



EDEN ENERGY LTD

ACN 109 200 900

Level 40, Exchange Plaza
2 The Esplanade, Perth, Western Australia, 6000
Telephone: (08) 9282 5889 Facsimile: (08) 9282 5866

Website: www.edenenergy.com.au

ASX QUARTERLY EXPLORATION REPORT FOR PERIOD ENDED 30TH JUNE 2006

HIGHLIGHTS

- During the quarter, Eden Energy Ltd (“Eden”) was listed on the ASX on 6th June 2006, following the raising of \$8.4 million.
- Hythane Co awarded a major US Technology Award.
- Worldwide agreement signed with Advanced Engine Components for promoting Hythane®.
- Major demonstration project MOU signed in California and negotiations underway in both California and North Eastern USA for a series of major Hythane® demonstration projects.
- Negotiations continued with a major Indian engine manufacturer and a Hythane® engine conversion is planned for the second half of 2006. Negotiations commenced with two major regional Indian Natural Gas suppliers in relation to one or more possible Hythane® bus demonstration project in late 2006 or early 2007
- Brehon Cryogenics received its first orders from NASA and a major US soft drink manufacturer to supply important custom designed cryogenic equipment components.
- Preparatory work completed for drilling of three test wells in South Wales for Coal Bed Methane (“CBM”) data scheduled for last quarter of 2006.

Eden Energy Ltd (“Eden”) directly and through its wholly owned subsidiaries, Brehon Energy plc (“Brehon”) and Hythane Company LLC (“Hythane Co”), holds all the interests in these following world-class alternate energy projects.

ASX Listing

Following completion of an \$8.4 million capital raising, Eden Energy Ltd was listed on ASX on 6 June 2006.

Hydrogen and Hythane® (Eden 100%)

Hythane®

Hythane is a mixture of natural gas and hydrogen, usually 5-7% hydrogen by energy. Natural gas is generally about >90% methane, along with small amounts of ethane, propane, higher hydrocarbons, and "inerts" like carbon dioxide or nitrogen.

Hydrogen and methane are complimentary vehicle fuels in many ways. Methane has a relatively narrow flammability range that limits the fuel efficiency and oxides of nitrogen (NO_x) emissions improvements that are possible at lean air/fuel ratios.

The addition of even a small amount of hydrogen, however, extends the lean flammability range significantly. Methane has a slow flame speed, especially in lean air/fuel mixtures, while hydrogen has a flame speed about eight times faster. Methane is a fairly stable molecule that can be difficult to ignite, but hydrogen has an ignition energy requirement about 25 times lower than methane.

Finally, methane can be difficult to completely combust in the engine or catalyse in exhaust after treatment converters. In contrast, hydrogen is a powerful combustion stimulant for accelerating the methane combustion within an engine, and hydrogen is also a powerful reducing agent for efficient catalysis at lower exhaust temperatures.

Hythane® Marketing Progress

Continuing progress was made in the marketing of Hythane®, with significant advancement achieved in the US and India in particular.

1. Worldwide

A worldwide collaboration agreement was signed with Advanced Engine Components Ltd ("AEC") to cooperate on a non-exclusive basis with each party promoting the products and services of the other party.

AEC has its corporate and research headquarters in Perth and an office and assembly facility in Beijing, China. It undertakes research, development and supply of electronic fuel injection and engine management technologies to enable engines to be adapted to run on natural gas.

AEC supplies system components including engine controllers to Iveco (France), two major Chinese engine manufacturers, and is negotiating with another large Indian manufacturer.

Therefore, in addition to potentially generating revenue for Brehon, it is anticipated that this agreement with AEC will accelerate penetration of Hythane® into the very large Chinese and Indian markets. The agreement will also provide significant benefit to Brehon in Europe and other parts of the world.

