



# EDEN ENERGY LTD

ACN 109 200 900

## ASX QUARTERLY REPORT FOR PERIOD ENDED 31<sup>ST</sup> MARCH 2007

### HIGHLIGHTS

#### Hythane®

- 5 year agreement with Gujarat State Petroleum Corporation Ltd to market Hythane® in India.
- Extremely low emission levels obtained from Hythane conversion of Ashok Leyland bus engine.
- Negotiations with other Indian parties for various aspects of Hythane® marketing and rollout progressing well.

#### HyRadix Inc

- Acquisition (after end of March quarter) of 100% of leading US hydrogen production equipment manufacturer.

#### South Wales – Coal Bed Methane (50% farm in joint venture)

- CBM drilling contract finalised - drilling to start mid-May 2007.

### Hydrogen and Hythane® (Eden 100%)

#### Hythane® Marketing

During the quarter ended 31<sup>st</sup> March 2007 (“the Quarter”) further progress was made in the marketing of Hythane®, with significant advances achieved in India.

#### 1. India

##### *Eden’s Indian Strategy*

As previously discussed, Eden aims to establish a joint venture company in India with a major Indian partner. The joint venture plans to derive revenue from various sources including royalties on Hythane® engine calibrations, from the sale of equipment for the production and blending of Hythane®, and the ongoing maintenance of such equipment. Ongoing negotiations for this proposed joint venture are at an advanced stage.

Additionally, marketing of any consequential carbon credit benefits that may be derived from the conversion of engines to Hythane® operation could potentially leading to a significant revenue stream for the Indian joint venture should the Hythane® marketing programme be successful.

During the Quarter, the following developments occurred:

1. A 5-year agreement with the Gujarat State Petroleum Corporation Ltd (“GSPC”), a major Indian Natural Gas producer, pipeline operator, distributor and marketer, to market Hythane® in India was executed. Under the terms of the agreement, Eden and GSPC will collaborate, on a non-exclusive basis, to market Hythane® in Gujarat, a major industrial state in north-western India. Eden, through its wholly owned subsidiaries, will provide to the GSPC Group and its customers, and thereafter maintain, on commercial terms to be agreed, all necessary equipment to produce all Hythane® required by them. GSPC will in turn support the marketing of Hythane® and the proposed Hythane® bus demonstration project planned for Ahmedabad ( the capital city of the state of Gujarat) planned for later in 2007, and the establishment of all necessary standards and regulations for Hythane® in India. All carbon credit benefits derived from their joint Hythane® operations will be shared equally between Eden and GSPC.

GSPC Group, which comprises seven companies, has been playing a pivotal role in energizing and mobilizing the energy sector of India. It has earned the rare distinction in little over 25 years, of becoming a major Indian Natural Gas and oil producer in addition to developing a comprehensive energy infrastructure which includes a 2500km high-pressure Natural Gas pipeline which services 20 cities in the state of Gujarat. Additionally, GSPC Group has developed, alone and in joint venture, more than 1000MW of gas fired power production in Gujarat as well as establishing an expanding chain of Natural Gas retail outlets that service the bus and automobile markets. As well as being a major oil and gas producer in India, GSPC has acquired oil and gas exploration interests in two Western Australian offshore permits as well holding a 20% farm-in interest in an offshore block in the Otway Basin in Victoria.

