65.0
LPG Price -10% (US\$ /MT)	513.5	473.7	457.7	453.5	453.5	453.5	453.5

Table 4-2: LPG Price Forecast – Based on Tagging to Brent Price (US\$ Real)

#### 4.3 Project Costs

CAPEX, OPEX and abandonment costs (ABEX) have been estimated relating for the new Akatara Gas Field Development, in addition to remaining ABEX liabilities associated with the ceased oil extraction. New costs

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



are based on the FEED study conducted on behalf of Jadestone Energy in September 2019 and are noted to be approximately 50% higher than those estimated during the pre-FEED assessments by the previous operator. The FEED study was not provided to THREE60 Energy but was estimated to cost US\$ 3.1 MM based on previous operator comments.

# 4.3.1 Akatara Gas Development Project CAPEX

Jadestone Energy has provided a summary of the CAPEX costs for the Akatara Gas Development Project at US\$ 97 Million based on the September 2019 FEED report. CAPEX payments are expected to commence in Q1 2022 once FID has been declared.

In addition to the LPG plant and facilities, Jadestone Energy will drill two new gas production wells at a cost of US\$ 3.5 MM each in mid-2025. Further, the workover of two wells in late-2024 and early-2025 to convert previous oil producers to gas producers is estimated at US\$ 700,000 each. These costs are extracted from THREE60 Energy's previous study and were confirmed by Jadestone Energy.

# 4.3.2 Akatara Gas Development Project OPEX

The components of the Akatara Gas Development Project OPEX are presented below and are based on THREE60 Energy's end-2018 study and were confirmed by Jadestone Energy:

- Field OPEX: Fixed and Variable Akatara Gas Development Project fixed OPEX estimated to be a flat US\$ 250,000 per month with additional variable liquids OPEX of US\$ 333,000 per month that reduces as the liquid yields decrease.
- 2) Staff OPEX: Fixed assumed to be US\$ 300,000 per month.

# 4.3.3 Akatara Gas Development Project ABEX

- 1) Abandonment cost ("ABEX") Following SKK Migas regulations, funds amounting to US\$ 1.2 MM were needed to be accrued to provide provision for the ceased oil producing activities only. That estimate was based on US\$ 30,000 per drill pad, US\$ 100,000 per well and 10% of the total CAPEX spent on the oil development. Jadestone Energy confirmed that a total of US\$ 0.77 MM has not been accrued for the oil project ABEX at the cessation of production in December 2019. This has been added as a starting balance to the Akatara Gas Development Project.
- 2) The ABEX for the Akatara Gas Development Project was based on information provided by the previous operator and subsequently updated by Jadestone Energy. The amount of US\$ 9.5 MM has been retained for incremental installed facilities and two additional wells. That ABEX, plus the remainder from the oil project, will be accrued over the life of the producing Akatara Gas Development Project and is cost recoverable.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



#### 4.4 Other Commercial Factors

Cross cost recovery is applicable in the Lemang PSC which means that the large unrecovered oil cost are recovered against the gas, condensate and LPG revenues. Costs are inflated at 2% per annum from 2022 in the economic model. THREE60 Energy made assumptions on the costs accrued during the period end-December 2019 to end-June 2021 based on our reviews conducted at end-2018. Updated details were provided by Jadestone Energy. The accrued costs during the period of non-production to the effective date of this report are:

- i) US\$ 100,000 per month for staffing (as General and Administration OPEX).
- ii) US\$ 3.1 MM for the FEED study (as OPEX).

#### 4.5 Commercial Evaluation

THREE60 Energy has updated previous operator's economic model inputs to incorporate sensitivities for:

- Low, Best and High production estimates of gas from the Akatara Gas Development Project to commence in January 2024.
- 2) Gas, condensate and LPG price sensitivities.
- 3) CAPEX schedules for the gas Project.
- 4) OPEX schedules for the gas Project.
- 5) ABEX schedule based on pro-rated production to account for abandonment of the asset.

The economic model outputs the gas, condensate and LPG volumes attributable on a gross (100%), net working interest to Eneco (10%) and net entitlement to Eneco (variable) basis. Net present values (NPV) to Eneco's Net Entitlement are calculated using varying discount rates.

A final sensitivity is run on a 9% net working interest to Eneco based on the scenario that local Indonesian Government party backs into the project at 10% on commercialisation. That party's costs are carried proportionally by Jadestone Energy and Eneco.

# 4.6 Contingent Resources

A summary of Contingent Resources evaluated by THREE60 Energy for the Lemang PSC is provided in **Table 4-3**, with an **effective date of December 31**, **2021**.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











Category	Gross Attributable to Licence <sup>1</sup>	Working Interest Attributable to Issuer <sup>2</sup>	Net Entitlement Attributable to Issuer <sup>3, 4</sup>	Risk Factors <sup>5</sup>	Remarks					
Contingent	Resources – Aka	tara Gas Develo <sub>l</sub>	oment <sup>6, 7</sup> – <i>Proj</i> e	ct Maturity Sub-c	lass "Development Pending"					
Gas Contingent Resources (Bscf 8)										
1C	34.2	3.4	3.0	Note PRMS	Planned development of Non					
2C	59.2	5.9	4.7	project	Associated Gas (NAG) resources in UTAF and LTAF reservoirs. Subject					
3C	74.3	7.4	5.7	maturity status	to regulatory approval and FID.					
Condensa	ate Contingent Re	esources (Mstb <sup>9</sup> )	1							
1C	582	58	52	Note PRMS	Associated condensate yields					
2C	1,025	103	77	project	(separated wet gas) from the					
3C	1,472	147	93	maturity status	planned Akatara Gas Development.					
Liquid Per	troleum Gas Con	tingent Resource	es (MT <sup>10</sup> )							
1C	332.6	33.3	29.6	Note PRMS	Associated liquid petroleum gas					
2C	543.5	54.4	43.0	project	(LPG) extraction from the planned					
3C	662.1	66.2	50.8	maturity status	Akatara Gas Development.					

#### Notes to Table 4-3:

- Tabulated volumes are Gross Attributable to Licence and include the other Contractor's share (operator Jadestone Energy's 90% Working Interest) and the Indonesian Government's share of the Contingent Resources.
- Tabulated volumes are Working Interest volumes for Eneco's 10% Contractor participation in the PSC. These
  exclude Jadestone Energy's volumes but are not net to the Indonesian Government's entitlement to the Contingent
  Resources
- 3. Tabulated volumes are Net Entitlement volumes for Eneco's 10% participation in the PSC. These exclude both Jadestone Energy's and the Indonesian Government's entitlements to the Contingent Resources. Net Entitlement Contingent Resources form the true volumes attributable to Eneco as per the terms and conditions of the PSC for the Asset.
- 4. Note that Eneco's working interest may reduce to 9% if the local Indonesian government exercises its 10% back-in right under the PSC at the time of Akatara Gas Development Project sanction. The 2C Net entitlement volumes at 9% working interest are Gas: 4.2 Bscf, Condensate: 69 Mstb, and LPG: 38.9 MT, respectively.
- Our reporting of Contingent Resources is on an unrisked basis. Assessment of risk related to Contingent Resources
  development is made qualitatively by assigning resources to one of the SPE PRMS 2018 Project Maturity Subclasses. THREE60 Energy estimates a Probability of Development (Pd) of 80%.
- 6. The Contingent Resources are classified Project Maturity Sub-class "Development Pending" as there remain contingencies on the final investment decision (FID) to undertake the gas development project, in addition to final approval of the development by the Joint Venture partners and the Indonesian Government.
- 7. 1C: Low; 2C: Best; 3C: High estimated Contingent Resources pertaining to the Akatara Gas Development discussed above.
- 8. Bscf: Billions of standard cubic feet of gas.
- 9. Mstb: Thousands of stock tank barrels of condensate.
- 10. MT: Thousands of metric tonnes of LPG or natural gas liquids.

Table 4-3: Summary of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



# 4.7 Development and Commercial Status of Contingent Resources

Jadestone Energy has an intent to develop the gas resources in the Akatara Field and there are two (2) idle wells earmarked as future gas producers (Akatara-1 and -C2ST1), in addition to recompletion of gas reservoirs in two (2) other existing wells (Akatara-B3 and -D1). Production start-up is provisionally scheduled for Q1 2024. It is our view that the development of the gas resources currently has the classification of Contingent Resources – Project Maturity Sub-class Development Pending. Volumes could mature to the Reserves class categories once contingencies have been removed. Although development of the Akatara Gas Development Project resources are part of the approved POD, which provides the regulatory approval to develop the gas resource including Associated Gas (AG) and Non-Associated Gas (NAG), Indonesian Government regulatory approvals are still required, especially now that the gas development is significantly different from the POD gas development. The Chance of Commercialisation of the gas resources is deemed high at 80% and is further contingent on final investment decision (FID) being taken by the Joint venture partners of Jadestone Energy (as operator) and Eneco.

#### 4.8 Valuation of Resources

Per the requirements of the VALMIN CODE 2015 standards, THREE60 Energy has assessed the value of Eneco's interest in the Asset using multiple methods.

Income-Based Assessment (Discounted Cash Flow)

THREE60 Energy has reviewed and amended the previous operator's assessments of potential production forecasting for the near-term Akatara Gas Development to be conducted within the Asset. Further, THREE60 Energy has placed the range of profiles in a discounted cash flow (DCF) model to extract the Gross, Working Interest and Net Entitlement volumes and values for that Project. The DCF model applies assumptions on timing, prices (gas, LPG, and condensate) and discount factors to determine the economic cut-off of the Contingent Resources and the associated volume and value.

A summary of the values for the Contingent Resources is presented in **Table 4-4** with an **effective date of December 31**, **2021**. Net Present Values (NPVs) pertain to Eneco's Net Entitlement within the PSC at different discount rates. Detailed description of the valuation, to VALMIN CODE 2015 standards, is presented in **Appendix 3**.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











#### Contingent Resources (Akatara Gas Development Project) 1

Contingent Resources		Net Present Value <sup>2</sup> (discount rate) at 10% Working Interest US\$ MM <sup>3</sup>										
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25						
1C	15.5	10.9	7.4	4.9	2.9	1.4						
2C	23.2	15.8	10.8	7.1	4.5	2.6						
3C	29.0	19.2	12.8	8.4	5.4	3.1						

Contingent Resources		Net Present Value <sup>2</sup> (discount rate) at 9% Working Interest US\$ MM <sup>3</sup>										
Category	NPV0	70 NPV5 NPV10 NPV15		NPV20	NPV25							
1C	15.5	10.8	7.4	4.9	2.9	1.4						
2C	22.2	15.2	10.3	6.8	4.3	2.4						
3C	27.5	18.3	12.2	8.0	5.1	2.9						

#### Notes:

- Contingent Resources values relate to Eneco's Net Entitlement within the PSC and are for the planned Gas Development Project. PRMS Project Maturity Sub-class "Development Pending". First gas is planned for Q1 2024. Contingent Resources values are unrisked.
- 2. Eneco's 10% net working interest in the Asset is presented in the upper table. Note, however, the lower table presents the case whereby Eneco's interest reduces to 9%, based on the local Indonesian government exercising its 10% back-in right under the PSC at the time of development sanction.
- 3. US\$ MM: Millions of United States Dollars.

Table 4-4: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021

The table above presents the full project life-cycle valuation of the Akatara Gas Development Project; however, there are other considerations that can be taken into account on the valuation of the Asset as detailed below.

## Market-Based Valuation (Comparative Transaction)

The Asset was sold by the previous operator (Mandala Energy) to the new Operator (Jadestone Energy) on June 29, 2020, with the purchase price being disclosed (<a href="https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/">https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/</a>) as:

- a) Initial Cash Payment US\$ 12.0 MM for 90% operated interest;
- b) Incremental Payment US\$ 5.0 MM once the project commences production (2024); and
- c) Contingent Payments of up to US\$ 26.7 MM if several "upsides" are realised (see Appendix 3).

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











In essence, a reasonable Market-based Comparative Transaction valuation for the Asset at the commencement of production is set at US\$ 17.0 MM for 90% interest, which equates to US\$ 18.9 MM at 100% interest and, thus, US\$ 1.9 MM for Eneco's 10% interest.

#### Cost-Based Valuation (Cash Call Positioning)

If historical and current unpaid cash calls are taken into consideration, and the possibility that the Asset is defaulted to the Operator due to non-payment, a reasonable range of valuations would be:

- a) On default US\$ 0.0 MM (zero) as the Operator takes Eneco's defaulted interest;
- b) Full Project Basis (as of end-2021) US\$ 5.8 MM based on full project NPV15 at 9% working interest (US\$ 7.1 MM) that assumes local government entity back-in (10% gross) at production commencement and deduction of current outstanding cash calls for US\$ 1.4 MM.
- c) Full Project Basis (at first production in 2024) undetermined but note that the outstanding cash call position per b) above as of end-2021 would increase significantly up to the point of first production in 2024 to include ~US\$ 1 MM in net additional OPEX and US\$ 9.7 MM as Eneco's 10% share of development CAPEX costs. THREE60 Energy opines that this case would not proceed as the Operator would enact point a) above.

In conclusion, the range in valuation is broad and based on perception of different business scenarios. THREE60 Energy opines that a reasonable fair market value of Eneco's interest in the Asset is **US\$ 1.9 MM** considering the recent, arms-length comparative transaction for the Asset between a willing buyer and a willing seller.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











# Appendix 1: Akatara Field Petrophysical Summations

Reservoir-zone property averages for the wells drilled in the Akatara Field are presented below.

