

DIRECTORS' REPORT

The Members,

Your Directors have pleasure in presenting the Seventh Annual Report on the business and operations of the Company and the Audited Financial accounts for the year ended 31 March, 2013.

COMPANY'S PERFORMANCE

During the year under review, Cairn India's gross operated production was 205,323 barrels of oil equivalent per day. This has helped to reduce India's crude oil import dependence by ~INR 385 billion and has contributed ~INR 200 billion to the national exchequer.

The exploration in existing development blocks pursuant to policy clarity is a significant step for the nation towards energy self-sufficiency and will not only add to economic growth but also reduce the fiscal deficit through increased contribution to the exchequer.

The company contributes to around 25% of the nation's crude oil production. In addition, your company is focused on exploration across the asset portfolio both in India and core areas internationally and has also started the seismic survey in its South Africa block, which is in line with your company's exploration led growth strategy focused on replacement and growth of reserves leading to long term sustainable value creation.

FINANCIAL HIGHLIGHTS

In INR Lacs

	Standalone		Consolidated	
	For the financial year ended		For the financial year ended	
	31 March, 2013	31 March, 2012	31 March, 2013	31 March, 2012
Total income	1,010,065	24,893	1,856,039	1,279,866
Total Expenditure	335,555	20,143	640,557	437,519
Profit before tax	674,510	4,750	1,215,482	842,347
Taxes	26,445	354	23,508	48,573
Profit/(loss) after tax	648,065	4,396	1,191,974	793,774
Impact of scheme	826,612	-	13,665	-
Profit/ (loss) for the year	1,474,677	4,396	1,205,639	793,774

The consolidated statements provide the results of Cairn India Limited together with those of its subsidiaries for the financial year ended 31 March, 2013.

DIVIDEND

Your Directors are pleased to recommend a final dividend of INR 6.50 per equity share of face value of Rs.10 each for the year ended 31 March, 2013, subject to approval of shareholders at the ensuing Annual General Meeting of the Company. The dividend will be paid in compliance with applicable regulations.

INTERIM DIVIDEND

In addition to the proposed final dividend of INR 6.50 per equity share, your Company had already distributed an interim dividend of INR 5 per equity share of face value of INR 10 each, to shareholders, who were on the Register of members of the Company as at closing hours of 6 November, 2012, being the record date fixed by the Board of Directors for this purpose. Interim

Dividend was paid on 10 November, 2012.

TRANSFER TO RESERVES

Your Company proposes to transfer INR 294,935 lacs to the general reserve. An amount of INR 895,308 lacs is proposed to be retained in the statement of profit and loss.

LIQUIDITY

Your Company has a strong balance sheet with ample cash reserves to meet the various strategic initiatives and to support future expansion programs. As at 31 March, 2013, the company had liquid assets worth INR 1,276,631 lacs. The company recognizes that though the liquidity is needed to cover the business and financial risks but it should get the adequate return as well. The funds, therefore, have been

Exploration in existing development blocks is a significant step towards energy self-sufficiency for the nation.

invested in bank deposits, mutual funds, tax free bonds and certificate of deposits.

CHANGES IN CAPITAL STRUCTURE

During the financial year under review, 2,842,046 equity shares of INR 10 each were allotted on exercise of Employee Stock Options by the employees of the Company and its subsidiaries. Accordingly, the issued and paid up capital of the Company has increased to INR 19,102,381,540 divided into 1,910,238,154 equity shares of INR 10 each.

Subsequent to the close of the financial year, the Company allotted 18,228 equity shares of INR 10 each on exercise of Stock Options by the employees. Accordingly, the issued and paid up capital of the Company has increased to INR 19,102,563,820 divided into 1,910,256,382 equity shares of INR 10 each.

REDEMPTION OF DEBENTURES

During the year under review, the Company has redeemed 6,250 Unsecured Redeemable Non-convertible "Series A" Debentures having face value aggregating to INR 62,500 lacs and 6,250 Unsecured Redeemable Non-convertible "Series B" Debentures having face value aggregating to INR 62,500 lacs. Debentures issued by your Company had a credit rating of CARE AAA. There was no outstanding debt liability of the Company as on 31 March 2013.