2. The Ashok Leyland natural gas bus engine was received in Colorado. The conversion to Hythane® operation has been completed. In a steady-state test the emission levels were reduced from Euro 3 to significantly better than Euro 5. Plans are underway to modify the control system on the engine with the aim of achieving similar very low emission levels on a transient cycle test, as required by the Euro 4 and Euro 5 standards. It is anticipated that tis will be completed within the next 2-3 months. After which the engine will be returned to India for testing, certification and demonstration in several major cities where natural gas buses currently operate
3. Negotiations with a major engineering group in India were significantly progressed with a view to establishing a joint venture company in India for the marketing and roll out of Hythane®. Eden anticipates that this agreement will now be finalised during May 2007.
4. Further encouraging progress was made in the Company’s negotiations with another major Indian bus manufacturer and with a major Indian generator manufacturer in relation to developing Hythane® gensets for the huge Indian generator market. These discussions are now well advanced and it is hoped that both of these negotiations will progress to agreements during the next 1-3 months.
5. The Gas Authority of India, a government body which owns and operates most of the gas pipelines in India and is a major gas supplier in India, offered to partner with Hythane Co (the wholly owned subsidiary of Eden Energy) in the Indian Hythane® bus demonstration projects for the Ashok Leyland engine, planned for May-June 2007, following which they are ready to commence an immediate roll out of Hythane® in selected areas where both hydrogen and Natural Gas are available. The company is currently in discussions over the terms of this agreement.
6. At the 2007 Symposium on International Automotive Technology (SIAT 2007), arranged and run by the Automotive Research Association of India (“ARAI”) in association with SAE India and the Indian National Automotive Testing and R&D Infrastructure Projects (NATRIP), a leading consultant to the Indian government announced that it is proposed to develop an urban rapid

transit system in India using buses, to build dedicated bus lanes in approximately 50 cities, and to power the buses with alternate fuels. Natural Gas and Hythane® are likely to be the major fuels used for these buses.

7. ARAI, which, along with the associated Indian government organisation NATRIP, have recently received major Indian government funding to expand automotive research and development in India. The associate director of ARAI, has stated that whilst India proposes to ultimately move to pure hydrogen as a vehicle fuel, Hythane® is the transitional fuel that will be used and developed in the meantime. ARAI further indicated a desire to work with Hythane Co to develop and test Hythane® engines for the Indian market where appropriate.

## **2. USA**

### ***US Hythane® Demonstration Projects***

Hythane Company LLC (“Hythane Co”), Eden Energy’s wholly owned US subsidiary, is awaiting final confirmation and start of funding from the US Department of Energy for the US\$2 million contract for a 2-3 year test programme involving two identical, heavy-duty, spark-ignited natural gas engines. The engines will be acquired and modified – one to run on Hythane® and the other to run on hydrogen. Hythane Co. will undertake most of the work on the 2500-hour test programme.

The company is still awaiting government-funding allocations for several Hythane® demonstration projects for cities in California and in the northeastern USA at least one of which it is hoped will be approved during the next quarter.

## **3. Europe**

European interest is emerging, particularly in Italy, for Hythane® demonstration projects. Negotiations with various interested parties continue and it is hoped these talks will result in Hythane Co’s participation in one or more demonstration projects in Europe during 2007.

## **4. China**

China remains a major target market for Hythane® and Eden plans to re-enter the Chinese market later in 2007, after the marketing structure in India is resolved and the equipment development and manufacture is progressed.

## **Hydrogen Production using Low Temperature Pyrolysis (Eden 50% interest)**

Patent applications for the hydrogen production process were lodged during the Quarter.

The research team are now moving ahead to optimise the process as a prelude to developing a prototype for scaling up the process to pilot plant scale.

## HyRadix Inc Acquisition

Since the end of the Quarter, Eden has taken over Chicago-based HyRadix Inc (see ASX announcement of 27 April 2007).

HyRadix is a world leader in providing proven, on-site hydrogen generation systems and supply solutions. Through their proprietary technology, they are meeting the global demand for lower-cost hydrogen.

The HyRadix product portfolio includes:

- the Aptus® product which is easily applied in industrial applications including float glass production, oils hydrogenation, metals treating, and electronics,
- the Adéo® product for refuelling hydrogen vehicles as well as vehicles using internal combustion engines operating on hydrogen or Hythane®, and
- the Agilon product, which produces a hydrogen rich stream for PEM fuel cells.