14/511	DECEDITORD	TOP	BOT	GROSS	NET RES	NET PAY	NTG	PHIT_AVG	SW_MID	HPV
WELL	RESERVOIR	TVDss	(feet)	ft	ft	ft	v/v	v/v	v/v	
SELONG_1	UTAF	4475.00	4610.50	135.499	0.000	0.000	0.030	0.000	1.000	0.000
SELONG_1	UTAF A	4610.75	4619.25	8.497	0.000	0.000	0.424	0.000	1.000	0.000
SELONG_1	4700sd /UTAF B	4657.00	4662.25	5.249	0.735	0.488	0.187	0.104	0.787	0.011
SELONG_1	UTAF B1	4688.25	4699.25	11.001	9.252	9.252	0.841	0.215	0.504	0.987
SELONG_1	UTAF B2	4701.75	4708.25	6.503	6.503	6.503	1.000	0.265	0.393	1.046
SELONG_1	UTAF B3	4741.25	4749.75	8.501	5.865	4.641	0.690	0.229	0.587	0.439
SELONG_1	UTAF B4	4765.50	4770.00	4.501	0.000	0.000	0.000	0.000	1.000	0.000
SELONG_1	UTAF B5	4771.00	4772.25	1.250	0.000	0.000	0.000	0.000	1.000	0.000
SELONG_1	UTAF B6	4774.75	4778.25	3.501	0.000	0.000	0.000	0.000	1.000	0.000
SELONG_1	4890sd / UTAF C	4854.75	4934.50	79.751	18.024	2.472	0.310	0.117	0.759	0.070
SELONG_1	UTAF C1	4963.00	4971.75	8.750	0.000	0.000	0.334	0.000	1.000	0.000
SELONG_1	UTAF C2	4978.00	4986.00	8.002	0.000	0.000	0.000	0.000	1.000	0.000
SELONG_1	UTAF C3	5027.50	5039.25	11.749	4.136	0.000	0.393	0.000	1.000	0.000
SELONG_1	UTAF D	5064.00	5080.75	16.749	3.433	0.000	0.205	0.000	1.000	0.000
SELONG_1	UTAF D1	5158.75	5168.25	9.501	6.594	0.000	0.771	0.000	1.000	0.000
SELONG_1	5260sd / UTAF E	5218.75	5253.25	34.501	15.146	0.000	0.763	0.000	1.000	0.000
SELONG_1	5370sd_LTAF F	5321.00	5331.25	10.249	0.000	0.000	0.000	0.000	1.000	0.000
SELONG_1	LTAF F1	5331.50	5360.00	28.501	27.617	20.406	0.969	0.219	0.713	1.283
SELONG_1	LTAF F2	5365.00	5424.75	59.751	4.481	3.466	0.313	0.112	0.772	0.088
SELONG_1	LTAF F3	5425.00	5445.50	20.502	13.921	10.948	0.729	0.206	0.749	0.566
SELONG_1	LTAF G	5458.00	5479.25	21.250	4.675	0.000	0.580	0.000	1.000	0.000
SELONG_1	LTAF G1	5479.50	5684.00	204.498	47.444	5.521	0.342	0.196	0.743	0.278
SELONG_1	LTAF H	5684.25	5922.00	237.753	107.940	8.797	0.497	0.208	0.754	0.450
SELONG_1	LTAF I	6024.50	6356.75	332.247	49.173	0.332	0.290	0.124	0.754	0.010

Table A1-1: Reservoir Summation in Well Selong-1

14/511	DESERVOIR	TOP	вот	GROSS	NET RES	NET PAY	NTG	PHIT_AVG	SW_MID	HPV
WELL	RESERVOIR	TVDss	(feet)	ft	ft	ft	v/v	v/v	v/v	
AKATARA_1	UTAF	4440.78	4580.97	140.190	1.262	0.000	0.009	0.000	1.000	0.000
AKATARA_1	UTAF A	4580.97	4590.26	9.288	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_1	4700sd /UTAF B	4629.36	4643.25	13.891	4.987	4.042	0.359	0.209	0.420	0.490
AKATARA_1	UTAF B1	4648.11	4666.13	18.012	17.634	17.634	0.979	0.229	0.323	2.734
AKATARA_1	UTAF B2	4669.05	4679.27	10.220	9.320	9.320	0.912	0.226	0.407	1.249
AKATARA_1	UTAF B3	4701.90	4707.01	5.112	1.671	0.000	0.327	0.000	1.000	0.000
AKATARA_1	UTAF B4	4715.53	4725.99	10.463	4.237	0.942	0.719	0.115	1.000	0.000
AKATARA_1	UTAF B5	4727.44	4729.87	2.421	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_1	UTAF B6	4735.19	4738.58	3.389	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_1	4890sd / UTAF C	4816.08	4895.58	79.508	26.715	12.642	0.417	0.160	0.666	0.676
AKATARA_1	UTAF C1	4926.68	4933.76	7.080	0.000	0.000	0.064	0.000	1.000	0.000
AKATARA_1	UTAF C2	4954.52	4960.89	6.365	1.375	0.000	0.360	0.000	1.000	0.000
AKATARA_1	UTAF C3	5011.82	5022.23	10.410	3.133	2.020	0.388	0.117	0.778	0.052
AKATARA_1	UTAF D	5046.98	5067.81	20.830	12.248	4.395	0.599	0.215	0.775	0.213
AKATARA_1	UTAF D1	5126.79	5138.09	11.299	7.107	1.774	0.688	0.147	1.000	0.000
AKATARA_1	5260sd / UTAF E	5193.15	5247.30	54.150	34.873	14.025	0.701	0.166	0.611	0.906
AKATARA_1	5370sd_LTAF F	5304.08	5304.73	0.653	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_1	LTAF F1	5304.95	5310.60	5.650	2.164	1.079	0.689	0.151	0.770	0.037
AKATARA_1	LTAF F2	5322.12	5389.81	67.694	5.212	3.655	0.397	0.108	0.457	0.214
AKATARA_1	LTAF F3	5390.03	5399.61	9.583	5.252	5.031	0.548	0.203	0.326	0.688
AKATARA_1	LTAF G	5434.44	5462.26	27.825	26.767	19.199	0.962	0.213	0.764	0.965
AKATARA_1	LTAF G1	5462.48	5581.21	118.734	31.702	20.778	0.281	0.173	0.659	1.226
AKATARA_1	LTAF H	5581.43	5851.82	270.390	92.744	45.155	0.351	0.171	0.634	2.826
AKATARA_1	LTAF I	5908.96	6131.23	222.270	95.576	58.679	0.721	0.132	0.556	3.439

Table A1-2: Reservoir Summation in Well Akatara-1

Qualified Person's Report and Valuation – Lemang PSC, Indonesia



	DESERVOIR	TOP	BOT	GROSS	NET RES	NET PAY	NTG	PHIT_AVG	SW_MID	HPV
WELL	RESERVOIR	TVDss	(feet)	ft	ft	ft	v/v	v/v	v/v	
AKATARA_2	UTAF	4458.27	4591.86	133.596	0.668	0.668	0.038	0.000	1.000	0.000
AKATARA_2	UTAF A	4591.86	4601.25	9.383	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_2	4700sd /UTAF B	4638.62	4648.69	10.072	5.943	5.943	0.590	0.120	0.764	0.168
AKATARA_2	UTAF B1	4652.76	4656.82	4.068	3.690	3.690	0.907	0.172	0.688	0.198
AKATARA_2	UTAF B2	4661.29	4664.30	3.018	1.075	1.075	0.356	0.168	0.745	0.046
AKATARA_2	UTAF B3	4674.15	4684.22	10.072	5.741	5.741	0.570	0.187	0.622	0.406
AKATARA_2	UTAF B4	4711.06	4729.95	18.898	5.764	5.764	0.407	0.198	0.663	0.385
AKATARA_2	UTAF B5	4734.45	4741.99	7.546	2.845	2.845	0.377	0.180	0.733	0.137
AKATARA_2	UTAF B6	4760.93	4765.88	4.954	2.314	2.314	0.467	0.165	0.741	0.099
AKATARA_2	4890sd / UTAF C	4830.48	4910.70	80.217	21.498	21.498	0.346	0.139	0.704	0.885
AKATARA_2	UTAF C1	4938.22	4946.26	8.038	0.000	0.000	0.353	0.000	1.000	0.000
AKATARA_2	UTAF C2	4959.25	4965.32	6.070	0.868	0.868	0.507	0.000	1.000	0.000
AKATARA_2	UTAF C3	5037.89	5045.05	7.152	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_2	UTAF D	5056.56	5079.79	23.228	15.284	15.284	0.658	0.208	0.757	0.773
AKATARA_2	UTAF D1	5140.72	5153.61	12.894	12.339	12.339	0.957	0.000	1.000	0.000
AKATARA_2	5260sd / UTAF E	5220.05	5260.01	39.961	32.488	32.488	0.830	0.166	0.747	1.364
AKATARA_2	5370sd_LTAF F	5335.96	5336.19	0.230	0.000	0.000	0.000	0.000	1.000	0.000
AKATARA_2	LTAF F1	5336.19	5340.75	4.560	0.000	0.000	0.154	0.000	1.000	0.000
AKATARA_2	LTAF F2	5347.54	5426.80	79.265	43.675	43.675	0.755	0.138	0.701	1.802
AKATARA_2	LTAF F3	5426.80	5443.18	16.371	13.850	13.850	1.000	0.196	0.508	1.336
AKATARA_2	LTAF G	5466.86	5489.76	22.900	11.015	11.015	0.491	0.000	1.000	0.000
AKATARA_2	LTAF G1	5489.76	5643.54	153.773	69.505	69.505	0.526	0.198	0.725	3.785
AKATARA_2	LTAF H	5643.54	5834.35	190.814	78.806	78.806	0.413	0.161	0.740	3.299
AKATARA_2	LTAF I	5883.33	6118.00	234.667	63.829	63.829	0.349	0.085	0.671	1.785

Table A1-3: Reservoir Summation in Well Akatara-2

	250	TOP	BASE	GROSS	NET RES	NTG		Net Pay 9K	SWT_AVG_9K	Net Pay 13K	SWT_AVG_13K	Net Pay 19K	SWT_AVG_19K	Net Pay 28K	SWT_AVG_28K
WELL	RES	М	М	М	М	M/M	PHIT_AVG	М	V/V	M	V/V	М	V/V	M	V/V
	UTAF	1370.207	1411.382	41.175	0.152	0.004	0.106	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF A	1411.382	1424.492	13.110	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B	1424.492	1430.893	6.401	1.219	0.190	0.165	0.000	1.000	0.457	0.711	0.610	0.599	0.914	0.550
	UTAF B1	1430.893	1436.379	5.486	4.420	0.806	0.215	3.505	0.507	4.115	0.464	4.420	0.396	4.420	0.319
	UTAF B3	1436.379	1447.962	11.583	5.486	0.474	0.203	5.029	0.616	5.182	0.516	5.486	0.434	5.486	0.370
	UTAF B4	1447.962	1456.191	8.229	2.134	0.259	0.130	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B5	1456.191	1483.321	27.130	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF C	1483.321	1552.511	69.190	7.163	0.104	0.137	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF D	1552.511	1595.793	43.282	1.219	0.028	0.144	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
A3	UTAF E	1595.793	1632.064	36.271	4.572	0.126	0.121	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F	1632.064	1634.502	2.438	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAFF1	1634.502	1640.903	6.401	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F2	1640.903	1660.410	19.507	0.914	0.047	0.104	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F3	1660.410	1674.431	14.021	4.420	0.315	0.165	3.048	0.720	3.658	0.609	4.115	0.520	4.267	0.438
	LTAF G	1674.431	1682.356	7.925	5.334	0.673	0.192	0.000	1.000	0.000	1.000	3.962	0.758	5.182	0.640
	LTAF G1	1682.356	1693.633	11.277	1.219	0.108	0.169	0.000	1.000	0.152	0.798	0.457	0.697	1.067	0.651
	LTAF G1A	1693.633	1702.476	8.843	3.048	0.345	0.194	0.000	1.000	0.000	1.000	0.000	1.000	2.134	0.733
	LTAF G1B	1702.476	1723.263	20.787	4.572	0.220	0.195	0.000	1.000	0.000	1.000	0.000	1.000	2.591	0.729
	LTAF H	1723.263	1773.936	50.673	3.353	0.066	0.180	0.000	1.000	0.000	1.000	0.762	0.714	2.438	0.686

Table A1-4: Reservoir Summation in Well Akatara-A3

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











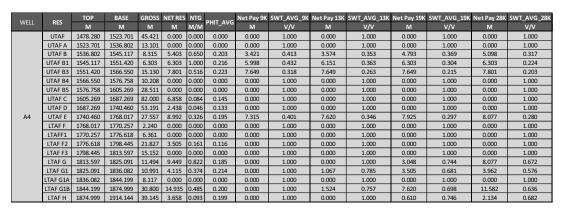


Table A1-5: Reservoir Summation in Well Akatara-A4

WELL	RES	TOP	BASE	GROSS	NET RES	NTG	DUIT AVC	Net Pay 9K	SWT_AVG_9K	Net Pay 13K	SWT_AVG_13K	Net Pay 19K	SWT_AVG_19K	Net Pay 28K	SWT_AVG_28K
WELL	KES.	M	М	М	М	M/M	PHIT_AVG	М	V/V	М	V/V	М	V/V	М	V/V
	UTAF	1443.274	1486.900	43.626	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF A	1486.900	1500.530	13.630	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B	1500.530	1507.757	7.227	3.384	0.468	0.188	2.775	0.540	3.080	0.472	3.232	0.396	3.384	0.369
	UTAF B1	1507.757	1514.649	6.892	3.931	0.570	0.187	3.321	0.669	3.778	0.571	3.931	0.473	3.931	0.403
	UTAF B3	1514.649	1529.867	15.218	4.115	0.270	0.178	1.372	0.754	3.353	0.676	3.658	0.565	3.962	0.484
	UTAF B4	1529.867	1537.801	7.934	2.591	0.327	0.140	0.000	1.000	0.000	1.000	0.305	0.728	0.914	0.697
	UTAF B5	1537.801	1568.501	30.700	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF C	1568.501	1636.389	67.888	7.925	0.117	0.137	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF D	1636.389	1653.244	16.855	1.372	0.081	0.130	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
B2	UTAF E	1653.244	1689.961	36.717	5.639	0.154	0.114	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F	1689.961	1690.881	0.920	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAFF1	1690.881	1701.025	10.144	5.029	0.496	0.193	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F2	1701.025	1718.404	17.379	0.914	0.053	0.103	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F3	1718.404	1732.306	13.902	1.676	0.121	0.143	0.000	1.000	0.000	1.000	0.152	0.771	0.610	0.693
	LTAF G	1732.306	1739.902	7.596	3.810	0.502	0.172	3.048	0.599	3.658	0.528	3.810	0.440	3.810	0.414
	LTAF G1	1739.902	1754.362	14.460	3.658	0.253	0.201	2.896	0.560	3.200	0.482	3.505	0.408	3.658	0.347
	LTAF G1A	1754.362	1767.474	13.112	4.267	0.325	0.216	3.658	0.483	3.810	0.406	3.962	0.339	4.267	0.299
	LTAF G1B	1767.474	1795.936	28.462	7.620	0.268	0.200	0.000	1.000	0.000	1.000	0.305	0.776	5.334	0.757
	LTAF H	1795.936	1834.896	38.960	11.887	0.305	0.190	0.000	1.000	0.000	1.000	0.914	0.733	9.449	0.736

Table A1-6: Reservoir Summation in Well Akatara-B2

		TOP	BASE	CBOCC	NET RES	NTG		Nat Day Of	CHIT AND OK	N-4 D 43K	CIMIT ANG 43K	N - 4 D 101/	CALL ANG 40K	N - 4 D 201/	CINIT ANG 2016
WELL	RES						PHIT AVG				SWT_AVG_13K			_	
		M	М	М	М	M/M		М	V/V	М	V/V	M	V/V	М	V/V
	UTAF	1615.440	1663.553	48.113	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF A	1663.553	1677.092	13.539	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B	1677.092	1682.484	5.392	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B1	1682.484	1688.452	5.968	2.134	0.358	0.198	1.524	0.735	2.134	0.633	2.134	0.516	2.134	0.401
	UTAF B3	1688.452	1702.972	14.520	2.438	0.168	0.202	1.219	0.733	1.676	0.630	2.134	0.553	2.438	0.482
	UTAF B4	1702.972	1711.867	8.895	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF B5	1711.867	1737.046	25.179	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF C	1737.046	1804.273	67.227	8.077	0.120	0.144	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	UTAF D	1804.273	1845.009	40.736	2.286	0.056	0.180	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
B3	UTAF E	1845.009	1881.427	36.418	9.449	0.259	0.134	1.067	0.662	1.524	0.591	2.134	0.539	2.134	0.505
	LTAF F	1881.427	1882.573	1.146	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAFF1	1882.573	1888.074	5.501	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F2	1888.074	1908.566	20.492	2.591	0.126	0.110	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF F3	1908.566	1920.341	11.775	3.962	0.336	0.159	3.658	0.539	3.810	0.456	3.810	0.374	3.810	0.399
	LTAF G	1920.341	1929.664	9.323	1.219	0.131	0.133	0.000	1.000	0.305	0.778	0.762	0.688	0.762	0.578
	LTAF G1	1929.664	1939.997	10.333	0.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
	LTAF G1A	1939.997	1946.425	6.428	0.914	0.142	0.172	0.000	1.000	0.457	0.774	0.762	0.669	0.914	0.590
	LTAF G1B	1946.425	1975.433	29.008	13.564	0.468	0.184	0.000	1.000	0.610	0.775	7.163	0.722	10.820	0.638
	LTAF H	1975.433	2045.513	70.080	31.090	0.444	0.174	0.000	1.000	0.305	0.781	2.134	0.744	19.507	0.735