CONSOLIDATED FINANCIAL STATEMENTS

Your Company is also presenting the audited consolidated financial statements prepared in accordance with the Accounting Standard 21 issued by the Institute of Chartered Accountants of India. Information in aggregate for each subsidiary in respect of capital reserves, total assets, liabilities, investments, turnover, etc. is disclosed separately and forms part of the annual report.

OPERATIONS & PROJECTS

A detailed review of operations and projects has been included in the Management Discussion and Analysis Report, which forms a part of this Annual Report.

EMPLOYEE STOCK OPTION SCHEMES

Your Company has established share incentive schemes viz., Cairn India Senior Management Plan (CISMP), Cairn India Performance Option Plan (CIPOP) and Cairn India Employee Stock Option Plan (CIESOP) pursuant to which options to acquire shares have been granted to selected employees and Directors of the Company and its subsidiaries. The Company also has cash awards option plan (phantom stock options) for expatriate employees of the Company and its subsidiaries.

During the financial year, stock options have been granted to the employees of



The Company has an adequate system of internal control commensurate with its size and nature of business.

the Company and its subsidiaries under CIPOP & CIESOP schemes. On exercise of the options so granted, the paid-up equity share capital of the Company will increase in terms of the Stock Option Plans mentioned above. The details of stock options granted by the Company are set out in Annexure I to this Report in compliance with Clause 12 of the Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999.

During the year under review, 2,842,046 equity shares of INR 10 each were allotted pursuant to the exercise of stock options.

INTERNAL CONTROL SYSTEM

The Company has put in place an adequate system of internal control commensurate with its size and nature of business. These systems provide a reasonable assurance in respect of providing financial and operational information, complying with applicable statutes, safeguarding of assets of the Company and ensuring compliance with corporate policies.

The company has a dedicated Internal Audit team which is commensurate with the size, nature & complexity of operations of the Company. Internal Audit reports functionally to Audit Committee of Board which reviews and approves risk based annual Internal Audit plan. Audit Committee periodically reviews the performance of internal audit function.

The Company has a rigorous business planning system to set targets and

parameters for operations which are reviewed with actual performance to ensure timely initiation of corrective action, if required.

The Audit Committee reviews adherence to internal control systems and internal audit reports. The Committee also reviews all quarterly and yearly results of the Company and recommends the same to Board for its approval.

SUBSIDIARY COMPANIES

During the financial year under review, a new subsidiary Company, namely, Cairn South Africa Proprietary Limited was incorporated in South Africa.

As on 31 March, 2013, the Company had 31 subsidiaries including indirect subsidiaries. All these companies are 100% beneficially owned by Cairn India Limited. The Company has its representatives on the boards of subsidiary companies and monitors the performance of such companies regularly.

The Ministry of Corporate Affairs, vide its circular no. 2/2011 dated 8 February, 2011, had granted exemption to holding companies from attaching the financial statements of its subsidiaries to the Company's Annual Report. In accordance with the said circular, the Balance Sheet, Profit & Loss Account and other documents of the subsidiary companies are not being attached with the Balance Sheet of the Company. The Company will make available the Annual Accounts of the subsidiary companies to any member of the Company who may be interested

in obtaining the same. The annual accounts of the subsidiary companies will also be kept open for inspection at the Registered office of the Company and respective subsidiary companies. Further, the annual accounts of the subsidiaries are also available on the website of the Company: www.cairnindia.com. The consolidated financial statements presented by the Company include the financial results of its subsidiary companies.

