Cairn Oil & Gas, a vertical of Vedanta Limited is one of the largest oil and gas exploration and production companies in India. We are the largest private sector producer of crude oil in India with 188,784 BOPD of average operated production in FY2019. The company’s target reserve and resource base are 70 billion BOE. Through its affiliates, Cairn Oil & Gas has been operating for more than two decades in India playing an active role in developing the country’s oil and gas resources. We combine a world-class asset portfolio with proven expertise across exploration, development and production to create significant value for all stakeholders.
Our Values

TRUST: We actively foster a culture of mutual trust in our interactions with our stakeholders and encourage an open dialogue which ensures mutual respect.

ENTREPRENEURSHIP: Our people are our most important assets. We actively encourage their development and support them in pursuing their goals.

INNOVATION: We embrace a conducive environment for encouraging innovation that leads to a Zero Harm environment and exemplifying optimal utilization of natural resources, improved efficiencies and recoveries of by-products.

EXCELLENCE: Our primary focus is on delivering value of the highest standard to our stakeholders. We are constantly motivated on improving our costs and our quality of production in each of our business through a culture of best practice benchmarking.

INTEGRITY: We place utmost importance on engaging ethically and transparently with all our stakeholders, taking accountability of our actions to maintain the highest standards of professionalism and complying with international policies and procedures.

RESPECT: We lay consistent emphasis on human rights, respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.

CARE: As we continue to grow, we are committed to the triple bottom line of People, Planet and Prosperity to create a sustainable future in a zero harm environment for our communities.

Our Portfolio

- Largest independent oil and gas E&P company in India
- Production from operated assets constitute -25 per cent of India’s crude oil production
- Opened four frontier basins
- 7.0 billion BOE target reserves and resources
- Built world’s longest continuously heated and insulated pipeline (~670Km)
- In 2004, discovered the Mangala field in Rajasthan; largest onshore oil discovery in India in more than two decades
- Portfolio of 58 blocks in India with total acreage of ~65,000 sq km. Three producing assets: Rajasthan and Cambay in the West, Ravva in the East coast and Krishna Godavari Basin.

History

1994
- 1st December
- Videocon Petroleum Limited

1998
- 3rd December
- Videocon Petroleum Limited, Vidhanswami Private Limited

2000
- 1st December
- Videocon Petroleum Limited

2004
- 26th January
- Videocon Petroleum Limited

2007
- 1st December
- Videocon Petroleum Limited

2008
- 1st December
- Videocon Petroleum Limited

2009
- 2nd December
- Videocon Petroleum Limited

2014
- 22nd August
- Videocon Petroleum Limited

2015
- 1st December
- Videocon Petroleum Limited
LEVERAGING THE TECHNOLOGY TO UNLOCK THE POTENTIAL OF RAJASTHAN BLOCK

HYDRAULIC FRACTURING
Hydraulic fracturing is the process of providing a conductive path for hydrocarbons to flow from the reservoir to the wellbore, in low permeability reservoirs by high-pressure injection of fracturing fluid, primarily - water containing sand or other proppants.

- Successfully placed the largest frac (452K lbs per stage proppant) job in India in one of the RDG wells; improved operation efficiency (Reduction in days from 4.5 to 2.2 per frac)
- Limited entry technique used to increase reservoir coverage from 60% to 85%.
- Expected ultimate recovery from the RDG field upgraded by ~25% as a result of successful application of hydraulic frac technology and better reservoir characterization.
- Addressable switch technology implemented for perforating multiple zones in a Single E-line run: Evaluating and implementing filter assisted frac technology to increase fracture conductivity and reduce cost per frac by ~50%.
- Operational excellence: Multiple wells in Barmer Hill formations being accessed in tandem.
- Longest onshore 6 " lateral section (1380m) in India drilled in Aishwarya Barmer Hill using Periscope HD tool.
- Successful fracturing of more than 150 stages using Broadband Precision Integrated completion service method.

3D SEISMIC
3D seismic is a powerful method of geophysics used for hydrocarbon exploration and field development. It provides a detailed information about the subsurface structures, fault distribution and reservoir prediction to build high resolution geological models in the areas of interest.

- Cairn Oil & Gas has implemented an innovative workflow of merging two existing seismic vintages with different orientations for generating high quality seismic images in Mangala Field.
- State of the art ESG3D seismic imaging technology for better definition of main bounding and intra-field faults for reducing drilling risk in attic oil development of Bhagym field.
- Application of stochastic inversion technology to delineate thin beds of Fatehgarh reservoir and built a detailed reservoir model for reducing development drilling risks in Aishwarya field.
- Started mega merge seismic processing to combine all individual 3D surveys into a single seamless seismic volume for identifying new exploration prospects in Rajastan block.