Table A1-7: Reservoir Summation in Well Akatara-B3

Qualified Person's Report and Valuation - Lemang PSC, Indonesia





Table A1-8: Reservoir Summation in Well Akatara-BWI1

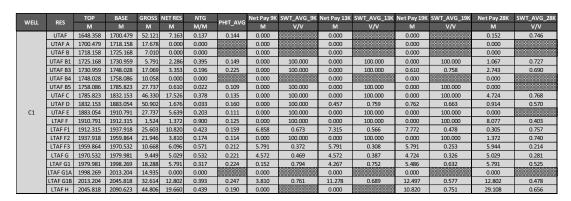


Table A1-9: Reservoir Summation in well Akatara-C1

WELL	RES	TOP	BASE	GROSS	NET RES	NTG	DUIT AVG	Net Pay 9K	SWT_AVG_9K	Net Pay 13K	SWT_AVG_13K	Net Pay 19K	SWT_AVG_19K	Net Pay 28K	SWT_AVG_28K
WELL	RES	М	М	М	M	M/M	PHIT_AVG	М	V/V	M	V/V	M	V/V	M	V/V
	UTAF	1872.996	1935.175	62.179	6.401	0.103	0.121	0.000	100.000	0.000	100.000	0.000	100.000	0.000	
	UTAF A	1935.175	1958.035	22.860	0.000	0.000		0.000		0.000		0.000		0.000	
	UTAF B	1958.035	1965.183	7.148	0.000	0.000		0.000		0.000		0.000		0.000	
	UTAF B1	1965.183	1975.653	10.470	9.235	0.882	0.199	8.169	0.375	8.169	0.310	8.169	0.255	8.931	0.236
	UTAF B3	1975.653	1992.731	17.078	4.023	0.236	0.207	4.023	0.345	4.023	0.285	4.023	0.235	4.023	0.193
	UTAF B4	1992.731	2010.741	18.011	0.000	0.000		0.000		0.000		0.000		0.000	
	UTAF B5	2010.741	2041.246	30.504	0.000	0.000		0.000		0.000		0.000		0.000	
	UTAF C	2041.246	2134.319	93.074	19.202	0.206	0.167	0.000	100.000	0.000	100.000	0.305	0.791	11.735	0.736
C2-ST1	UTAF D	2134.319	2197.562	63.243	10.820	0.171	0.177	0.000	100.000	1.676	0.763	2.743	0.673	7.772	0.667
C2-311	UTAF E	2197.562	2243.633	46.071	2.591	0.056	0.110	0.000	100.000	0.000	100.000	0.000	100.000	0.000	
	LTAF F1	2243.633	2267.849	24.216	20.269	0.837	0.196	19.660	0.289	19.812	0.241	20.117	0.203	20.269	0.169
	LTAF F2	2267.849	2291.307	23.457	2.438	0.104	0.135	0.000	100.000	0.000	100.000	0.762	0.743	1.067	0.640
	LTAF F3	2291.307	2301.545	10.238	3.048	0.298	0.195	1.829	0.556	1.829	0.459	2.591	0.455	2.743	0.387
	LTAF G	2301.545	2314.346	12.802	5.791	0.452	0.174	1.067	0.749	3.658	0.680	4.877	0.588	5.791	0.505
	LTAF G1	2314.346	2337.511	23.165	12.040	0.520	0.221	1.219	0.646	4.115	0.676	11.278	0.654	11.887	0.546
	LTAF G1A	2337.511	2355.799	18.288	6.248	0.342	0.198	0.305	0.782	4.115	0.743	5.791	0.639	6.248	0.533
	LTAF G1B	2355.799	2398.166	42.367	22.555	0.532	0.211	5.334	0.680	9.296	0.629	17.983	0.621	21.793	0.535
	LTAF H	2398.166	2427.732	29.566	4.572	0.155	0.211	0.000		0.152	0.709	3.505	0.756	4.420	0.634

Table A1-10: Reservoir Summation in well Akatara-C2ST1

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



14/511	RES	TOP	BASE	GROSS	NET RES	NTG	BUILT AVIC	Net Pay 9K	SWT_AVG_9K	Net Pay 13K	SWT_AVG_13K	Net Pay 19K	SWT_AVG_19K	Net Pay 28K	SWT_AVG_28K
WELL	KES	М	M	М	M	M/M	PHIT_AVG	М	V/V	М	V/V	М	V/V	М	V/V
	UTAF	1368.339	1408.877	40.538	2.652	0.065	0.126	0.000	100.000	0.000	100.000	0.000	100.000	0.213	0.725
	UTAF A	1408.877	1420.307	11.430	1.219	0.107	0.136	0.000	100.000	0.000	100.000	0.000	100.000	0.000	
	UTAF B	1420.307	1427.836	7.529	4.115	0.547	0.132	0.000	100.000	0.762	0.765	3.505	0.714	3.505	0.587
	UTAF B1	1427.836	1434.572	6.736	0.305	0.045	0.104	0.000	100.000	0.000	100.000	0.000	100.000	0.000	
	UTAF B3	1434.572	1441.155	6.584	0.518	0.079	0.112	0.000	100.000	0.000	100.000	0.000	100.000	0.000	
	UTAF B4	1441.155	1448.166	7.010	2.591	0.370	0.138	0.762	0.648	0.762	0.536	0.762	0.441	1.067	0.433
	UTAF B5	1448.166	1472.367	24.201	6.096	0.252	0.164	0.000	100.000	0.000	100.000	0.000	100.000	2.743	0.715
	UTAF C	1472.367	1542.806	70.439	18.745	0.266	0.151	0.762	0.628	2.743	0.672	6.248	0.638	10.058	0.592
D1	UTAF D	1542.806	1587.216	44.409	5.334	0.120	0.146	0.000	100.000	0.000	100.000	0.000	100.000	1.067	0.762
	UTAF E	1587.216	1624.797	37.582	8.839	0.235	0.136	0.000	100.000	0.305	0.786	1.067	0.727	1.829	0.649
	LTAF F1	1625.011	1631.869	6.858	5.822	0.849	0.211	0.000	100.000	0.000	100.000	0.000	100.000	5.182	0.731
	LTAF F2	1631.869	1652.016	20.147	5.182	0.257	0.120	0.000	100.000	0.000	100.000	0.000	100.000	1.067	0.743
	LTAF F3	1652.016	1659.331	7.315	0.000	0.000		0.000		0.000		0.000		0.000	
	LTAF G	1659.331	1666.768	7.437	1.372	0.184	0.168	0.762	0.713	0.914	0.613	1.067	0.524	1.372	0.474
	LTAF G1	1666.768	1678.777	12.009	0.762	0.063	0.129	0.000	100.000	0.305	0.792	0.610	0.696	0.762	0.602
	LTAF G1A	1678.777	1692.219	13.442	9.449	0.703	0.179	1.829	0.695	2.896	0.620	5.029	0.612	8.992	0.588
	LTAF G1B	1692.219	1739.494	47.274	12.040	0.255	0.206	0.000	100.000	0.000	100.000	1.067	0.772	8.839	0.706

Table A1-11: Reservoir Summation in well Akatara-D1

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











# Appendix 2: UTAF Non-Associated Gas Resources Mapping

Reservoir maps for the UTAF non-associated gas Resources estimation are presented in **Figure A2-1** to **Figure A2-23**.