SCHEME OF ARRANGEMENT

In order to simplify and consolidate the multi layered structure comprising foreign subsidiaries, your Company had proposed a scheme of arrangement between Cairn India Limited, Cairn Energy India Pty Limited, Cairn Energy India West B.V., Cairn Energy Cambay B.V., Cairn Energy Gujarat B.V. and their respective shareholders and creditors (the 'Scheme'). The members of the Company had approved the scheme with overwhelming majority in the Court Convened meeting held on 18 February, 2010.

The Hon'ble High Courts of Madras and Bombay sanctioned the Scheme in April, 2010 and June, 2010 respectively. The Scheme was also subject to receipt of regulatory approvals and the same were received during the year under review. Consequently, the Scheme, having an appointed date of 1 January, 2010 became effective from 18 October, 2012, being the date of last approval received under the Scheme.

The Scheme has helped in consolidation of Indian businesses held by the foreign subsidiaries, directly under Cairn India.

DIRECTORS

During the period under review, following changes were made in the composition of the Board:

- Mr. Rahul Dhir resigned as Managing Director and Chief Executive Officer with effect from 31 August, 2012.
- Mr. P. Elango was appointed as additional and Whole time Director of the Company effective 21 January, 2013.

Pursuant to the provisions of Section 260 of the Companies Act, 1956, Mr. P. Elango, holds office up to the date of this Annual General Meeting. The Company has received notices from members of the Company sponsoring his candidature as Directors of the Company. He is proposed to be appointed as Director liable to retire by rotation.

Further, shareholders' approval is also required for appointment of Mr. P. Elango as Whole Time Director. Necessary resolution along with relevant details is included in the Notice of the ensuing AGM for seeking approval of members.

In accordance with the Articles of Association of the Company, Mr. Naresh Chandra and Mr. Edward T Story, shall retire by rotation as Directors at the ensuing Annual General Meeting and are eligible for re- appointment.

A brief profile of the above-named Directors seeking appointment/re- appointment forms part of the Corporate Governance report.

CORPORATE GOVERNANCE

Your company strives to ensure that best Corporate Governance practices are identified, adopted and consistently followed. Your Company believes that good governance is the basis for sustainable growth of the business and for enhancement of stakeholder value. The Corporate Governance and Management Discussion and Analysis reports form an integral part of this report and are set out as separate sections to this annual report. The Certificate of S. R. Batliboi & Co. LLP, chartered accountants, the statutory auditors of the Company certifying compliance with the conditions of corporate governance as stipulated in clause 49 of the listing agreement with Stock Exchanges is annexed with the report on corporate governance.

SECRETARIAL AUDIT

In line with the high standards of corporate governance adopted by the Company and also to ensure proper compliance with the provisions of various corporate laws, regulations and guidelines issued by the Securities and Exchange Board of India and the listing agreement, the Company has voluntarily started a practice of secretarial audit from a practicing Company Secretary.

An audit report issued by M/s. Nesar & Associates, Company Secretaries, in respect of the secretarial audit of the Company for the financial year ended 31 March 2013, is provided separately in the Annual Report.

AUDITORS & AUDITORS' REPORT

S. R. Batliboi & Co. LLP (formerly known as M/s. S. R. Batliboi & Co.), chartered accountants, auditors of the Company, retire at the conclusion of the ensuing annual general meeting and being eligible, offer themselves for re-appointment. The Audit Committee at its meeting held on 22 April, 2013 has also recommended the re-appointment of S. R. Batliboi & Co. LLP as Statutory Auditors of the Company. Your directors also recommend their appointment.

In the accompanying financial statements, the Company has adjusted goodwill against the securities premium account pursuant to the Scheme of Arrangement approved by the Hon'ble High Courts of Bombay and Madras and other relevant regulatory authorities. This accounting, although different from that prescribed under the Accounting Standards, is in conformity with the accounting principles generally accepted in India, and the same has been approved by the Courts. The same has been reported by the Auditors under 'Emphasis of Matter' in their Report.

Notes to the accounts, as referred to in the Auditors' Report, are self explanatory and therefore do not require further comments and explanation.