The initial HyRadix technology development dates back to 1998 under a leading provider of technology to the refining and petrochemical industries. Its history is as follows:

1998	Work began investigating ways to meet growing demand for fuel supply focusing on small-scale hydrogen generation
1999	First pilot plant operation began and successfully demonstrated the potential of the technology
2002	HyRadix was formed with the goal of developing and commercializing hydrogen generation systems
2004	Pre-commercial Adéo H2 Generator begins operation at California-based SunLine Transit Agency for use in fuelling the company's Hythane® fuelled bus fleet
2005	HyRadix secured initial commercial sales for the Aptus® Industrial hydrogen generator
2006	First three commercial hydrogen generators begin operation
2006	Partnership formed with a Paris-based leader in process development focusing on the production of hydrogen from renewable liquid fuels

The HyRadix team is comprised of world-class scientists and engineers with expertise in the fields of chemical and mechanical engineering, controls and process integration, and gas separations. Together this team, averaging over 15 years of industry experience each, has developed world leading hydrogen generation systems and equipment, which they market globally.

HyRadix currently has its on-site hydrogen generating systems operating with customers in USA (at the SunLine Transit Agency in California, where the Hythane® bus trial was conducted), China and Malaysia for use in transport, oil hydrogenation and metal annealing. These hydrogen generation systems are ideally suited for integration with the Hythane® blender and other technology for on-site production and dispensing of Hythane®.

HyRadix, and its predecessor company, spent more than US\$40 million over the past 9 years developing its suite of strategic patents and products, all of which compliment perfectly the allied technologies and patents that Hythane Company, Eden's Colorado based subsidiary, has already developed.

This provides Eden with the immediate opportunity to supply a fully developed, complete Hythane® system which will now be marketed in India, US, China, Europe and elsewhere as an ultra-low emission, high efficiency blend of hydrogen and Natural Gas that is the ideal transitional fuel between the hydrocarbon economy and the future hydrogen economy.

Additionally, HyRadix has an on-going contract with a leading French petroleum industry research company, for HyRadix to develop new methods of hydrogen production from liquids such as ethanol and glycerine.

HyRadix has sales, distribution and service agreements with leading companies for central, Eastern Europe, and Malaysia. It is also at an advanced stage of negotiations with another leading company for marketing its products in China, Brazil and India.

When added to the very significant marketing progress that Hythane Company has made in India, US and China, the Eden Group of companies is extremely well placed to be able to rapidly the marketing of its combined range of products around the world.

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

During the Quarter, preparations for drilling at least three CBM exploration wells in Petroleum Exploration and Development Licence 100 were progressed, with finalisation of a drilling contract completed.

Drilling of the wells is expected to commence in May 2007, following mobilisation of drilling equipment in late April.

All well sites are permitted and site works have been finished at the first well site, enabling an immediate start once the rig arrives.

As previously discussed, there are excellent CBM targets in gassy Westphalian coal seams of the South Wales Coal Basin from 350m to 900m depth. Eden is farming in, with right to earn 50% of the CBM rights, to the 230km<sup>2</sup> PEDL100. Essentially no CBM exploration has been undertaken in the project area.

The South Wales CBM Project is testing an area with excellent geological prospectivity combined with strong natural gas price and strong market fundamentals in a region with pipeline infrastructure already in place within and adjacent to the project area enabling potential easy access to markets. Furthermore, the large population gives a large market with both short-term major local customers and long-term opportunities.

## **Geothermal Exploration, South Australia (Eden 100%)**

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

A preliminary field visit was made to Renmark to assist drill planning for the project. Permitting for the programme is well underway with a Statement of Environmental Objectives (SEO) and preliminary Environmental Impact Report (EIR) nearing completion. Discussions with contractors are underway for suitable drilling equipment to complete the programme.

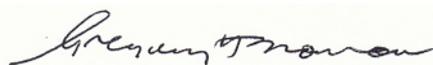
A suitable mineral drilling rig to drill a test well at Witchellina to collect thermal gradient data and core for thermal conductivity measurements to enable heat flow estimates for the prospect has been

identified. Activity approval paperwork is being prepared. It is hoped to complete the well before the end of the next quarter.

## **South Australian Gas Project (Eden 100%)**

Negotiations with relevant Native Title parties continued. An agreement is now expected in May 2007. Following agreement on the Native Title, grant of the Petroleum Exploration licence is expected shortly thereafter.

It is hoped to drill the already identified Natural Gas target later in 2007, possibly in conjunction with a joint venture partner.

A handwritten signature in black ink, appearing to read "Greg Solomon", is written on a light yellow rectangular background.