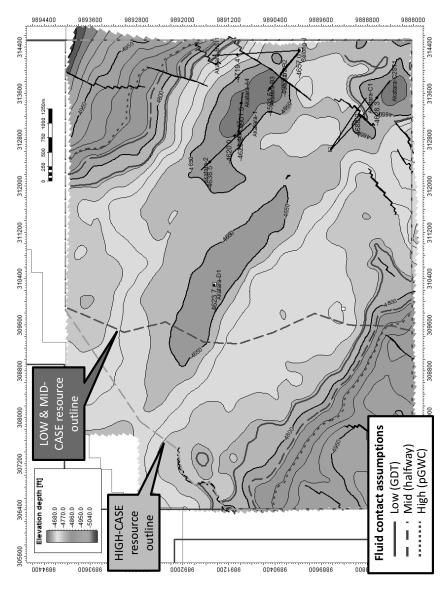


Figure A2-1: UTAF B-B3 Top-structure Map with Fluid Contact Assumptions

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



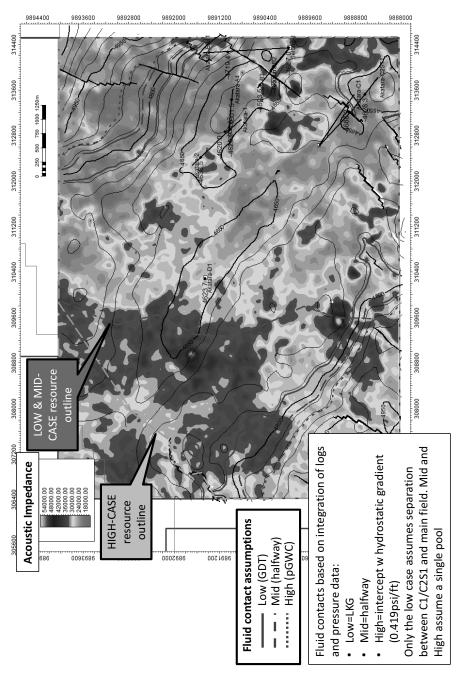


Figure A2-2: UTAF B-B3 Seismic Attribute Used for Reservoir Delineation



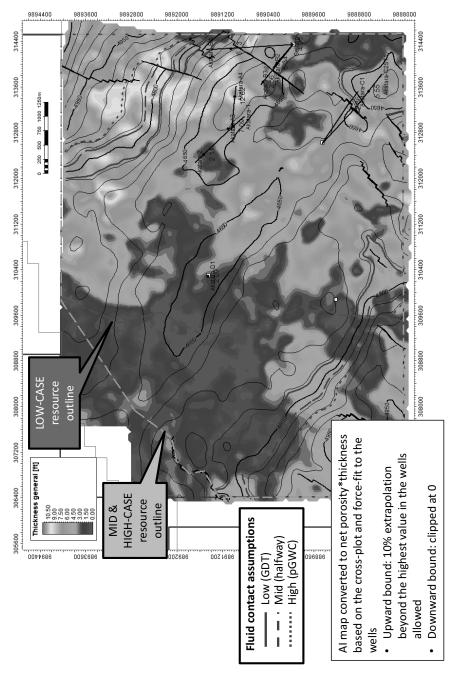


Figure A2-3: UTAF B-B3 Low & Mid-Case Net Porosity\*Thickness Map



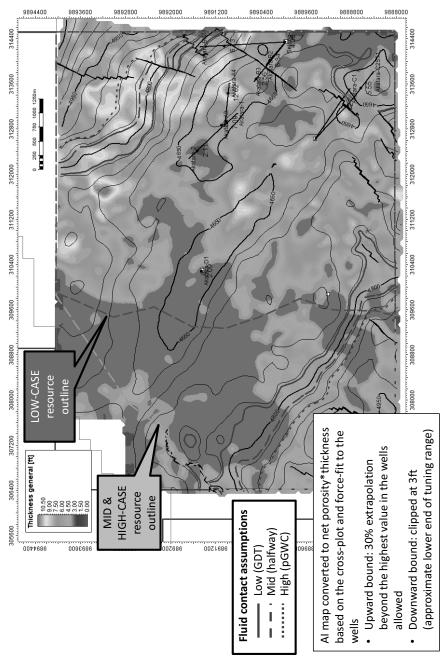


Figure A2-4: UTAF B-B3 High-Case Net Porosity\*Thickness Map



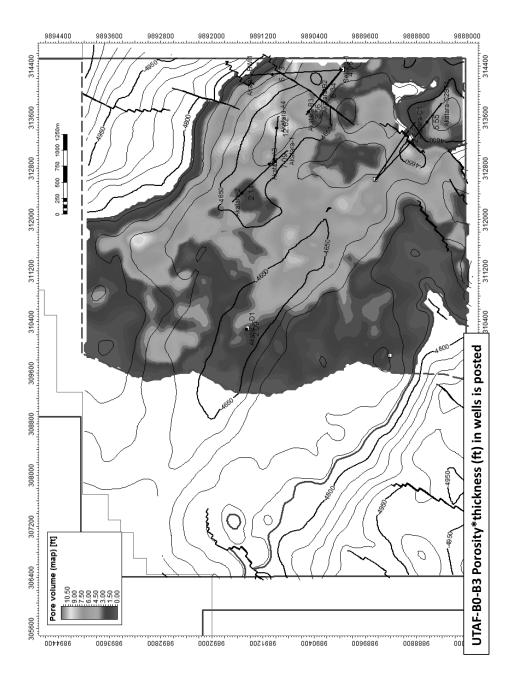


Figure A2-5: UTAF B Low Estimate Hydrocarbon-leg Porosity\*Thickness Map



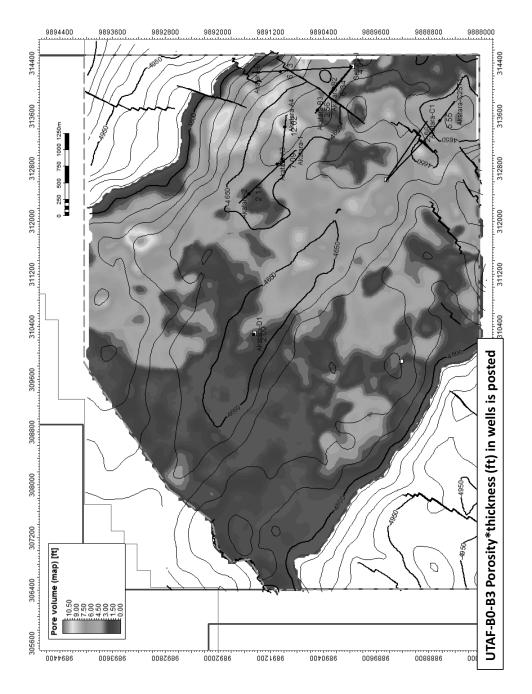


Figure A2-6: UTAF B Best Estimate Hydrocarbon-leg Porosity\*Thickness Map



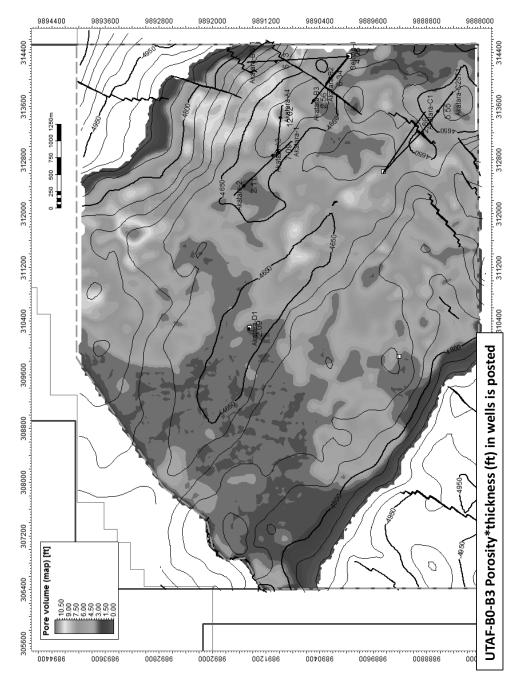


Figure A2-7: UTAF B High Estimate Hydrocarbon-leg Porosity\*Thickness Map



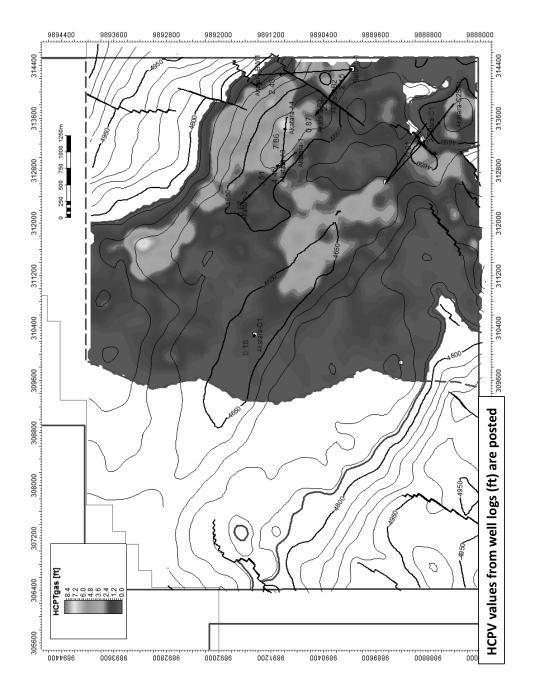


Figure A2-8: UTAF B Low Estimate Equivalent Gas Pore Volume (HCPV) Map



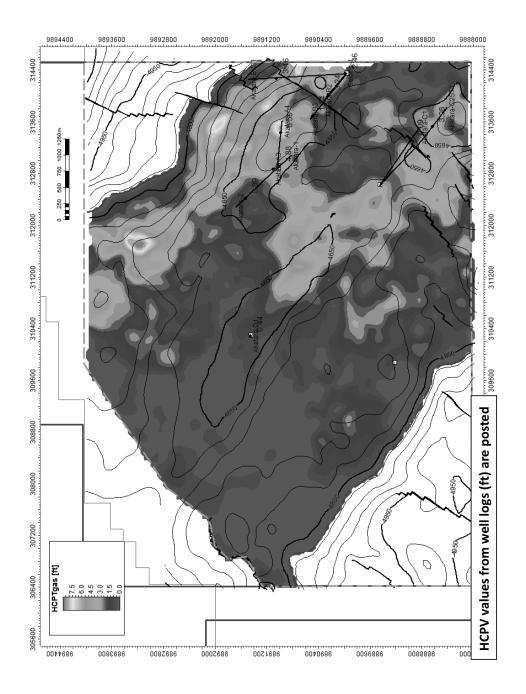


Figure A2-9: UTAF B Best Estimate Equivalent Gas Pore Volume (HCPV) Map



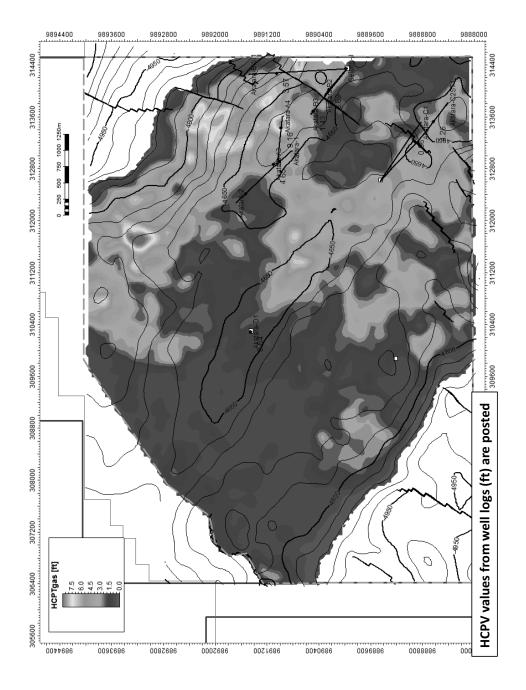


Figure A2-10: UTAF B High Estimate Equivalent Gas Pore Volume (HCPV) Map



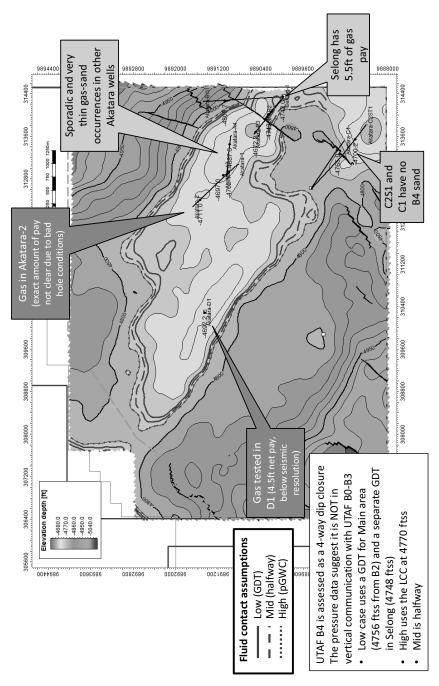


Figure A2-11: UTAF B4 Depth Structure Map and Resource Assessment Assumptions



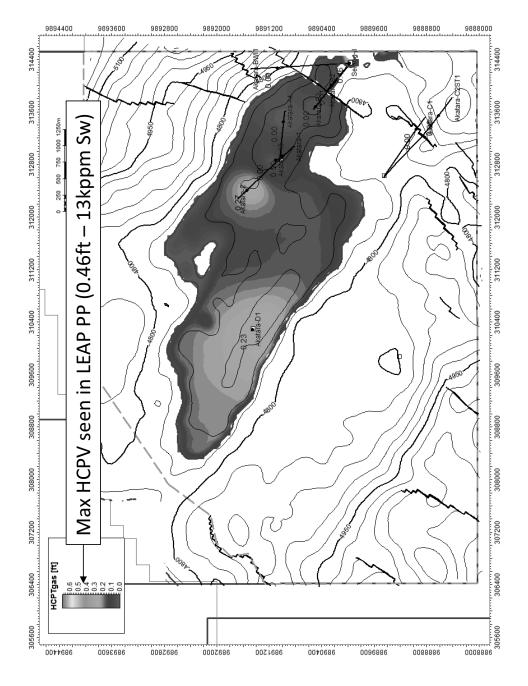


Figure A2-12: UTAF B4 Low Estimate Equivalent Gas Pore Volume (HCPV) Map



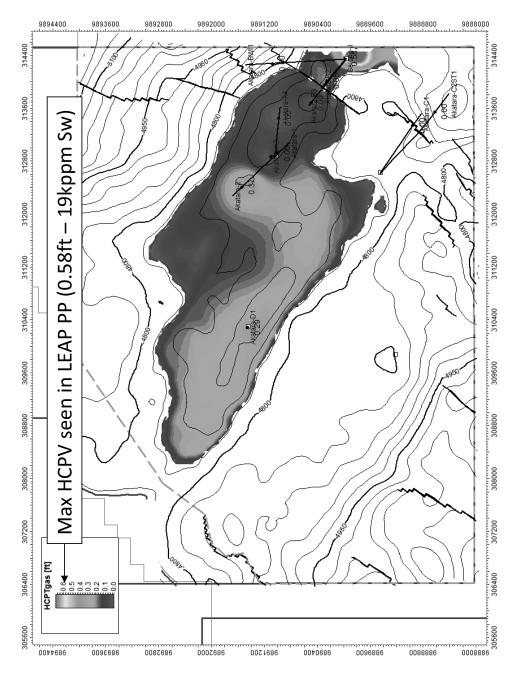


Figure A2-13: UTAF B4 Mid Estimate Equivalent Gas Pore Volume (HCPV) Map



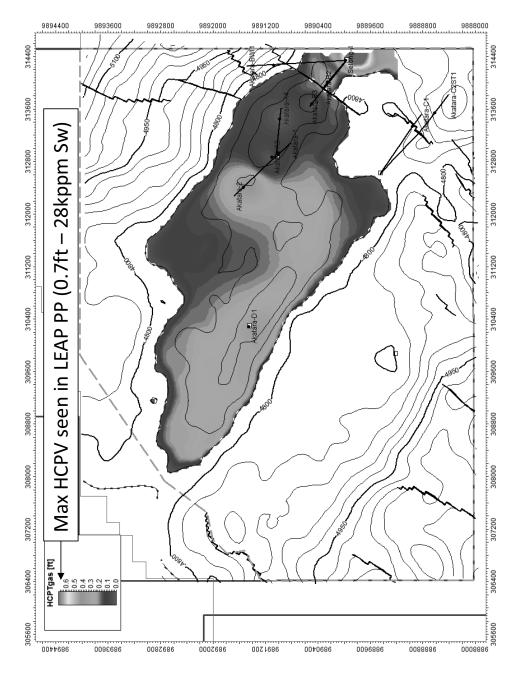


Figure A2-14: UTAF B4 High Estimate Equivalent Gas Pore Volume (HCPV) Map



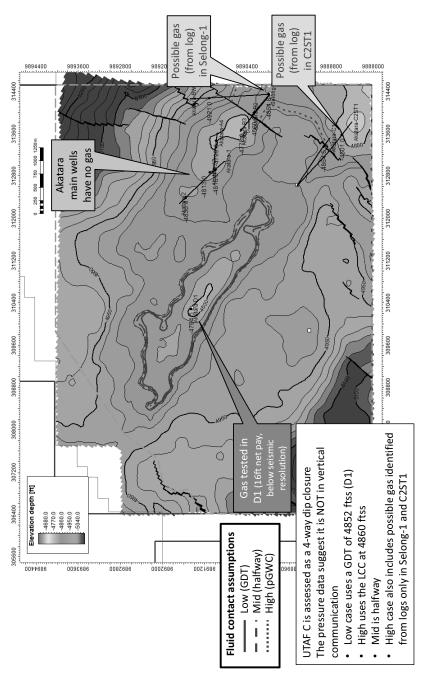


Figure A2-15: UTAF C Depth Structure Map and Resource Assessment Assumptions

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



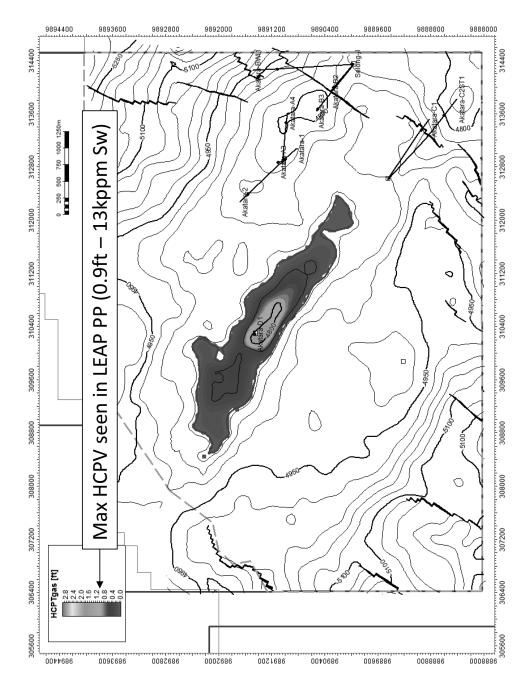


Figure A2-16: UTAF C Low Estimate Equivalent Gas Pore Volume (HCPV) Map



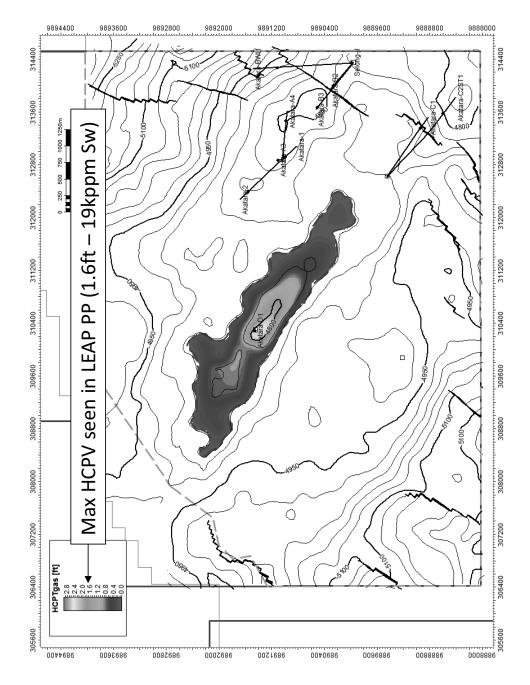


Figure A2-17: UTAF C Mid Estimate Equivalent Gas Pore Volume (HCPV) Map



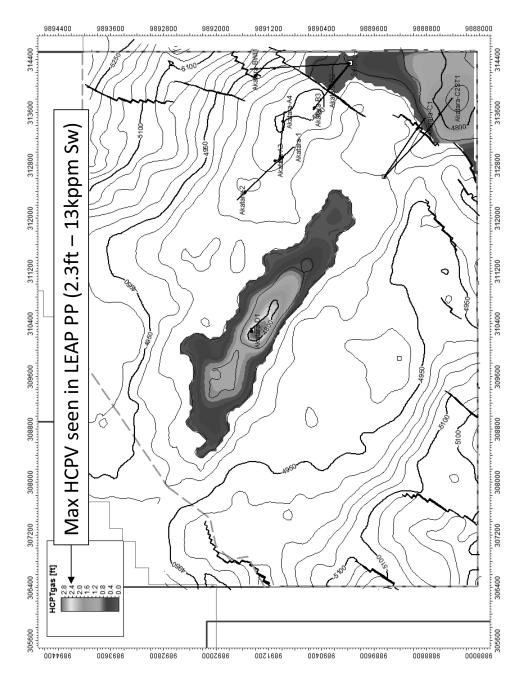


Figure A2-18: UTAF C High Estimate Equivalent Gas Pore Volume (HCPV) Map



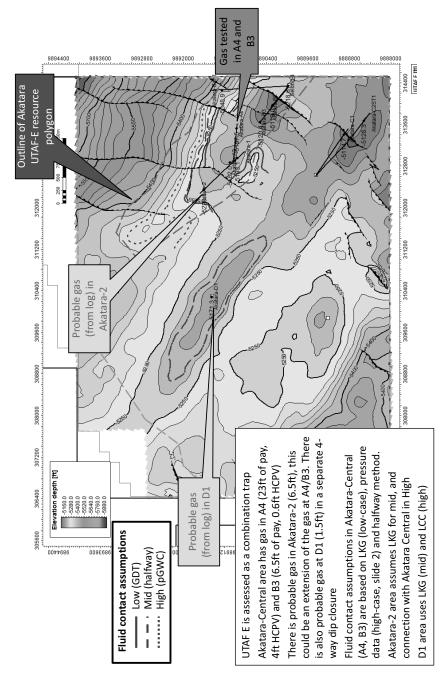


Figure A2-19: UTAF E Depth Structure Map and Resource Assessment Assumptions

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



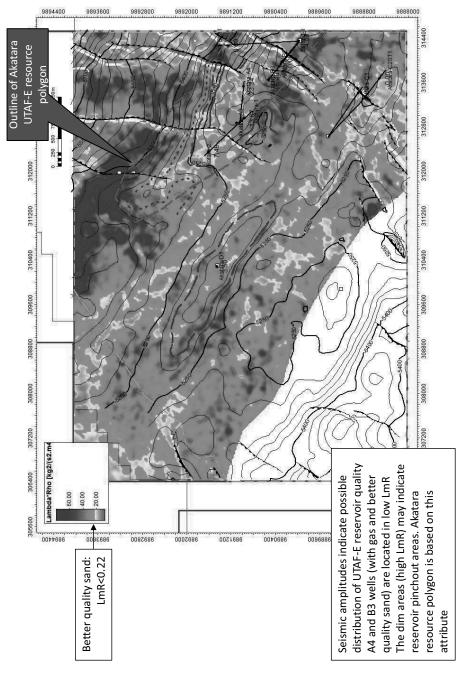


Figure A2-20: UTAF E Seismic Attribute Used for Reservoir Delineation

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



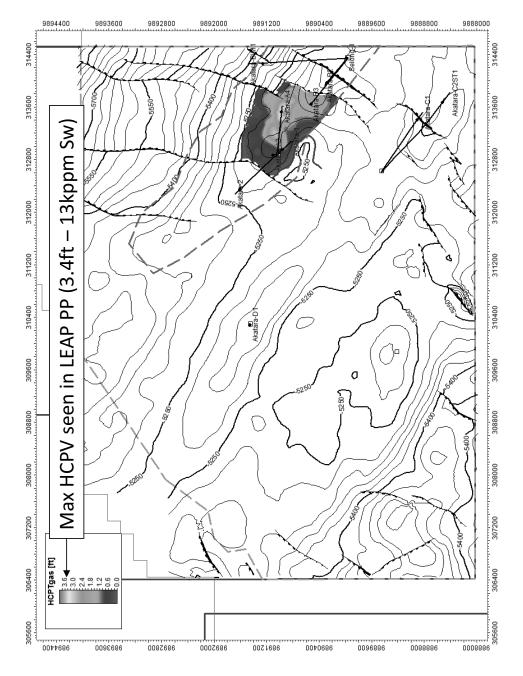


Figure A2-21: UTAF E Low Estimate Equivalent Gas Pore Volume (HCPV) Map



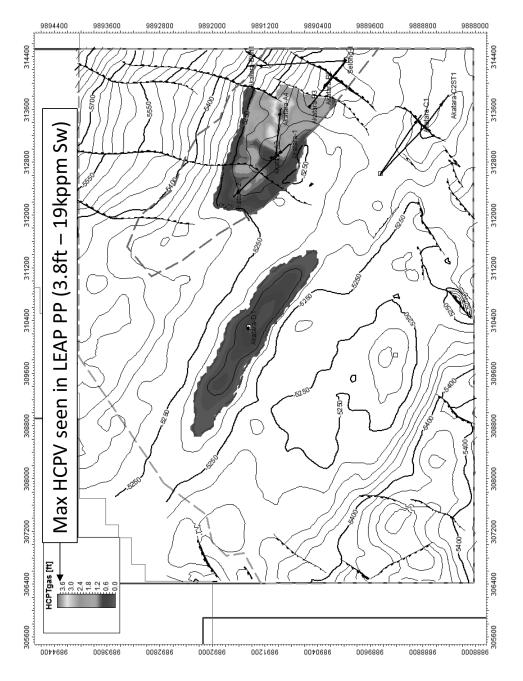


Figure A2-22: UTAF E Best Estimate Equivalent Gas Pore Volume (HCPV) Map



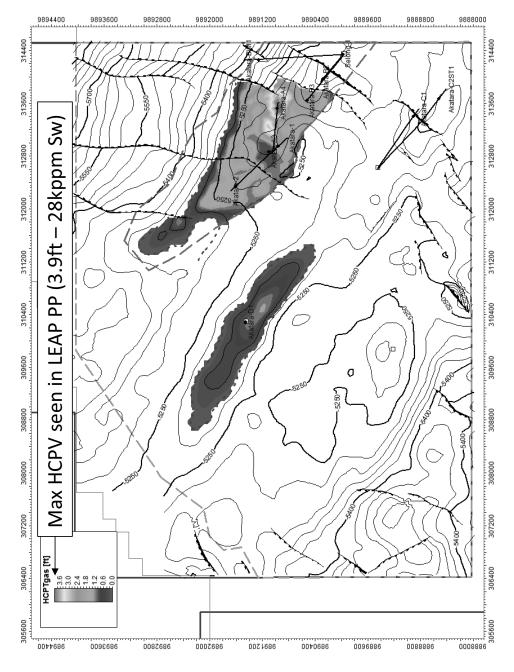
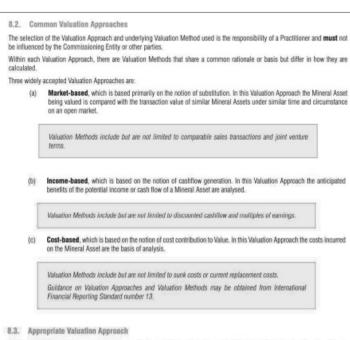


Figure A2-23: UTAF E High Estimate Equivalent Gas Pore Volume (HCPV) Map



## Appendix 3: Valuation to VALMIN CODE 2015 Standards

The VALMIN CODE 2015 requires that more than one valuation method is applied for the asset under assessment, as extracted from the document presented in Figure A3-1.



While each Valuation is time- and circumstance-specific, a general guide to the applicability of each Valuation Approach is outlined in Table 1.

TABLE 1

Valuation Approach	Exploration Projects	Pre-development Projects	Development Projects	Production Projects
Market	Yes	Yes	Yes	Yes
Income	No	In some cases	Yes	Yes
Cost	Yes	In some cases	No	No

For papers on valuation in the minerals sector, refer to the OneMine Global Library on the AustIMM web site (http://www.ausimm.com.au) and the Publications section of the AIG web site (http://www.aig.org.au).

A Valuation Report should make use of at least two Valuation Approaches. Where more than one Valuation Approach is used, the Practitioner should comment on how the results compare and on the reasons for selecting the Value adopted. If it is impractical to use two Valuation Approaches, the Practitioner must clearly and unambiguously outline the reasons for not

A Practitioner must make use of Valuation Methods that are suitable for the Mineral Assets under consideration. Selection of an appropriate Valuation Method will depend on such factors as the:

- (a) nature of the Valuation;
- (b) development status of the Mineral Assets; and
- (c) extent and reliability of available information.

Figure A3-1: VALMIN CODE 2015 Valuation Approaches

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



Based on the near-term, pre-development status of the Asset, THREE60 Energy has applied all three valuation approaches detailed above, with emphasis on the Market-Based approach due to the recent transaction of the Asset to the new operator, Jadestone Energy. The approaches applied are described below.

## Income-Based Assessment (Discounted Cash Flow)

During the assessment of the Asset, THREE60 Energy has reviewed and amended the previous operator's production forecasting for the near-term Akatara Gas Development. These have been further updated with new schedules for costs and production provided by Jadestone Energy.

- i) Production commencing in Q1 2024 (Jadestone Energy) and adjusted by THREE60 Energy proportionally to fit our subsurface ranges of uncertainty (see Section 3.5);
- ii) Gas Price per the December 2021 Gas Sales Agreement signed between Jadestone Energy and PT. PLN for the sales of 20.5 BBTU/d of gas at US\$ 5.60/ MMBTU (see Section 4.2.1);
- iii) Condensate and LPG Prices based on third-party published price forecasts (see Sections 4.2.2 and 4.2.3);
- iv) Capital Costs applying the third-party FEED assessment for the development and rescheduling commencement of expenditure from Q1 2022 (see Section 4.3.1) and assumptions regarding the abandonment of the Asset (see Section 4.3.3); and
- v) **Operating Costs** per Jadestone Energy's assessment of the fixed and variable expenses for the facilities, wells, staff/office and general & administration (see **Section 4.3.2**).

THREE60 Energy has placed the range of profiles and assumptions into a discounted cash flow (DCF) model to extract the Gross, Working Interest and Net Entitlement volumes and values for the Akatara Gas Development Project. The DCF model applies views on timing, prices (gas, LPG, and condensate) and discount factors within the terms and conditions of the PSC (see **Section 4.1**) to determine the economic cutoff of the Contingent Resources and the associated volume and value.

A summary of the values for the Contingent Resources is presented in **Table A3-1**, with an **effective date of December 31**, **2021**. Net Present Values (NPVs) pertain to Eneco's Net Entitlement within the PSC at different discount rates.

The table above presents the full project life-cycle valuation of the Akatara Gas Development Project; however, there are other considerations that can be taken into account on the valuation of the Asset as detailed below.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



### Contingent Resources (Akatara Gas Development Project) 1

Contingent Resources		Net Present Value <sup>2</sup> (discount rate) at 10% Working Interest US\$ MM <sup>3</sup>				
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25
1C	15.5	10.9	7.4	4.9	2.9	1.4
2C	23.2	15.8	10.8	7.1	4.5	2.6
3C	29.0	19.2	12.8	8.4	5.4	3.1

Contingent Resources	Net Present Value <sup>2</sup> (discount rate) at 9% Working Interest  US\$ MM <sup>3</sup>					
Category	NPV0	NPV5	NPV10	NPV15	NPV20	NPV25
1C	15.5	10.8	7.4	4.9	2.9	1.4
2C	22.2	15.2	10.3	6.8	4.3	2.4
3C	27.5	18.3	12.2	8.0	5.1	2.9

#### Notes:

- Contingent Resources values relate to Eneco's Net Entitlement within the PSC and are for the planned Gas Development Project. PRMS Project Maturity Sub-class "Development Pending". First gas is planned for Q1 2024. Contingent Resources values are unrisked.
- Eneco's 10% net working interest in the Asset is presented in the upper table. Note, however, the lower table presents