COST AUDITORS

Cost Accounting Records (Petroleum Industry) Rules, 2011, were issued by Ministry of Corporate Affairs on 7

December, 2011, vide G.S.R. 870(E). The said rules are applicable to Cairn India and the Company is now required to maintain cost accounting records and get them audited from the financial year 2012-13.

The Board appointed M/s. Shome & Banerjee, Cost Accountants, as Cost Auditors of the Company for the financial year 2012-13.

The cost audit report will be filed with the Central Government as per the timelines.

FIXED DEPOSITS

The Company has not invited any deposits from the public under Section 58A of the Companies Act, 1956.

HUMAN RESOURCES

Company's industrial relations continued to be harmonious during the period under review.

PARTICULARS OF EMPLOYEES

Particulars of employees required to be furnished under Section 217(2A) of the Companies Act, 1956 ('the Act') form part of this report. However, as per the provisions of Section 219(1)(b) (iv) of the Act, the report and accounts are being sent to the shareholders of the Company excluding the particulars of employees under Section 217(2A) of the Act. Any shareholder interested in obtaining a copy of the said statement may write to the Company Secretary for the same.

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO

Information on Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo is given in Annexure II to this report.

DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to Section 217(2AA) of the Companies Act, 1956, the Directors confirm that:

- (i) In the preparation of the annual accounts, the applicable accounting standards have been followed along with proper explanation relating to material departures;
- (ii) Appropriate accounting policies have been selected and applied consistently and have made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at 31 March, 2013 and of the profit of the Company for the year ended 31 March, 2013;
- (iii) Proper and sufficient care has been taken for maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- (iv) The annual accounts have been prepared on a going concern basis;

(v) The Company has devised proper systems to ensure compliances of all laws applicable to the Company;

(vi) Internal financial controls have been laid down and such internal financial controls are adequate and were operating effectively.

CORPORATE SOCIAL RESPONSIBILITY

At Cairn, Corporate Social Responsibility (CSR) encompasses much more than social outreach programs and is an integral part of the way the Company conducts its business. Detailed information on the initiatives of the Company towards CSR activities is provided elsewhere in the Annual Report.

BUSINESS RESPONSIBILITY REPORT

SEBI vide its circular CIR/CFD/DIL/8/2012 dated 13 August, 2012 and clause 55 of the Listing Agreement, mandated that top 100 listed companies based on market capitalization include Business Responsibility Report as a part of the Annual Report. Accordingly, the Business Responsibility Report for financial year 2012-13 is attached and forms part of the Annual report.

AWARDS AND RECOGNITIONS

As in the past, your company earned a number of awards and honors from different bodies and trade organisations, the summary of which is as under:

- The Company was adjudged the fastest growing energy company in the world at the Platts Top 250 Energy Company Awards 2012
- Golden Peacock Award for excellence in Corporate Governance 2012
- The Company won 16 awards in the 26th Mines Safety week 2012 under the aegis of Directorate General of Mines Safety (DGMS), Ajmer
- Raageshwari Oil Mine won the runners up award at the National Safety Awards (Mines), 2010 held by Government of India for Lowest Injury Frequency Rate per lakh Man Shifts in Oil Mines Category

SHARE TRANSFER SYSTEM AND LISTING OF SHARES

Details pertaining to share transfers and listing of shares are given in the Corporate Governance Report which forms part of the Annual Report. The Company has paid the annual listing fee for the year 2013-14 to Bombay Stock Exchange Limited and National Stock Exchange of India Limited.

APPRECIATION

Your Directors wish to place on record their sincere appreciation of the efforts and dedicated service of all employees, which contributed to the continuous growth and consequent performance of the Company. Your Directors wish to place on record their gratitude for the valuable assistance and co-operation extended to the Company

by the Central Government, State Governments, Joint Venture Partners, Banks, Institutions, Investors and Customers.