2. USA

- In June 2006, Hythane Company was awarded in Denver, Colorado, the prestigious 2006 CSIA Apex award for 'Best Use of Technology for a Global Impact'.
- Further design work and preliminary fabrication was undertaken on the range of Hythane® related equipment that Hythane Co proposes to market.
- In the US, the factors driving the Hythane® market continued to strengthen, with rising oil prices and growing concern with emissions and global warming.
- Hythane Company continued discussions with several cities in California in relation to establishing Hythane® demonstration projects for bus fleets, with a view to then rolling out Hythane® as an ultra low emission vehicle fuel.

California introduces very strict emission standards in 2007, and there is a rapidly growing ground swell in that State for conversion to low emission fuels.

Further meetings occurred with the City of Barstow (with which a memorandum of understanding has been signed) and several other cities in both California and now also in

northeast USA in relation to major Hythane® demonstration projects and several of these projects are now only awaiting funding.

Discussions with a major US engine manufacturer are progressing, with a view to undertaking a Hythane engine conversion on their engine. This Hythane engine would then be used in the proposed Hythane® demonstration projects during the second half of 2006.

3. India

Negotiations continued in relation to an initial Hythane® engine conversion for a leading Indian natural gas bus engine.

It is hoped that this conversion will occur before the end of 2006. This will enable Hythane Company to undertake a major Indian Hythane® demonstration project as a forerunner to rolling out Hythane® on a broad-scale as a low emission fuel in Indian buses. Many major Indian cities are converting to Natural Gas as a primary vehicle fuel due to significant smog problems. Negotiations also commenced with two major regional Natural Gas suppliers, with a view to endeavouring to secure one or more Hythane® bus demonstration projects in India by late 2006 or early 2007.

4. China

Brehon Energy, Eden's wholly owned subsidiary, is awaiting the outcome of a tender submitted to the US Department of Energy ("DOE") to build a Hythane® refuelling station in Beijing as part of a DOE demonstration project for the 2008 Beijing Olympic Games.

Eden is also planning, in conjunction with AEC, to accelerate the marketing of Hythane® into the huge emerging Chinese Hythane® market over the next 6-12 months, targeting the three Chinese engine makers that utilise the AEC engine controllers.

5. Europe

Negotiations are underway in Europe for a series of projects, including:

- Providing a Brehon Hythane® blender for use in the first multi-fuel (hydrogen/natural gas/Hythane®/petrol/diesel) integrated service station being developed in Italy by ENI/AGIP;
- Arranging mutual distribution rights with a leading Italian hydrogen equipment manufacturer for Brehon to market their equipment including a unit to produce hydrogen through electrolysis of water and that company to market Brehon's equipment in Italy; and,
- Supplying Hythane® technology for two proposed Hythane® demonstration projects in Europe.

Cryogenics

Cryogenic storage involves storage of substances at very low temperatures. It is a rapidly emerging market and has many applications in the fuel industry (for LNG, liquid hydrogen, cryogenic Hythane®), the food and drink industry (liquid nitrogen and carbon dioxide) and the semiconductor industry (liquid CO₂).

Early in 2006, Eden's established a wholly owned subsidiary, Brehon Cryogenics LLC, to service this market and has received its first orders from NASA and a major US soft drink manufacturer to supply important custom designed cryogenic equipment components.

This division is headed by Steve Hensley, who has more than 25 years experience in the cryogenic valve and system industry. It builds on know-how developed on various NASA projects where

cryogenic storage was used for liquid fuel storage in the space programme. Brehon has assembled a world-class team of cryogenic consultants and employees and some of the patent applications it holds have significant potential. For example, Brehon's patent application for Cryogenic Hythane®, using LNG and gaseous hydrogen is currently being developed for prototyping.

This cryogenic division is projected to be cashflow positive within the next six months, and will provide a strong platform from which the cryogenic research being conducted by Brehon can be undertaken.

Work commenced on developing a prototype for production and storage of Cryogenic Hythane.