Greg Solomon  
Executive Chairman

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. 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")

31 MARCH 2007

### Consolidated statement of cash flows

		Current quarter \$A'000	Year to date (9 months) \$A'000
<b>Cash flows related to operating activities</b>			
1.1	Receipts from product sales and related debtors	28	57
1.2	Payments for (a) exploration and evaluation	(16)	(26)
	(b) development		
	(c) production		
	(d) administration	(1,279)	(3,335)
1.3	Dividends received	0	0
1.4	Interest and other items of a similar nature received	61	174
1.5	Interest and other costs of finance paid	(2)	(6)
1.6	Income taxes paid – GST Paid	(28)	(58)
	Income Taxes – GST Refunds Received	9	94
1.7	Other (provide details if material)- Research & Development –Hydrogen production	(46)	(125)
<b>Net Operating Cash Flows</b>		<b>(1,273)</b>	<b>(3,225)</b>
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of: (a)prospects	0	0
	(b)equity investments	(67)	(267)
	(c)other fixed assets	(130)	(288)
1.9	Proceeds from sale of: (a) prospects	0	0
	(b)equity investments	0	0
	(c) other fixed assets	0	0
1.10	Loans to other entities	0	0
1.11	Loans repaid by other entities	0	0
1.12	Other (provide details if material)	0	0
	Loans repaid to associated entities	0	(267)
<b>Net investing cash flows</b>		<b>(197)</b>	<b>(822)</b>
1.13	Total operating and investing cash flows (carried forward)	<b>(1,470)</b>	<b>(4,047)</b>

1.13	Total operating and investing cash flows (brought forward)	(1,470)	(4,047)
<b>Cash flows related to financing activities</b>			
1.14	Proceeds from issues of shares, options, etc.	4,065	4,068
1.15	Proceeds from sale of forfeited shares	0	0
1.16	Proceeds from borrowings	0	0
1.17	Repayment of borrowings	(10)	(36)
1.18	Dividends paid	0	0
1.19	Other (provide details if material)		
	Option Agreement Payment	0	(135)
	Share Issue Costs	(175)	(238)
<b>Net financing cash flows</b>		<b>3,880</b>	<b>3,659</b>
<b>Net increase (decrease) in cash held</b>		<b>2,410</b>	<b>(388)</b>
1.20	Cash at beginning of quarter/year to date	4,132	6,930
1.21	Exchange rate adjustments to item 1.20	0	0
1.22	<b>Cash at end of quarter</b>	<b>6,542</b>	<b>6,542</b>

**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	324
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.  
Professional Fees and commissions were paid during the quarter to a company of which Mr GT Le Page is a director.  
Bona-fide reimbursement of expenses for the period to 31 March 2007  
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	1,000
4.2 Development	
<b>Total</b>	<b>1,000</b>

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	4,132	5,627
5.2 Deposits at call	0	0
5.3 Bank overdraft	0	0
5.4 Other (provide details)	0	0
<b>Total: cash at end of quarter (item 1.22)</b>	<b>4,132</b>	<b>5,627</b>

## 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 <b>Eden Energy Ltd</b>			
	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 <b>Eden Energy Ltd</b> 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)			
	NOT APPLICABLE			
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions			
7.3	<b>*Ordinary securities</b>			
	134,058,422	84,725,584		
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs			
	11,556,429			
7.5	<b>*Convertible debt securities (description)</b>			
	NOT APPLICABLE			

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	<b>Options</b>	86,731,165 950,000 4,000,000 500,000	36,310,109 NIL NIL NIL	<i>Exercise price</i> 20 cents 25 cents 20 cents 58.5 cents	<i>Expiry date</i> 30 Sep 2009 30 Aug 2009 5 Jun 2009 5 April 2012
7.8	Issued during quarter	NIL	NIL		
7.9	Exercised during quarter	117,000	NIL		
7.10	Expired during quarter	NIL	NIL		
7.11	<b>Debentures</b> <i>(totals only)</i>	NOT APPLICABLE			
7.12	<b>Unsecured notes</b> <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: 30 April 2007

## 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.

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