For and on behalf of the Board of Directors

**Mr. Navin Agarwal
Chairman**

Place: Gurgaon

Date: 22 April, 2013

ANNEXURES TO THE DIRECTORS' REPORT

ANNEXURE I

Disclosure pursuant to the provisions of Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999

S. No.	Particulars	Cairn India Senior Management Plan	Cairn India Performance Option Plan (2006)	Cairn India Employee Stock Option Plan (2006)
1.	Options granted during April 2012- March 2013	Nil	890,501	4,153,467
2.	The Pricing Formula	INR 33.70 per Share	INR 10 per Share Price	Price determined by the Remuneration Committee but not less than the fair market value of a share on the date of grant
3.	Options Vested during April 2012- March 2013	NIL	13,766	5,410,112
4.	Options Exercised during April 2012- March 2013	NIL	221,029	2,621,017
5.	Total number of Shares arising as a result of exercise of options during April 2012- March 2013	NIL	221,029	2,621,017
6.	Options lapsed during April 2012- March 2013	NIL	246,449	1,524,050
7.	Variation of terms of options	None	None	None
8.	Money realized by exercise of options during April 2012- March 2013		2,210,290	586,754,457
9.	Total number of options in force as on 31 March, 2013	NIL	1,505,363	13,971,816
10.	Employee wise details of options granted during the year to:			
	(i) Senior Managerial Persons	None	S V Nair-53,691* Ajay Gupta- 42,614** R. Ranganath- 37,569 Elango P.- 35,455 Neerja Sharma- 27,766 Santosh Chandra- 21,210 Sanjay Singh - 15,201 Ananthakrishnan B.- 12,196	None
	(ii) Any other employee who receives a grant in any one year of option amounting to 5% or more of options granted during the year	None	S V Nair - 53,691*	None
	(iii) Identified employees who were granted options during any 1 year, equal to or exceeding 1% of the issued capital (excluding outstanding warrants & conversions) of the Company at the time of grant	None	None	None

11.	Diluted Earnings Per Share (EPS) pursuant to issue of Shares on exercise of options calculated in accordance with Accounting Standard 20	63.06	63.06	63.06
12.	(i) Method of calculation of employee compensation cost		Intrinsic Value Method	
	(ii) Difference between the employee compensation cost so computed at 12(i) above and the employee compensation cost that shall have been recognised if it had used the fair value of the options (INR in lacs)		4,831	
	(iii) The impact of this difference on profits and on EPS of the Company			
	Profit after Tax (PAT) (INR in lacs)		1,205,639	
	Less: Additional employee Compensation cost based on fair value (INR in lacs)		(4,831)	
	Adjusted PAT (INR in lacs)		1,200,808	
	Adjusted EPS Basic (INR)		62.91	
	Adjusted EPS Diluted (INR)		62.81	
13.	Weighted-average exercise prices of options granted during April 2012- March 2013	NA	10	326.85
	Weighted-average fair value of each option outstanding as on 31 March, 2013	NA	318.16	161.57
14.	A description of the method and significant assumptions used during the year to estimate the fair values of options, including the following weighted-average information:			
(i)	risk-free interest rate	NA	8.18	8.18
(ii)	expected life (in years)	NA	3.12	6.50
(iii)	expected volatility	NA	44.25	44.25
(iv)	expected dividends	NA	NA	NA
(v)	price of the underlying Share in market at the time of option grant	NA	326.85	326.85

*S V Nair resigned from the Company with effect from 15 October, 2012 and is currently associated with the Company as a consultant. All unvested options at the date of his resignation were cancelled.

**Ajay Gupta resigned from the Company with effect from 7 January, 2013 and all unvested options at the date of his resignation were cancelled.

ANNEXURE II

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO

CONSERVATION OF ENERGY

Energy conservation measures taken

Cairn India operates in a safe and environmentally responsible

manner for the long-term benefit of all stakeholders. We work towards minimizing the impact of our operations on the environment. Towards this direction, we continuously take effective steps to conserve energy

and reduce environmentally harmful emissions.