New Patents and Technology

During the quarter, Brehon filed further patent applications, including a patent application for a unit for producing Hythane® directly from natural gas and in one single piece of equipment.

South Wales – Coalbed Methane/Coalmine Methane/Natural Gas (Eden earning 50%)

During the quarter, work continued with obtaining permits for drilling a series of coal bed methane and coal mine methane drill holes during the second half of 2006.

Permitting for all coal bed methane test well sites is now complete.

Contractors for all phases of the initial test well programme, comprising:

- Drilling and coring the test wells;
- Gas Desorption testing;
- Wireline logging;
- Drill stem tests including permeability; and
- Data processing and modelling;

have now been identified, and contracts are now being finalised.

It is anticipated that the coal bed methane test well programme in South Wales will commence during the last quarter of 2006 and take 3-4 months to complete; with results becoming available in late 2006 or early 2007.

Testing of abandoned mine methane targets requires a smaller rig than necessary for the CBM test wells and a rig suitable for this work is available from Eden's South Wales partner. Permit applications for drilling these holes have been submitted to the regulatory authorities. Drilling of these holes is planned to begin in the next quarter.

These projects have the potential to produce a large amount of methane that is currently in great demand in the UK. In July 2004 when Eden entered into the Joint Venture, Natural Gas was selling in the UK at approximately 28 pence/therm. During the last northern winter, the UK Natural Gas price peaked at over 200 pence/therm and it is anticipated that a very strong market will continue for any gas that is produced from Eden's Welsh Joint Venture.

South Australian Gas Project (Eden 100%)

As reported last quarter, Eden is accelerating the "Right to Negotiate process," necessary for the grant of Petroleum Exploration Licence application 183. Positive discussions were held with the

Native Title claimant group's lawyer and document preparation is underway. It is anticipated that a conjunctive agreement between Eden, the SA government and the Native Title claimant group will be achieved in the next 1-2 months, with the licence grant likely shortly thereafter.

Following the grant of the licence, Eden plans either alone or in joint venture with an as-yet unidentified partner, a slimline drill test of the primary gas target identified in the Arthur Hill anticline of the Mulgaria sub-basin as soon as an appropriate drill rig can be contracted.

The Arthur Hill anticline has a geophysical footprint of approximately 100km x 10km, which is large enough to potentially contain a very significant quantity of hydrocarbons.

Geothermal Exploration (Eden 100%)

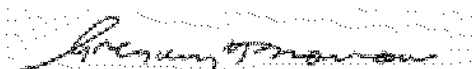
Eden holds eight geothermal exploration licences in South Australia: GELs 166, 167, 168, 169, 175, 176, 177 and 185.

A suitable drill rig to test the West Well anomaly was unable to be obtained in the last quarter. Eden seeks to obtain heatflow data and assess the potential geothermal prospectivity of the West Well geophysical anomaly. Eden is planning to undertake a hole re-entry at the Witchelina Project (GELs 166,167,168) or if the re-entry fails then to drill a new hole at the West Well geophysical anomaly.

Eden has also begun planning a programme of shallow drilling at the Renmark Project (GELs 175 and 176) designed to produce an initial heatflow map for the region to aid further geothermal prospecting. A drill rig has been tentatively scheduled for late 2006.

Summary

Significant progress has been made during the quarter, particularly on the hydrogen/Hythane® projects and the Welsh methane project, and the company is hopeful that this will translate into firm contracts and major discoveries over the next 6-9 months.