  the case whereby Eneco's interest reduces to 9%, based on the local Indonesian government exercising its 10%
  back-in right under the PSC at the time of development sanction.
- 3. US\$ MM: Millions of United States Dollars.

Table A3-1: Valuation of Contingent Resources in the Lemang PSC, as of Effective Date December 31, 2021

## **Market-Based Valuation (Comparative Transaction)**

The Asset was sold by the previous operator (Mandala Energy) to the new Operator (Jadestone Energy) on June 29, 2020, with the purchase price being disclosed (<a href="https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/">https://www.jadestone-energy.com/acquisition-of-operated-90-interest-in-lemang-psc/</a>). This, therefore, give a direct insight to the fair market value for an armslength transaction between a willing buyer and a willing seller. Often, such information does not exist or is dated and requires re-basing to apply appropriate adjustments for costs and prices. Commonly, assessment of other regional analogue transactions is required to attempt to determine a dollar per barrel equivalent price (US\$/BOE) paid by the buyer for the best estimate volumes for the Asset. In many cases, the volumes may not be disclosed and the structure of the purchase price may include several contingencies and/or asset swap, share swap balancing, market drivers etc. that present non-definitive inputs to the US\$/BOE estimate.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











However, in the case of the Akatara Gas Development Project transaction from June 2020, Jadestone Energy's press release presented all details of the deal:

- a) Initial Cash Payment US\$ 12.0 MM for 90% operated interest;
- b) Incremental Payment US\$ 5.0 MM once the project commences production (2024); and
- c) Contingent Payments of up to US\$ 26.7 MM if several upsides are realised, comprising of:
  - i. US\$ 3.0 MM should first gas occur prior to March 31, 2023;
  - ii. US\$ 3.0 MM if audited close out costs are equal to or less than budget;
  - US\$ 0.7 MM on VAT refund related to pre-effective date expenditures exceeding US\$ 6.7 MM (gross);
  - iv. US\$ 3.0 MM if Average Saudi CP exceeds US\$ 620/MT in year one of production;
  - v. US\$ 2.5 MM if Average Dated Brent exceeds US\$ 80/stb in year one of production;
  - vi. US\$ 2.0 MM if Average Saudi CP exceeds US\$ 620/MT in year two of production;
  - vii. US\$ 1.5 MM if Average Dated Brent exceeds US\$ 80/stb in year two of production; and
  - viii. if a new discovery is made on the drilling of the final commitment well, US\$ 3.0 MM is payable upon approval of the resulting plan of development, and an additional US\$ 8.0 MM is payable if oil reserves approved under that plan of development are no less than 8.4 MMstb (gross).

In essence, a reasonable Market-based Comparative Transaction valuation for the Asset with the commencement of production in early 2024 is set at US\$ 17.0 MM for 90% interest, which equates to US\$ 18.9 MM at 100% interest and, thus, US\$ 1.9 MM for Eneco's 10% interest.

## **Cost-Based Valuation (Cash Call Positioning)**

The final metric for assessing the value of the Asset relates to the current positioning of Eneco's working interest in the PSC and considerations over costs owed in the past, presently and in the future. This utilises the DCF and adjusts for unpaid cash calls and the possibility that the Asset is defaulted to the Operator due to non-payment. THREE60 Energy's assessment forms a reasonable range of valuations as presented below:

- a) On default US\$ 0.0 MM (zero) as the Operator takes Eneco's defaulted interest;
- b) Full Project Basis (as of end-2021) US\$ 5.8 MM based on full project NPV15 at 9% working interest (US\$ 7.1 MM) that assumes local government entity back-in (10% gross) at production commencement and deduction of current outstanding cash calls for US\$ 1.4 MM.
- c) Full Project Basis (at first production in 2024) undetermined but note that the outstanding cash call position per b) above as of end-2021 would increase significantly up to the point of first production in 2024 to include ~US\$ 1 MM in net additional OPEX and US\$ 9.7 MM as Eneco's 10% share of development CAPEX costs. THREE60 Energy opines that this case would not proceed as the Operator would enact point a) above.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



## **Opinion on Fair Market Valuation**

In conclusion, the range in valuation is broad and based on perception of different business scenarios. THREE60 Energy opines that a reasonable fair market value of Eneco's current interest in the Asset is **US\$ 1.9 MM** applying the observations below:

- a) Market-based Valuation direct metric that considers the June 2020 arms-length comparative transaction for the Asset between a willing buyer (Jadestone Energy) and a willing seller (Mandala Energy). Pro-rating the initial and incremental payments announced by the buyer to Eneco's 10% pre-production share in the asset result in the valuation of US\$ 1.9 MM. The contingent upside payments have been excluded from the analysis.
- b) Income-based Valuation based on full field life economics for the Asset using best estimates for production, costs and prices within the terms and conditions of the PSC. The economic analysis forms a broad range of values due to the uncertainty ranges of the inputs and commercial assumptions. The contingent payments have not been modelled which, if realised, would erode gross project value.
- c) Cost-based Valuation an alternative process that assesses certain legal aspects of Eneco's cash call positioning for the Asset upon which THREE60 Energy is not in a position to substantiate on likelihood, but which present a possible range of uncertainty of the valuation.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











# Appendix 4: Glossary of Terms and Abbreviations

1C	denotes a Low estimate scenario of Contingent Resources
1P	denotes a Low estimate / Proved Reserves (see <i>Proved Reserves</i> )
1U	denotes a Low estimate scenario of Prospective Resources
2C	denotes a Best estimate scenario of Contingent Resources
2P	denotes a Best estimate / Proved plus Probable Reserves
2U	denotes a Best estimate scenario of Prospective Resources
3C	denotes a High estimate scenario of Contingent Resources
3P	denotes a High estimate / Proved plus Probable plus Reserves
3U	denotes a High estimate scenario of Prospective Resources
2D seismic	seismic data acquired in a single traverse or series of traverses. 2D seismic data provides single cross sections
3D seismic	seismic data acquired as multiple, closely spared traverses. 3D seismic data typically provides a more detailed and accurate image of the subsurface than 2D seismic
ABEX	Decommissioning costs
Aggregation	the process of summing reservoir (or project) level estimates of resource quantities to higher levels or combinations such as field, country or company totals. Arithmetic summation may yield different results from probabilistic aggregations of distributions
ALS	Abnormal Limit State – structural design
API	American Petroleum Institute
appraisal	the phase of petroleum operations immediately following a successful discovery. Appraisal is carried out to determine size, production rate and the most efficient development of a field
appraisal well	a well drilled as part of an appraisal of a field
asl	above sea level
В	billion
bbl	barrels
bbl/d	barrels per day
Bcm	billion cubic metres
block	term commonly used to describe areas over which there is a petroleum or production licence
Bg	gas formation volume factor
Bgi	gas formation volume factor (initial)
Во	oil formation volume factor
Boi	oil formation volume factor (initial)
Bw	water volume factor
BOE	barrels of oil equivalent. Converting gas volumes to oil equivalent is customarily done on the basis of the nominal heating content or calorific value of the fuel. Before aggregating, the gas volumes must be converted to the same temperature and pressure. Common industry gas conversion factors usually range between 1 barrel of oil equivalent = 5,600 scf of gas to 6,000 scf of gas