Last year, as part of our efforts to reduce environmentally harmful emissions, we launched number of

initiatives. In Rajasthan, which is our key producing asset, we are working to install solar-powered lighting system. Renewable energy is predominantly utilized in our producing assets at Ravva and Suvali.

These initiatives have enabled us to meet the internal Greenhouse Gas (GHG) emissions target for 2012-13.

Measures taken for reduction of energy consumption & consequent impact

During the period under review, several energy conservation initiatives were adopted and were taken, some of which are listed below:

Rajasthan upstream operations –

- We currently use associated gas at Central Processing Terminal to generate power for our operational facilities and excess associated gas is flared. An initiative to compress and condition (mainly CO₂ removal) this excess gas and to make it saleable is currently underway. Post-conditioning, this gas will be commingled and exported with the Raageshwari gas for sale to our gas customers.
- We are in the process of installing solar-powered lighting at our facilities. In the fiscal 2012-13, thirty four solar powered lights were recently installed in the Central processing terminal and the well pads resulting in a saving of 1,487 KWH.
- We are exploring opportunities for large-scale power generation using solar PVC arrays, for our new project

locations where gas might not be available. This also helps to avoid environmental and social issues related to laying of transmission lines.

- Hot water requirement at the operations base is being met through solar water heaters. We plan to explore solar thermal and geo-thermal energy solutions that could be viable for temperature control and water heating.
- We will also explore hybrid power plant solutions (high-pressure steam used for heating and power from a combination of solar thermal energy and associated gas) at MPT.

Midstream operations -

- We developed the world's longest (approx. 700 kms) continuously heated and insulated pipeline to transport the viscous crude from our Rajasthan fields from the interiors of Rajasthan to various refineries in Gujarat and finally to the coast for further marine transportation. Energy requirement for heating the crude oil pipeline is met by the gas we produce from Raageshwari fields in Rajasthan. The gas is transported through a pipeline laid in the same pipeline corridor and fed to Above Ground Installations (AGIs) along the pipeline route.
- We are in the process of installing rooftop solar panels at our Above Ground Installations (AGIs) for facility lighting.