Greg Solomon
Executive Chairman

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix B. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

EDEN ENERGY LIMITED

ABN

58 109 200 900

Quarter ended ("current quarter")

30 June 2006

Consolidated statement of cash flows

Cash flows related to operating activities		Current quarter \$A'000	Year to date (12 months) \$A'000
1.1	Receipts from product sales and related debtors	104	104
1.2	Payments for (a) exploration and evaluation (b) development (c) production (d) administration	(29) (693)	(168) (1,269)
1.3	Dividends received	0	0
1.4	Interest and other items of a similar nature received	44	64
1.5	Interest and other costs of finance paid	0	0
1.6	Income taxes paid – GST Paid	(71)	(92)
	Income Taxes – GST Refunds Received	12	29
1.7	Other (provide details if material)-	(91)	(101)
Net Operating Cash Flows		(724)	(1,433)
Cash flows related to investing activities			
1.8	Payment for purchases of: (a)prospects (b)equity investments (c)other fixed assets	0 (87) (12)	0 (1,717) (57)
1.9	Proceeds from sale of: (a) prospects (b)equity investments (c) other fixed assets	0 0 0	0 0 0
1.10	Loans to other entities	(195)	(398)
1.11	Loans repaid by other entities	0	0
1.12	Other (provide details if material)	0	0
Net investing cash flows		(294)	(2,172)
1.13	Total operating and investing cash flows (carried forward)	(1,018)	(3,605)

1.13	Total operating and investing cash flows (brought forward)	(1,018)	(3,605)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	8,389	9,015
1.15	Proceeds from sale of forfeited shares	0	0
1.16	Proceeds from borrowings	0	0
1.17	Repayment of borrowings	0	0
1.18	Dividends paid	0	0
1.19	Other (provide details if material) Share Issue Costs	(610)	(759)
Net financing cash flows		7,779	8,256
Net increase (decrease) in cash held		6,761	4,651
1.20	Cash at beginning of quarter/year to date	259	2,369
1.21	Exchange rate adjustments to item 1.20	0	0
1.22	Cash at end of quarter	7,020	7,020

**Payments to directors of the entity and associates of the directors
Payments to related entities of the entity and associates of the related entities**

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	152
1.24	Aggregate amount of loans to the parties included in item 1.10	0

1.25 Explanation necessary for an understanding of the transactions

Management Fees, as per agreement, were paid during the quarter to a company of which Mr GH Solomon and Mr DH Solomon are directors.
Commissions on placements to a company of which Mr G T Le Page is a director.
Bona-fide reimbursement of expenses for the period to 30 June 2006
Directors Fees and Superannuation paid during the period.

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Not applicable

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	50
4.2 Development	
Total	50

Subsequent to end of quarter additional capital has been raised to fund part of this expenditure.

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	7,020	259
5.2 Deposits at call	0	0
5.3 Bank overdraft	0	0
5.4 Other (provide details)	0	0
Total: cash at end of quarter (item 1.22)	7,020	259

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			
6.2	Interests in mining tenements acquired or increased			
	Geothermal Licences held in the name of Eden Energy Ltd			
	GEL 166	Licence granted	100%	100%
	GEL 167	Licence granted	100%	100%
	GEL 168	Licence granted	100%	100%
	GEL 169	Licence granted	100%	100%
	GEL 175	Licence granted	100%	100%
	GEL 176	Licence granted	100%	100%
	GEL 177	Licence granted	100%	100%
	GEL 185	Licence granted	100%	100%
	Outstanding Petroleum Exploration Licence Application in the Name of Eden Energy Ltd PELA 183			

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)			
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions			
7.3	122,329,993	67,177,606		
7.4	41,948,000	41,948,000	20 cents	20 cents
7.5	*Convertible debt securities (description)			
	NOT APPLICABLE			

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	Options	86,853,165	32,751,303	<i>Exercise price</i> 20 cents	<i>Expiry date</i> 30 Sep 2009
7.8	Issued during quarter	20,974,000	20,974,000		
7.9	Exercised during quarter	NIL	NIL		
7.10	Expired during quarter	NIL	NIL		
7.11	Debentures <i>(totals only)</i>	NOT APPLICABLE			
7.12	Unsecured notes <i>(totals only)</i>	NOT APPLICABLE			

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

RAYMOND FRANCIS BUSCALL – COMPANY SECRETARY

Date: 31 July 2006

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities.** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

== == == == ==