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











ВОР	Blowout Preventer
bopd	barrels of oil per day
BTU	British Thermal Unit
Bscf	billions of standard cubic feet
bwpd	barrels of water per day
CAPEX	Capital expenditure
charge or migration	the movement of hydrocarbons from source rocks into reservoir rocks. Migration can be local or can occur along distances of hundreds of kilometres in large sedimentary basins, and is critical to a viable petroleum system
closure	the height from the apex of a reservoir structure to the lowest contour that contains the reservoir structure (spill). Measurements of both the areal closure and the distance from the apex to the lowest closing contour are typically used for the calculations of the estimates hydrocarbon content of a trap
CO <sub>2</sub>	Carbon dioxide
commercial discovery	discovery of oil and gas which the Company determines to be commercially viable for appraisal and development
condensate	liquid hydrocarbons which are sometimes produced with natural gas and liquids derived from natural gas
CGR	Condensate Gas Ratio
Contingent Resources	those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable due to one or more contingencies
Conventional	Conventional resources are defined as hydrocarbons above a mapped structural closure.
cР	centipoise
Cretaceous	the final period of the Mesozoic era ranging from approximately 65 to 144 million years ago
CT	Corporation Tax
Cw	water compressibility
DBA	decibels
DCA	Decline Curve Analysis
Decommission or decommissioning	the process or the procedure by which the facilities and the infrastructure related to the production of hydrocarbon from an oil field are demobilised and abandoned
Decommissioning charge	cost of charge associated with decommission procedures
deepwater	any area of water over 250 m in depth
dip	the angle at which a rock stratum or structure is inclined from the horizontal
discovery	an exploration well which has encountered oil and gas for the first time in a structure
drilling campaign	a period of time in which drilling activities are performed
dry well	a well which does not encounter hydrocarbons in economically producible quantities
	I
DST	drill stem test
DST E&P	drill stem test exploration and production
E&P	exploration and production

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











EUR	Estimated Ultimate Recovery (Technically Recoverable pre-ELT)
exploration	the phase of operations which covers the search for oil or gas by carrying out detailed geological and geophysical surveys followed up where appropriate by exploratory drilling
exploration drilling	drilling carried out to determine whether oil and gas are present in a particular area or structure
exploration well	a well in an unproven area or prospect, may also be known as a "wildcat well"
facies	sedimentological description of rock
farmout	a term used to describe when a company sells a portion of the acreage in a block to another company, usually in return for consideration and for the buying company taking on a portion of the selling company's work commitments
FBHP	flowing bottom hole pressure
FDP	Field Development Plan (also POD, Plan of Development)
field	a geographical area under which either a single oil or gas reservoir or multiple oil or gas reservoirs lie, all grouped on or related to the same individual geological structure feature and/or stratigraphic condition
formation	a body of rock identified by lithic characteristics and stratigraphic position which is mappable at the earth's surface or traceable in the subsurface
FPSO	Floating production storage and offloading
FTHP	flowing tubing head pressure
ft	feet
GDT	Gas Down To
geophysical	geophysical exploration is concerned with measuring the earth's physical properties to delineate structure, rock type and fluid content — these measurements include electrical, seismic, gravity and magnetics
GIIP	Gas Initially-In-Place
GOR	gas/oil ratio
GRV	gross rock volume
GSA	Gas Sales Agreement
GWC	Gas Water Contact
H <sub>2</sub> S	Hydrogen sulphide
HIC	hydrogen induced cracking
HOA	Heads of Agreement (for sales)
hydrocarbon	a compound containing only the elements hydrogen and carbon. May exist as a solid, a liquid or a gas. The term describes any combination of oil, gas and/or condensate
infrastructure	oil and gas processing, transportation and off-take facilities
IRR	internal rate of return
KB	Kelly Bushing
ka	absolute permeability
kh	horizontal permeability
km	kilometres
km²	square kilometres
kPa	kilopascals
kr	relative permeability
krg	relative permeability of gas

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











krgcl	relative permeability of gas @ connate liquid saturation
krog	relative permeability of oil-gas
kroso	relative permeability at residual oil saturation
kroswt	relative permeability to oil @ connate water saturation
kv	vertical permeability
licence	an exclusive right to explore for petroleum, usually granted by a national governing body
licence area	the area covered by a licence
m	metre
M	thousand
Miocene	the epoch after the Oligocene and before the Pliocene in the Tertiary period approximately from 23 million to 5.3 million years ago
MM	million
MMBOE	million barrels of oil equivalent
MMstb	million stock tank barrels
MD	measured depth
mD	permeability in millidarcies
m <sup>3</sup>	cubic metres
m³/d	cubic metres per day
MMscfd	millions of standard cubic feet per day
m/s	metres per second
msec	milliseconds
mV	millivolts
MT	thousands of metric tonnes
MMT	millions of metric tonnes
MOD	Money of the Day
MPa	mega pascals
natural gas	gas, predominantly methane, occurring naturally, and often found in association with crude petroleum
N <sub>2</sub>	Nitrogen
NTG	net to gross ratio
NGL	Natural Gas Liquids
NUI	Normally Unmanned Installation
offshore	that geographical area that lies seaward of the coastline
oil	a mature of liquid hydrocarbons of different molecular weight
oil field	the mapped distribution of a proven oil-bearing reservoir or reservoirs
Oligocene	the epoch after the Eocene and before the Miocene in the Tertiary period approximately from 34 million to 23 million years ago
onshore	that geographic area that lies landward of the coastline
operator	the company that has legal authority to drill wells and undertake production of oil and gas.  The operator is often part of a consortium and acts on behalf of the consortium
OPEX	Operating expenses
OWC	oil water contact

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











P90	denotes a scenario which has at least a 90% probability of occurring
P50	denotes a scenario which has at least a 50% probability of occurring
P10	denotes a scenario which has at least a 10% probability of occurring
participating interests	the proportion of exploration and production costs each party will bear and the proportion of production each party will receive, as set out in an operating agreement
Pb	bubble point pressure
Pc	capillary pressure
Pd	Probability of development (of a discovery)
petroleum	A generic name for oil and gas, including crude oil, natural gas liquids, natural gas and their products
petroleum system	Geologic components and processes necessary to generate and store hydrocarbons, including a mature source rock, migration pathway, reservoir rock, trap and seal
Pg	Probability of geologic discovery of an undrilled exploration lead or prospect
phase	a distinct state of matter in a system, e.q. liquid phase or gas phase
PHI	porosity fraction
PHIT	Total porosity (including clay-bound water)
PHIE	Effective porosity
pi	initial reservoir pressure
PI	productivity index
PIIP	Petroleum Initially-In-Place
Play	a conceptual model for a style of hydrocarbon accumulation
PLEM	Pipeline end manifold
Pliocene	the epoch after the Miocene up to the end of the Tertiary period approximately from 5.3 million to 1.8 million years ago
PLT	Production Logging Tool
POD	Plan Of Development (also FDP, Field Development Plan)
POR	porosity
Possible Reserves	Possible Reserves are those additional Reserves that analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the highestimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves that are located outside of the 2P area (not upside quantities to the 2P scenario) may exist only when the commercial and technical maturity criteria have been met (that incorporate the Possible development scope). Standalone Possible Reserves must reference a commercial 2P project (e.g., a lease adjacent to the commercial project that may be owned by a separate entity), otherwise stand-alone Possible is not permitted.
ppm	parts per million
Probable Reserves	Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.

Qualified Person's Report and Valuation – Lemang PSC, Indonesia



musamaat	an identified trap that may contain hydrocarbons. A potential hydrocarbon accumulation may be described as a lead or prospect depending on the
prospect	degree of certainty in that accumulation. A prospect is generally mature enough to be considered for drilling
Prospective Resources	those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from undiscovered accumulations
prospectivity	the likelihood of an area to contain potential hydrocarbon accumulations, i.e. prospects
Proved Reserves	Proved Reserves are those quantities of Petroleum that, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from known reservoirs and under defined technical and commercial conditions. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.
psi	pounds per square inch
psia	pounds per square inch absolute
psiq	pounds per square inch gauge
Pwt	flowing bottom hole pressure
PVT	pressure volume temperature
rb	barrel(s) of oil at reservoir conditions
RCAL	Routine Core Analysis
rcf	reservoir cubic feet
Reserves	those quantities of petroleum which are anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions, reference should be made to the full SPE PRMS definitions for the complete definitions and guidelines
reservoir	an underground porous and permeable formation where oil and gas has accumulated
Resources	Contingent and Prospective Resources, unless otherwise specified
RFT	repeat formation tester
RKB	relative to Kelly bushing
rm3	reservoir cubic metres
SCAL	Special Core Analysis
scf	standard cubic feet measured at 14.7 pounds per square inch and 60° F
scfd	standard cubic feet per day
scf/stb	standard cubic feet per stock tank barrel
seal	a relatively impermeable rock, commonly shale, anhydrite or salt that forms a barrier or cap above and around reservoir rock such that fluids cannot migrate beyond the reservoir. A seal is a critical component of a complete petroleum system
seismic survey	a method by which an image of the earth's subsurface is created through the generation of shockwaves and analysis of their reflection from rock strata
SGS	Sequential Gaussian Simulation
SIS	Sequential Indicator Simulation
So	oil saturation
Sor	residual oil saturation
Sorw	residual oil saturation (waterflood)

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











Soi	irreducible oil saturation
source	characteristic of organic-rich rocks to contain the precursors to oil and gas, such that the type and quality of expelled hydrocarbon can be assessed
source potential	characteristic of a rock formation to constitute a source of oil and gas
source rock	a rock rich in organic matter which, if given the right conditions, will generate oil or gas. Typical source rocks, usually shales or limestones, contain at least 0.5 per cent total organic carbon (TOC), although a rich source rock might have as much as 10 per cent organic matter. Access to a working source rock is necessary for a complete petroleum system
SPE PRMS	Society of Petroleum Engineers – Petroleum Resources Management System (of 2018)
stb	stock tank barrels measured at 14.7 pounds per square inch and 60° F
stb/d	stock tank barrels per day
STOIIP	Stock Tank Oil Initially-In-Place
Sw	water saturation
Swc	connate water saturation
Sw <sub>irr</sub>	Irreducible water saturation
t	tonnes
THP	tubing head pressure
trap	A configuration of rocks suitable for containing hydrocarbons and sealed by a relatively impermeable formation through which hydrocarbons will not migrate. Traps are described as structural traps (in deformed strata such as folds and faults) or stratigraphic traps (in areas where rock types change, such as unconformities, pinch outs and reefs). A trap is an essential component of a petroleum system
Tscf	trillion standard cubic feet
TVDSS	true vertical depth (sub-sea)
TVT	true vertical thickness
TWT	two-way time
Unconventional	Unconventional intervals are those below structural closure in which hydrocarbons have been demonstrated to be present or considered to be present
ULS	Ultimate Limit State – structural design
US\$	United States Dollar
Vsh	shale volume
W/m/K	watts/metre/°K
WAP	weighted average gas price
WC	water cut
WUT	Water Up To
μ	viscosity
μgb	viscosity of gas
μob	viscosity of oil
μw	viscosity at water

Qualified Person's Report and Valuation – Lemang PSC, Indonesia











## Appendix 5: SPE Petroleum Resources Management System

The following text has been extracted from sections 1 and 2 of the SPE PRMS 2018. The full document can be obtained at:

https://www.spe.org/en/industry/petroleum-resources-management-system-2018/

Petroleum resources are the quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resources assessments estimate quantities in known and yet-to-be-discovered accumulations. Resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating projects, and presenting results within a comprehensive classification framework.

The estimation of petroleum resource quantities involves the interpretation of volumes and values that have an inherent degree of uncertainty. These quantities are associated with development projects at various stages of design and implementation. Use of a consistent classification system enhances comparisons between projects, groups of projects, and total company portfolios according to forecast production profiles and recoveries. Such a system must consider both technical and commercial factors that impact the project's economic feasibility, its productive life, and its related cash flows.

## Petroleum Resources Classification Framework

Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid state. Petroleum may also contain non-hydrocarbons, common examples of which are carbon dioxide, nitrogen, hydrogen sulphide, and sulphur. In rare cases, non-hydrocarbon content can be greater than 50%.

The term resources as used herein is intended to encompass all quantities of petroleum naturally occurring within the Earth's crust, both discovered and undiscovered (whether recoverable or unrecoverable), plus those quantities already produced. Further, it includes all types of petroleum whether currently considered as conventional or unconventional resources.

## **Basic Principles and Definitions**

**Figure SPE-1** graphically represents the PRMS resources classification system. The system classifies resources into discovered and undiscovered and defines the recoverable resources classes: Production, Reserves, Contingent Resources, and Prospective Resources, as well as Unrecoverable Petroleum.

The horizontal axis reflects the range of uncertainty of estimated quantities potentially recoverable from an accumulation by a project, while the vertical axis represents the chance of commerciality, Pc, which is the chance that a project will be committed for development and reach commercial producing status.

The following definitions apply to the major subdivisions within the resources classification:

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



- A. **Total Petroleum Initially-In-Place (PIIP)** is all quantities of petroleum that are estimated to exist originally in naturally occurring accumulations, discovered and undiscovered, before production.
- B. **Discovered PIIP** is the quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations before production.
- C. Production is the cumulative quantities of petroleum that have been recovered at a given date. While all recoverable resources are estimated, and production is measured in terms of the sales product specifications, raw production (sales plus non-sales) quantities are also measured and required to support engineering analyses based on reservoir voidage.

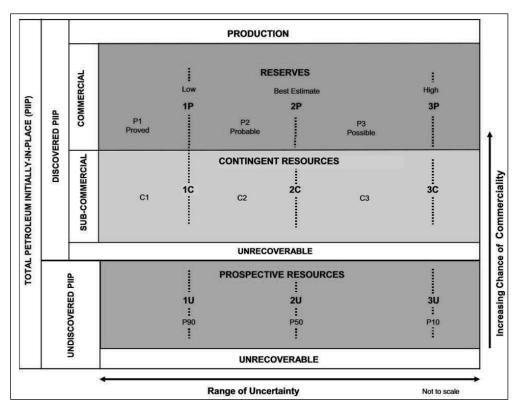


Figure SPE-1: Resources Classification Framework

Multiple development projects may be applied to each known or unknown accumulation, and each project will be forecast to recover an estimated portion of the initially-in-place quantities. The projects shall be subdivided into commercial, sub-commercial, and undiscovered, with the estimated recoverable quantities being classified as Reserves, Contingent Resources, or Prospective Resources respectively, as defined below.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



#### A. Reserves

- a. Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must satisfy four criteria: discovered, recoverable, commercial, and remaining (as of the evaluation's effective date) based on the development project(s) applied.
- b. Reserves are recommended as sales quantities as metered at the reference point. Where the entity also recognizes quantities consumed in operations (CiO), as Reserves these quantities must be recorded separately. Non-hydrocarbon quantities are recognized as Reserves only when sold together with hydrocarbons or CiO associated with petroleum production.
  - If the non-hydrocarbon is separated before sales, it is excluded from Reserves.
- c. Reserves are further categorized in accordance with the range of uncertainty and should be subclassified based on project maturity and/or characterized by development and production status.
- B. Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, by the application of development project(s) not currently considered to be commercial owing to one or more contingencies. Contingent Resources have an associated chance of development. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the range of uncertainty associated with the estimates and should be subclassified based on project maturity and/or economic status.
- C. **Undiscovered PIIP** is that quantity of petroleum estimated, as of a given date, to be contained within accumulations yet to be discovered.
- D. Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of geologic discovery and a chance of development. Prospective Resources are further categorized in accordance with the range of uncertainty associated with recoverable estimates, assuming discovery and development, and may be sub-classified based on project maturity.
- E. Unrecoverable Resources are that portion of either discovered or undiscovered PIIP evaluated, as of a given date, to be unrecoverable by the currently defined project(s). A portion of these quantities may become recoverable in the future as commercial circumstances change, technology is developed, or additional data are acquired. The remaining portion may never be recovered because of physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



The sum of Reserves, Contingent Resources, and Prospective Resources may be referred to as "remaining recoverable resources." Importantly, these quantities should not be aggregated without due consideration of the technical and commercial risk involved with their classification. When such terms are used, each classification component of the summation must be provided.