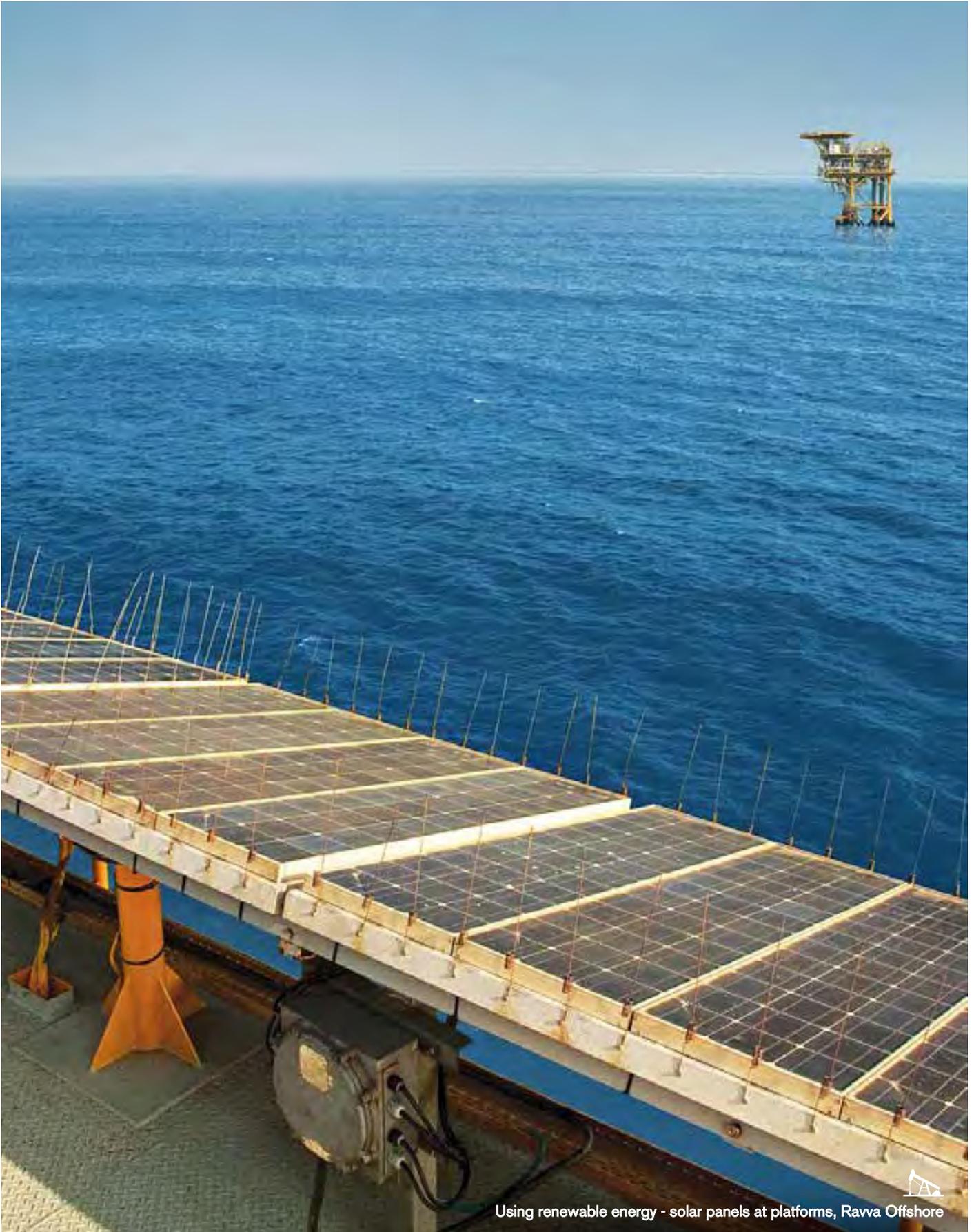
- We will explore opportunities for power generation at the Bhogat terminal from wind.

Ravva operations -

- We initiated hazardous waste co-processing. 312 tons of oily sludge was sent to cement manufacturing units for co-processing instead of incineration facilities. Energy recovered from oily sludge by co-processing is in the range of 2,500 to 10,000 Kcal/Kg.
- Each unmanned offshore platform has solar panels and a small wind turbine that provides power for instrumentation, telemetry system and navigation lights. Hot water for laundry at living quarters is generated from solar water heater. The estimated value of renewable energy used at Ravva in the fiscal 2012-13 is 54.56 MWH. Solar power capacity at the offshore platforms was augmented with additional solar arrays of capacity 2,340 Watts.
- Re-injection of produced water separated at the Ravva terminal, back into the reservoir helps reduce discharge of waste water to sea and abstraction of ground water for injection purposes.

Suvali operations -

- Approximately 13,720 KW/ year of power is generated by the solar power system installed at the offshore platforms.
- Produced water cooler has been installed in the oil handling train



Using renewable energy - solar panels at platforms, Ravva Offshore

The company provided more than 3,000 Solar Street Lighting systems to select villages coming under its operational areas.



at the on-shore processing facility to recover the waste heat from the residual water stream. The recovered heat is used to pre-heat the inlet oil stream for oil-emulsion separation.

A MoU was executed between Cairn and ONGC (Operator of North Tapti field) in March 2012 for processing the gas produced from ONGC's North Tapti field at the Suvali on-shore processing facility. The gas processing started in June 2012. This will help to utilize the spare gas processing capacity of Suvali facility, thereby reducing the energy consumption of the facility for each unit of gas processed.

- Condensate has been diverted to oil handling facility, with the following benefits:
 - i. Reduction in vapour pressure of product has resulted in reduction in vapour emission (cold venting) at loading bay; and
 - ii. Flash vapour generated is recovered using ejector and put back in gas stream.
- Occupancy sensor installation has been installed in offices to minimize electrical power consumption. The lights switch on and off automatically depending on occupancy in the room.
- Air-conditioning system of the CCR Building has been replaced with non-ODS type refrigerant (R-407C). The earlier air-conditioning system was using ODS type refrigerant (R-22

Refrigerant). We can save energy (up to 12%) by optimizing operation of the new system.

- Vapour balancing of crude oil tank blanketing gas is in progress. This will help in reduction of cold venting of natural gas. In the fiscal 2013-14, we propose to substitute natural gas with nitrogen for blanketing for storage to minimize the gas consumption.

Additional investments and proposals being implemented for conservation of energy

As part of reducing its carbon footprint the company has invested in new technologies which were absorbed & adapted in operational planning and investments. Some of these included installation of windmills and solar arrays on platforms and solar water heaters. The company also provided more than 3,000 Solar Street Lighting systems to select villages coming under its operational areas.

TECHNOLOGY ABSORPTION, ADAPTION & INNOVATION

Research & Development (R&D) Specific areas in which R & D was carried out by the Company

Cairn has been actively pursuing the application of EOR (Enhanced Oil Recovery) technology in the Mangala, Bhagyam and Aishwariya Fields. Studies by research institutes to define optimum formulations for increased oil recovery have been conducted. A field scale EOR pilot plant has been

set up within the Central Processing Terminal to test the chemical EOR process at pilot scale. Eight wells have been drilled and completed for the EOR pilot. The water injection & polymer injection phase of the pilot has been successfully completed. Polymer injection has resulted in significant decline in water-cut of the producer demonstrating efficacy of polymer in improving oil recovery over base water flood. Based on the successful pilot results, the development plan for full field application of polymer flood in Mangala field has been submitted. The preparation for the alkali surfactant polymer (ASP) phase of the pilot is in progress.

The National Council for Cement & Construction Material (NCCBM) was engaged to study the feasibility of using drill cuttings for co-processing in cement plants. Drilling cuttings are low toxicity high volume waste that possess disposal issues. The study positively concluded the feasibility of utilizing drill cuttings in cement kilns.

Benefits derived as a result of this R&D

All these initiatives are helping the Company in improving the overall efficiency, lowering the land impact & environmental concerns, cost effectiveness & project economics, thus leading to drilling and completing the wells faster than most companies in the world leading to much less fuel oil and energy consumed / utilised for this project than one would normally do in this scale of development. Cairn's research in EOR applications for the MBA fields has the potential to unlock

additional oil reserves within these fields and a long-term strategy for EOR is being developed with this end in mind.

Future Plan of Action

Trail run for co-processing of drilling cutting in cement kiln is planned during next financial year. This is a follow up to the study conducted by NCCBM where at the laboratory scale co-processing has been found to be viable. Trail run in cement plant if successful can solve disposal issue of low toxicity high volume (LTHV) drill cutting waste. This would also be the most environmentally acceptable solution.

Expenditure on R&D

Details outlined in the Table below.

FOREIGN EXCHANGE EARNINGS AND OUTGO

Activities relating to exports; initiatives taken to increase exports; development of new export markets for products and services; and export plans

Entire production of Cairn is sold domestically at present.

However, by discovering new oil & gas finds and bringing them into production, Cairn is working towards enhancing energy security and increasing the self Sufficiency of the nation which is in line with the policy of the Indian Government. The company contributes to around 25% of the nation's crude oil production.

Foreign exchange used and earned

During the period ended 31 March, 2013, the Company earned INR 926,149 lacs and incurred expenditure of INR 50,829 lacs in foreign exchange.

For and on behalf of the Board of Directors

Navin Agarwal
Chairman

Place : Gurgaon
Date : 22 April, 2013

		In INR lacs
S.No.	Particulars	Amount
1.	Capital	1,827
2.	Recurring	1,593
3.	Total*	3,420
4.	Total R&D expenditure as a % of total turnover	0.18%

*These are consolidated numbers for the twelve months period ended 31 March, 2013