Other terms used in resource assessments include the following:

- A. Estimated Ultimate Recovery (EUR) is not a resources category or class, but a term that can be applied to an accumulation or group of accumulations (discovered or undiscovered) to define those quantities of petroleum estimated, as of a given date, to be potentially recoverable plus those quantities already produced from the accumulation or group of accumulations. For clarity, EUR must reference the associated technical and commercial conditions for the resources; for example, proved EUR is Proved Reserves plus prior production.
- B. **Technically Recoverable Resources (TRR)** are those quantities of petroleum producible using currently available technology and industry practices, regardless of commercial considerations. TRR may be used for specific Projects or for groups of Projects, or, can be an undifferentiated estimate within an area (often basin-wide) of recovery potential.

Whenever these terms are used, the conditions associated with their usage must be clearly noted and documented.

**Project-Based Resource Evaluations** 

The resources evaluation process consists of identifying a recovery project or projects associated with one or more petroleum accumulations, estimating the quantities of PIIP, estimating that portion of those in-place quantities that can be recovered by each project, and classifying the project(s) based on maturity status or chance of commerciality.

The concept of a project-based classification system is further clarified by examining the elements contributing to an evaluation of net recoverable resources (see **Figure SPE-2**).

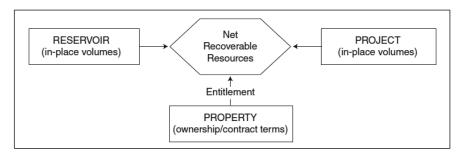


Figure SPE-2: Resources Evaluation

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



**The reservoir** (contains the petroleum accumulation): Key attributes include the types and quantities of PIIP and the fluid and rock properties that affect petroleum recovery.

The project: A project may constitute the development of a well, a single reservoir, or a small field; an incremental development in a producing field; or the integrated development of a field or several fields together with the associated processing facilities (e.g., compression). Within a project, a specific reservoir's development generates a unique production and cash-flow schedule at each level of certainty.

The integration of these schedules taken to the project's earliest truncation caused by technical, economic, or the contractual limit defines the estimated recoverable resources and associated future net cash flow projections for each project. The ratio of EUR to total PIIP quantities defines the project's recovery efficiency. Each project should have an associated recoverable resources range (low, best, and high estimate).

The property (lease or license area): Each property may have unique associated contractual rights and obligations, including the fiscal terms. This information allows definition of each participating entity's share of produced quantities (entitlement) and share of investments, expenses, and revenues for each recovery project and the reservoir to which it is applied. One property may encompass many reservoirs, or one reservoir may span several different properties. A property may contain both discovered and undiscovered accumulations that may be spatially unrelated to a potential single field designation.

### **Resources Classification**

The PRMS classification establishes criteria for the classification of the total PIIP. A determination of a discovery differentiates between discovered and undiscovered PIIP. The application of a project further differentiates the recoverable from unrecoverable resources. The project is then evaluated to determine its maturity status to allow the classification distinction between commercial and sub-commercial projects. PRMS requires the project's recoverable resources quantities to be classified as either Reserves, Contingent Resources, or Prospective Resources.

#### **Determination of Discovery Status**

A discovered petroleum accumulation is determined to exist when one or more exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially recoverable hydrocarbons and thus have established a known accumulation. In the absence of a flow test or sampling, the discovery determination requires confidence in the presence of hydrocarbons and evidence of producibility, which may be supported by suitable producing analogues. In this context, "significant" implies that there is evidence of a sufficient quantity of petroleum to justify estimating the in-place quantity demonstrated by the well(s) and for evaluating the potential for commercial recovery.

Where a discovery has identified recoverable hydrocarbons, but is not considered viable to apply a project with established technology or with technology under development, such quantities may be classified as Discovered Unrecoverable with no Contingent Resources. In future evaluations, as appropriate for petroleum resources management purposes, a portion of these unrecoverable quantities may become recoverable resources as either commercial circumstances change or technological developments occur.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



#### **Determination of Commerciality**

Discovered recoverable quantities (Contingent Resources) may be considered commercially mature, and thus attain Reserves classification, if the entity claiming commerciality has demonstrated a firm intention to proceed with development. This means the entity has satisfied the internal decision criteria (typically rate of return at or above the weighted average cost-of-capital or the hurdle rate). Commerciality is achieved with the entity's commitment to the project and all of the following criteria:

- A. Evidence of a technically mature, feasible development plan.
- B. Evidence of financial appropriations either being in place or having a high likelihood of being secured to implement the project.
- C. Evidence to support a reasonable time-frame for development.
- D. A reasonable assessment that the development projects will have positive economics and meet defined investment and operating criteria. This assessment is performed on the estimated entitlement forecast quantities and associated cash flow on which the investment decision is made
- E. A reasonable expectation that there will be a market for forecast sales quantities of the production required to justify development. There should also be similar confidence that all produced streams (e.g., oil, gas, water, CO2) can be sold, stored, re-injected, or otherwise appropriately disposed.
- F. Evidence that the necessary production and transportation facilities are available or can be made available.
- G. Evidence that legal, contractual, environmental, regulatory, and government approvals are in place or will be forthcoming, together with resolving any social and economic concerns.

**Project Status and Project Maturity Sub-classes** 

As **Figure SPE-3** illustrates, development projects and associated recoverable quantities may be subclassified according to project maturity levels and the associated actions (i.e., business decisions) required to move a project toward commercial production.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia











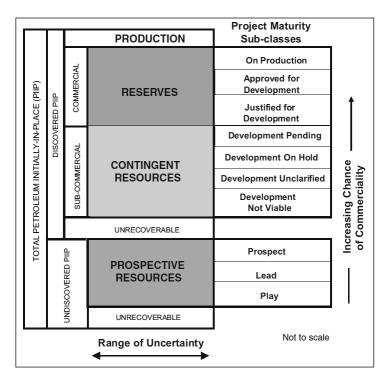


Figure SPE-3: Sub-classes based on Project Maturity

The project maturity class approach supports the management of portfolios of opportunities at various stages of exploration, appraisal, and development. Reserve sub-classes must achieve commerciality while Contingent and Prospective Resources sub-classes may be supplemented by associated quantitative estimates of chance of commerciality to mature.

Resources sub-class maturation is based on those actions that progress a project through final approvals to implementation and initiation of production and product sales. The boundaries between different levels of project maturity are frequently referred to as project "decision gates."

Projects that are classified as **Reserves** must meet the criteria stated **Determination of Commerciality** (above).

Projects sub-classified as Justified for Development are agreed upon by the managing entity and
partners as commercially viable and have support to advance the project, which includes a firm intent
to proceed with development. All participating entities have agreed to the project and there are no
known contingencies to the project from any official entity that will have to formally approve the project.

Justified for Development Reserves are reclassified to Approved for Development after a FID has been made. Projects should not remain in the Justified for Development sub-class for extended time

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



periods without positive indications that all required approvals are expected to be obtained without undue delay. If there is no longer the reasonable expectation of project execution (i.e., historical track record of execution, project progress), the project shall be reclassified as Contingent Resources.

Projects classified as **Contingent Resources** have their sub-classes aligned with the entity's plan to manage its portfolio of projects. Thus, projects on known accumulations that are actively being studied, undergoing feasibility review, and have planned near-term operations (e.g., drilling) are placed in Contingent Resources Development Pending, while those that do not meet this test are placed into either Contingent Resources On Hold, Unclarified, or Not Viable.

- Where commercial factors change and there is a significant risk that a project with Reserves will no longer proceed, the project shall be reclassified as Contingent Resources.
- For Contingent Resources, evaluators should focus on gathering data and performing analyses to
  clarify and then mitigate those key conditions or contingencies that prevent commercial development.
  Note that the Contingent Resources sub-classes described above and shown in Figure SPE-2 are
  recommended; however, entities are at liberty to introduce additional sub-classes that align with
  project management goals.

For **Prospective Resources**, potential accumulations may mature from Play, to Lead and then to Prospect based on the ability to identify potentially commercially viable exploration projects. The Prospective Resources are evaluated according to chance of geologic discovery, Pg, and chance of development, Pd, which together determine the chance of commerciality, Pc. Commercially recoverable quantities under appropriate development projects are then estimated. The decision at each exploration phase is whether to undertake further data acquisition and/or studies designed to move the Play through to a drillable Prospect with a project description range commensurate with the Prospective Resources subclass.

#### **Resources Categorization**

The horizontal axis in the resources classification in Figure SPE-1 defines the range of uncertainty in estimates of the quantities of recoverable, or potentially recoverable, petroleum associated with a project or group of projects. These estimates include the uncertainty components as follows:

- A. The total petroleum remaining within the accumulation (in-place resources).
- B. The technical uncertainty in the portion of the total petroleum that can be recovered by applying a defined development project or projects (i.e., the technology applied).
- C. Known variations in the commercial terms that may impact the quantities recovered and sold (e.g., market availability; contractual changes, such as production rate tiers or product quality specifications) are part of project's scope and are included in the horizontal axis, while the chance of satisfying the commercial terms is reflected in the classification (vertical axis).

The uncertainty in a project's recoverable quantities is reflected by the 1P, 2P, 3P, Proved (P1), Probable (P2), Possible (P3), 1C, 2C, 3C, C1, C2, and C3; or 1U, 2U, and 3U resources categories.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



The commercial chance of success is associated with resources classes or sub-classes and not with the resources categories reflecting the range of recoverable quantities.

There must be a single set of defined conditions applied for resource categorization. Use of different commercial assumptions for categorizing quantities is referred to as "split conditions" and are not allowed.

Frequently, an entity will conduct project evaluation sensitivities to understand potential implications when making project selection decisions. Such sensitivities may be fully aligned to resource categories or may use single parameters, groups of parameters, or variances in the defined conditions.

Moreover, a single project is uniquely assigned to a sub-class along with its uncertainty range. For example, a project cannot have quantities classified in both Contingent Resources and Reserves, for instance as 1C, 2P, and 3P. This is referred to as "split classification."

#### Range of Uncertainty

Uncertainty is inherent in a project's resources estimation and is communicated in PRMS by reporting a range of category outcomes. The range of uncertainty of the recoverable and/or potentially recoverable quantities may be represented by either deterministic scenarios or by a probability distribution.

When the range of uncertainty is represented by a probability distribution, a low, best, and high estimate shall be provided such that:

- A. There should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- B. There should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- C. There should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.

In some projects, the range of uncertainty may be limited, and the three scenarios may result in resources estimates that are not significantly different. In these situations, a single value estimate may be appropriate to describe the expected result.

Evaluators may assess recoverable quantities and categorize results by uncertainty using the deterministic incremental method, the deterministic scenario (cumulative) method, geostatistical methods, or probabilistic methods (read Section 4.2, Resources Assessment Methods). Also, combinations of these methods may be used.

Use of consistent terminology (Figures SPE-1 and SPE-3) promotes clarity in communication of evaluation results.

For Reserves, the general cumulative terms low/best/high forecasts are used to estimate the resulting 1P/2P/3P quantities, respectively. The associated incremental quantities are termed Proved (P1), Probable (P2) and Possible (P3). Reserves are a subset of, and must be viewed within the context of, the complete

Qualified Person's Report and Valuation - Lemang PSC, Indonesia









resources classification system. While the categorization criteria are proposed specifically for Reserves, in most cases, the criteria can be equally applied to Contingent and Prospective Resources.

Upon satisfying the commercial maturity criteria for discovery and/or development, the project quantities will then move to the appropriate resources sub-class.

For **Contingent Resources**, the general cumulative terms low/best/high estimates are used to estimate the resulting 1C/2C/3C quantities, respectively. The terms C1, C2, and C3 are defined for incremental quantities of Contingent Resources.

For **Prospective Resources**, the general cumulative terms low/best/high estimates also apply and are used to estimate the resulting 1U/2U/3U quantities. No specific terms are defined for incremental quantities within Prospective Resources.

#### **Reserves Categories**

The following summarizes the definitions for each Reserves category in terms of both the deterministic incremental approach and scenario approach and also provides the probability criteria if probabilistic methods are applied.

- A. Proved Reserves are those quantities of Petroleum that, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from known reservoirs and under defined technical and commercial conditions. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.
- B. Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate.
- C. Possible Reserves are those additional Reserves that analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the high-estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves that are located outside of the 2P area (not upside quantities to the 2P scenario) may exist only when the commercial and technical maturity criteria have been met (that incorporate the Possible development scope). Standalone Possible Reserves must reference a commercial 2P project (e.g., a lease adjacent to the commercial project that may be owned by a separate entity), otherwise stand-alone Possible is not permitted.

Qualified Person's Report and Valuation - Lemang PSC, Indonesia



#### NOTICE OF EXTRAORDINARY GENERAL MEETING

#### **ENECO ENERGY LIMITED**

(Incorporated in the Republic of Singapore) (Company Registration No. 20031668R)

## NOTICE OF EXTRAORDINARY GENERAL MEETING

**NOTICE IS HEREBY GIVEN** that an extraordinary general meeting ("**EGM**") of Eneco Energy Limited (the "**Company**") will be held by electronic means (via live webcast and telephone audio feed) on Monday, 20 June 2022 at 2:00 p.m. for the purpose of considering and, if thought fit, passing, with or without modifications, the ordinary resolution set out below.

All capitalised terms used in this Notice which are not defined herein shall have the meanings ascribed to them in the circular to shareholders of the Company dated 4 June 2022 (the "Circular").

This Notice has been made available on SGXNET at the URL https://www.sgx.com/securities/company-announcements and the Company's website at the URL www.enecoenergy.com. A printed copy of this Notice will NOT be despatched to shareholders of the Company.

#### **ORDINARY RESOLUTION**

THE ENTRY INTO THE SETTLEMENT AND TRANSFER AGREEMENT DATED 23 NOVEMBER 2021 BY PT. HEXINDO GEMILANG JAYA AND, IN PARTICULAR, THE PROPOSED DISPOSAL OF PT. HEXINDO GEMILANG JAYA'S 10% PARTICIPATING INTEREST IN THE PRODUCTION SHARING CONTRACT RELATING TO THE LEMANG BLOCK TO JADESTONE ENERGY (LEMANG) PTE LTD AS A MAJOR TRANSACTION UNDER CHAPTER 10 OF THE LISTING MANUAL

#### That:

- (a) approval be and is hereby given for the settlement and transfer agreement dated 23 November 2021 (the "Agreement") entered into by PT. Hexindo Gemilang Jaya ("Hexindo") and, in connection thereto, the proposed disposal of Hexindo's 10% participating interest in the production sharing contract dated 18 January 2007 (which was subsequently amended from time to time) relating to the Lemang Block to Jadestone Energy (Lemang) Pte Ltd, for an aggregate consideration of US\$1,857,726.99, on the terms and conditions of the Agreement (the "Proposed Disposal");
- (b) the directors of the Company (the "Directors") or any of them be and are hereby authorised to complete and do all acts and things (including, without limitation, enter into all transactions, arrangements and agreements and approve, sign and execute all such documents which they in their absolute discretion consider to be necessary, and to exercise such discretion as may be required, to approve any amendments, alterations or modifications to any documents, and to sign, file and/or submit any notices, forms and documents with or to the relevant authorities) as they or each of them deem desirable, necessary or expedient to give effect to the matters contemplated by this resolution, the Agreement and the Proposed Disposal as they or each of them may in their or each of their absolute discretion deem fit in the interests of the Company; and
- (c) any acts and things done or performed, and/or any agreements and documents signed, executed, sealed and/or delivered by a Director in connection with this resolution, the Agreement and the Proposed Disposal be and are hereby approved, confirmed and ratified.

## By Order of the Board

**Ang Siew Koon**Company Secretary

4 June 2022

#### NOTICE OF EXTRAORDINARY GENERAL MEETING

#### Important Notice to Shareholders Regarding the Conduct of the Company's EGM

Pursuant to Part 4 of the COVID-19 (Temporary Measures) Act 2020 and the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020 (the "COVID-19 Order"), the Company wishes to inform shareholders of the Company (the "Shareholders") that it will conduct its extraordinary general meeting on Monday, 20 June 2022 at 2:00 p.m. ("EGM") by way of electronic means pursuant to the First Schedule of the COVID-19 Order, and the physical location for the EGM is purely to facilitate the conduct of the EGM by way of electronic means.

The Company will arrange for (i) a "live" webcast of the EGM, which allows Shareholders to view the proceedings of the EGM contemporaneously ("LIVE WEBCAST"); and (ii) audio only means (via telephone), which allows Shareholders to observe the proceedings of the EGM contemporaneously ("AUDIO FEED"). Shareholders can ONLY participate in the EGM via LIVE WEBCAST or AUDIO FEED. The Company will not accept any physical attendance by Shareholders at the physical location of the EGM.

Shareholders should note the following procedures and/or instructions to participate in the EGM LIVE WEBCAST or AUDIO FEED.

#### 1. Voting at the EGM

- (a) Live Voting: Shareholders may cast their votes for each resolution through real-time remote electronic voting at the EGM. Unique access details for live voting will be provided to Shareholders who registered for and are verified to attend the EGM.
- (b) **Voting by Proxy:** As an alternative to live voting, Shareholders who wish to vote on any or all of the resolutions at the EGM may appoint their duly appointed proxies or the Chairman of the EGM as their proxy to vote on their behalf by completing the proxy form attached to the Notice of EGM by downloading it from the Company's announcement on SGXNet or from the Company's website at www.enecoenergy.com. Shareholders should specifically indicate how they wish to vote for or vote against (or abstain from voting on) the resolution set out in the Notice of EGM.

Shareholders must submit the completed and signed proxy form appointing the Chairman of the EGM as proxy (i) by email to sg.is.proxy@sg.tricorglobal.com; or (ii) by post to the Company's Share Registrar, Tricor Barbinder Share Registration Services (A division of Tricor Singapore Pte. Ltd.), 80 Robinsons Road #11-02, Singapore 068898, by 2:00 p.m. on Friday, 17 June 2022 (being not less than seventy-two (72) hours before the time fixed for the EGM). Any incomplete proxy form will be rejected by the Company.

For CPF/SRS investors who wish to attend and vote live at the EGM or wish to appoint the Chairman of the EGM as their proxy, they should approach their respective SRS Operators to submit their votes by email to sg.is.proxy@sg.tricorglobal. com or post to the Company's Share Registrar, Tricor Barbinder Share Registration Services (A division of Tricor Singapore Pte. Ltd.), 80 Robinsons Road #11-02, Singapore 068898 at least seven (7) working days before the EGM.

#### 2. Registration to attend the EGM

Shareholders who wish to attend the EGM can participate by registering at the link as follows:-

https://conveneagm.sg/enecoenergy2022egm/

by 2:00 p.m. on Thursday, 16 June 2022 (the "Registration Deadline") to enable the Company to verify the Shareholders' status. After the verification process, an email containing instructions to access the LIVE WEBCAST or AUDIO FEED (depending on the Shareholder's choice at the point of registration) will be sent to authenticated Shareholders by 12:00 p.m. on Saturday, 18 June 2022.

If Shareholders or their corporate representatives have pre-registered by the Registration Deadline, but did not receive an email by 12:00 p.m. on Saturday, 18 June 2022, they may contact the Company for assistance at 6236 3550 / 6236 3555.

Shareholders may attend the LIVE WEBCAST via your smart phones, tablets or laptops/computers, and the AUDIO FEED via a land or mobile phone line.

Shareholders who wish to attend the EGM via LIVE WEBCAST or AUDIO FEED are reminded that the EGM is private. Invitations to attend the LIVE WEBCAST or AUDIO FEED shall not be forwarded to anyone who is not a Shareholder of the Company or who is not authorised to attend the LIVE WEBCAST or AUDIO FEED. Recording of the LIVE WEBCAST and AUDIO FEED in whatever form is also strictly prohibited.

The Company would like to seek Shareholders' understanding in the event of any technical disruptions during the LIVE WEBCAST and AUDIO FEED.

#### 3. Shareholders' Questions and Answers (Q&A)

- (a) Shareholders who registered for and are verified to attend the EGM will be able to ask questions relating to the resolutions to be tabled for approval at the EGM by submitting text-based questions through real-time electronic communication during the EGM within a prescribed time limit. The Company will endeavour to respond to questions as far as reasonably practicable. Where there are substantially similar questions, the Company will consolidate such questions and consequently not all questions may be individually addressed.
- (b) Shareholders can also submit their questions in advance relating to the resolutions to be tabled for approval at the EGM at the link as follows: https://conveneagm.sg/enecoenergy2022egm/.

The submission deadline for questions is by 2:00 p.m. on Sunday, 12 June 2022.

#### NOTICE OF EXTRAORDINARY GENERAL MEETING

Shareholders are encouraged to submit their questions in accordance with the paragraphs above as soon as possible so that they may have the benefit of the answers to their questions (where substantial and relevant to the agenda of the EGM) prior to submitting their proxy forms.

Please note that substantial questions and relevant comments from Shareholders submitted in advance would be addressed by the Company (as may be determined by the Company at its sole discretion) and posted on SGXNet before the EGM. The Company will also address any subsequent clarifications sought, or follow-up questions, prior to, or at, the EGM in respect of substantial and relevant matters. The responses from the Board and management of the Company shall thereafter be published in the Company's Minutes of the EGM on SGXNet and the Company's website within one (1) month after the conclusion of the EGM.

#### 4. CPF and SRS investors

Persons who hold shares through relevant intermediaries (as defined in Section 181 of the Companies Act 1967 of Singapore), including CPF and SRS investors, and who wish to participate in the EGM ("Relevant Intermediary Participants") by (a) observing, voting and/or listening to the EGM proceedings via the LIVE WEBCAST or AUDIO FEED in the manner provided above; (b) submitting questions in advance of the EGM in the manner provided above; and/or (c) appointing the Chairman of the EGM as proxy to attend speak and vote on their behalf at the EGM, should contact the relevant intermediary (which would include, in the case of CPF and SRS investors, their respective CPF Agent Banks and SRS Operators) through which they hold such shares as soon as possible in order to facilitate the necessary arrangements for them to participate in the EGM. CPF or SRS investors who wish to appoint the Chairman of the EGM as proxy should approach their respective CPF Agent Banks or SRS Operators to submit their votes at least seven (7) working days before the EGM.

#### 5. Documents for the EGM

Documents relating to the business of the EGM, which comprise the Company's Circular, this Notice of EGM, and the proxy form for the EGM (collectively, the "EGM Documents"), have been published on SGXNet and the Company's website at www. enecoenergy.com on 3 June 2022.

#### PERSONAL DATA PRIVACY

By submitting an instrument appointing the Chairman of the EGM to attend, speak and vote at the EGM and/or any adjournment thereof, a member of the Company consents to the collection, use and disclosure of the member's personal data by the Company (or its agents or service providers) for the purpose of the processing and administration by the Company (or its agents) of proxies and representatives appointed for the EGM (including any adjournment thereof) and the preparation and compilation of the attendance lists, proxy lists, minutes and other documents relating to the EGM (including any adjournment thereof), and in order for the Company (or its agents or service providers) to comply with any applicable laws, listing rules, regulations and/or guidelines.

#### **PROXY FORM**

## **ENECO ENERGY LIMITED**

Company Registration No. 200301668R (Incorporated in the Republic of Singapore)

#### IMPORTANT

- 1. The Extraordinary General Meeting ("EGM") is being convened, and will be held, by way of electronic means pursuant to the First Schedule of the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020. Printed copies of the Company's Circular, the Notice of EGM, and this proxy form for the EGM (collectively, the "EGM Documents") will NOT be sent to members of the Company. Instead, the EGM Documents, including the Notice of EGM, will be sent to members of the Company by electronic means via publication on SGXNet and the Company's website at www.enecoenergy.com.
- 2. Alternative arrangements relating to (a) attendance at the EGM via electronic means (including arrangements by which the EGM can be accessed electronically via live webcast and telephone audio feed); (b) submission of questions in advance of, or live at, the EGM, addressing of substantial queries and relevant comments, prior to, or at, the EGM; and (c) voting live at the EGM by the members of the Company themselves or their duly appointed proxies (other than the Chairman of the EGM) via electronic means or voting by appointing the Chairman of the EGM as proxy at the EGM, are set out in the Notice of EGM.
- The accompanying proxy form for the EGM may be downloaded from SGXNet and at the Company's website at www.enecoenergy.com. By submitting a Proxy Form, a member of the Company is deemed to have accepted and agreed to the personal data privacy terms set out in the Notice of EGM.
- Please read the notes overleaf which contain instructions on, inter alia, the appointment of proxy/proxies.

Shares

## **PROXY FORM**

(Please see notes overleaf before completing this Form)

/We*,	(Name)	(NRIC/Passport No.)
of		(Address)

being a member/members\* of Eneco Energy Limited (the "Company"), hereby appoint:-

Name	NRIC/Passport Number	Proportion of Shareholings	
		Number of Shares	%
Address and Email Address			

and/or\*

Name	NRIC/Passport Number	Proportion of Shareholings	
		Number of Shares	%
Address and Email Address			

or failing him/her\*, the Chairman of the EGM as my/our\* proxy to attend, speak and vote for me/us\* on my/our\* behalf at the EGM of the Company held by electronic means on Monday, 20 June 2022 at 2:00 p.m. (Singapore time) and at any adjournment thereof.

I/We\* direct my/our\* proxy/proxies\* to vote for or against, or abstain from the Ordinary Resolution proposed at the EGM as indicated hereunder.

Note: In the absence of specific directions in respect of a resolution, the appointment of the Chairman of the EGM as your proxy for that resolution will be treated as invalid.

All resolution put to vote at the EGM shall be decided by way of poll.

No.	Resolutions relating to:	**For	**Against	**Abstained
1.	The entry into the settlement and transfer agreement			
	dated 23 November 2021 by PT. Hexindo Gemilang			
	Jaya ("Hexindo") and, in particular, the proposed			
	disposal of Hexindo's 10% participating interest in the			
	production sharing contract relating to the Lemang			
	Block to Jadestone Energy (Lemang) Pte Ltd as a major			
	transaction under Chapter 10 of the Listing Manual			

- Delete accordingly
- \*\* If you wish to exercise all your votes "For" or "Against", please mark an "X" within the box provided. Alternatively, please indicate the number of votes as appropriate. If you mark "X" in the abstain box for a particular resolution, you are directing your proxy not to vote on that resoution.

Dated this day of 2022	Total number of Shares in:	No. of
Signature of Shareholder(s)	(a) CDP Register	
Or Common Seal of Corporate Shareholder	(b) Register of Members	

#### **PROXY FORM**

#### Notes:

- Please insert the total number of Shares held by you. If you have Shares entered against your name in the Depository Register (as defined in Section 81SF of the Securities and Futures Act 2001 of Singapore), you should insert that number of Shares. If you have Shares registered in your name in the Register of Members, you should insert that number of Shares. If you have Shares entered against your name in the Depository Register and Shares registered in your name in the Register of Members, you should insert the aggregate number of Shares entered against your name in the Depository Register and registered in your name in the Register of Members. If no number is inserted, the instrument appointing a proxy or proxies shall be deemed to relate to all the Shares held by you.
- 2. Alternative arrangements relating to (a) attendance at the EGM via electronic means (including arrangements by which the EGM can be accessed electronically via live webcast and telephone audio feed); (b) submission of questions in advance of, or live at, the EGM, addressing of substantial queries and relevant comments, prior to, or at, the EGM; and (c) voting live at the EGM by the members of the Company themselves or their duly appointed proxies (other than the Chairman of the EGM) via electronic means or voting by appointing the Chairman of the EGM as proxy at the EGM, are set out in the Notice of FGM.
- Members of the Company (whether individual or corporate) who pre-register to observe and/or listen to the EGM proceedings and wish to vote on the resolutions to be tabled for approval at the EGM may:
  - (a) (where such members of the Company are individuals) vote live at the EGM via electronic means, or (where such members of the Company are individuals or corporates) appoint proxies (other than the Chairman of the EGM) to vote live at the EGM via electronic means on their behalf: or
  - (b) where such members of the Company are individuals or corporates) appoint the Chairman of the EGM as their proxy to vote on their behalf at the EGM in accordance with the instructions as set out in the relevant Proxy Forms.
- 4. Investor who buys shares using CPF monies ("CPF Investor") and/or SRS monies ("SRS Investor") (as may be applicable):
  - (a) may vote live at the EGM via electronic means if they are appointed as proxies by their respective CPF agent banks or SRS operators, and should contact their respective CPF agent banks or SRS operators if they have any queries regarding their appointment as proxies; or
  - (b) may appoint the Chairman of the EGM as proxy, in which case they should approach their respective CPF agent banks or SRS operators to submit their votes at least seven (7) working days before the date of the EGM.
- 5. The Proxy Form must be deposited to the Company in the following manner:
  - (i) by email to <a href="mailto:sg.is.proxy@sg.tricorglobal.com">sg.is.proxy@sg.tricorglobal.com</a>; or
  - (ii) by post to the Company's Share Registrar, Tricor Barbinder Share Registration Services (A division of Tricor Singapore Pte. Ltd.) at 80 Robinson Road, #11-02, Singapore 068898

in either case, by 2:00 p.m. on Friday, 17 June 2022, being not less than seventy-two (72) hours before the time appointed for holding the EGM.

A member who wishes to submit an instrument of proxy must complete and sign the proxy form, before submitting it by post to the address provided above or before scanning and sending by email to the email address provided above.

In appointing the Chairman of the EGM as proxy, a member of the Company must give specific instructions as to voting, or abstentions from voting, in respect of a resolution, failing which the appointment of the Chairman of the EGM as proxy for that resolution will be treated as invalid.

- 6. Where a Proxy Form is executed by an individual, it must be executed under the hand of the individual or his/her attorney duly authorised in writing. Where a Proxy Form is executed by a corporation, it must be executed either under its common seal or under the hand of its attorney or officer duly authorised in writing.
- 7. Where a Proxy Form is signed on behalf of an individual or a corporation, the letter or power of attorney or a duly certified copy thereof must (failing previous registration with the Company) be submitted to the Company together with the Proxy Form, failing which the Proxy Form may be treated as invalid.
- 8. The Company shall be entitled to reject a Proxy Form if it is incomplete, improperly completed, illegible or where the true intentions of the appointor are not ascertainable from the instructions of the appointor specified in the Proxy Form.
- 9. A Depositor shall not be regarded as a member of the Company entitled to attend the EGM and to speak and vote thereat unless their name appears on the Depository Register seventy-two (72) hours before the time set for the EGM.

## **Personal Data Privacy:**

By submitting an instrument appointing a proxy(ies) and/or representative(s), the member accepts and agrees to the personal data privacy terms set out in the Notice of EGM dated 4 June 2022.

#### General:

The Company shall be entitled to reject the instrument appointing a proxy or proxies if it is incomplete, improperly completed or illegible, or where the true intentions of the appointor are not ascertainable from the instructions of the appointor specified in the instrument appointing a proxy or proxies. In addition, in the case of Shares entered in the Depository Register, the Company may reject any instrument appointing a proxy or proxies lodged if the member, being the appointor, is not shown to have Shares entered against his name in the Depository Register as at seventy-two (72) hours before the time appointed for holding the Meeting, as certified by The Central Depository (Pte) Limited to the Company.