INNOVATION IN CONCEPT OPTIMISATION

- Reduction of field installation time and cost by using ‘Spool-able Reinforced Thermoplastic Pipe’ instead of DSS lines.
- Skid based modular polymer mother solution preparation unit instead of conventional plant to reduce execution time and onsite construction, and provide flexibility for relocation.
- Low invasive drilling fluid system to control wellbore damage.
ASSET HIGHLIGHTS

RAVVA (PKGM-1) ANDHRA PRADESH
- Located in the shallow offshore area of Krishna Godavari Basin
- Since its inception in 1994, Ravva has produced approximately 293 mmbbls of crude and 360 billion cubic feet of gas, representing close to 50 per cent recovery till FY2019
- Block current production: 14,890 BOPD as of FY2019
- Example on how technology can play a central role in accessing new reserves
- Field direct operating cost is one of the lowest amongst Cairn Oil & Gas peers
- The field has clocked 9.6 million LTI free man- hours by the end of FY2019

CAMBAY (CB/OS-2) GUJARAT
- Located in the offshore area of the Cambay block
- Since inception in 2002, Cambay has produced approximately 37 mmbbls of crude and 238 billion cubic feet of gas
- Block current production: 17,991 BOPD as of FY2019
- Application of advanced geophysical tools transformed the block from a predominantly gas field to an oil field.
- Example of optimal asset utilization, with its infrastructure being used for the tolling and processing of ONGC’s gas from its North Tapti field.
- The field has clocked 6.2 million LTI free man hours by the end of FY2019
RAJASTHAN BLOCK (RJ-ON-90/1)

- Spread over 3,111 km West of Barmer in Rajasthan
- Key producing fields – Mangala, Bhagyam, Aishwariya, Saraswati, Raageshwari; there are a total of 38 discoveries till date
- Block achieved cumulative total production of over 537 MMBOE till the end of FY2019. 1,55,903 BOPD gross production in FY2019
- Estimated HIIP of 7.0 billion BOE as of 31 March 2019
- Water flood operating expenditure was about US$ 5.0 per barrel, which remains one of the lowest in the world
India is the largest source of future oil demand growth

Oil consumption in India increases by 6 mb/d

In 2040, India’s import bill for oil & gas would be $460 billion compared with $65 billion in 2015
CARING FOR OUR PEOPLE & PLANET

We endeavor to meet the highest international standards of Health, Safety, and Environmental performance. We have consistently demonstrated HSE performance amongst peers and all our operational sites are certified as per ISO 14001 and OHSAS 18001 standards. Raageshwari, Radhanpur, Viramgam Terminals and CB/OS-2 asset are certified for ‘S5’ by Quality Circle Forum of India (QCFI).

Our effort towards maintaining a leading HSE culture is recognized by several reputed institutions.

Sustainability
- Cairn Oil & Gas received ‘CII ITC Sustainability Award 2018’.
- Occupational Health & Safety
  - Our CB/OS-2 asset received National Safety Award for Lowest Injury Frequency Rate for Oil Mines in 2015 and 2016 consecutively.
  - Our Harvia asset also received ‘National Safety Award 2016’.
  - Raageshwari Gas Terminal has won ‘Sword of Honour’ from the British Safety Council for excellence in HSE Management.
  - Our Midstream Operation also received British Safety Council ‘International Safety Award with Merit’.
  - In the 7th FICCI Safety Systems Excellence Award 2018, the Bhagyam oil and gas mine received the prestigious Platinum prize in the mining sector, while the pipeline operations and OBOS-2 asset received certificates of appreciation for Good Practices in Safety Systems.
  - Raiveshwar won ‘CII Southern Region’ Award for HSE excellence with ‘Four Star Rating’.
  - CB/OS-2 asset received ‘Global Safety Awards 2019’.
  - Raageshwari gas mine of Rajasthan asset and CB/OS-2 asset received ‘Silver SKOCH Award 2018’ with ‘Order of Merit’ respectively in ‘Energy’ category and ‘Digital Initiatives in Oil & Gas’ and ‘Creating Value for Stakeholders’.

Environment
- Cairn Oil & Gas has also dedicated considerable resources to improve the road safety of our vehicles by fitting them with right technology – such as GPS, seatbelts, airbags and conducting training programs for all our drivers. In addition, we have also worked with local community stakeholders so that they learn how to use the roads safely, improving the overall road safety environment. In all, we have trained over 21,000 individuals through our road safety training program.

People Safety, Community Wellbeing and Asset Integrity underpins our strong HSE performance.

- Structured approach on Asset Integrity, Quality and Process Safety Management
- Emphasis on mapping the risks and controls involved, integrating with our business processes
- Active leadership engagement with accountability
- Robust and tested Emergency / Crisis Management plan
- Concerted effort on embedding safety culture focusing on the front line worker and contract staff

We have consistently demonstrated HSE performance amongst peers and all our operational sites are certified as per ISO 14001 and OHSAS 18001 standards. Raageshwari, Radhanpur, Viramgam Terminals and CB/OS-2 asset are certified for ‘S5’ by Quality Circle Forum of India (QCFI).
Creating Shared Value Through Inclusive Growth

We are committed to empower the local communities in our areas of operation and support them in their journey towards a sustainable and inclusive future.

Our holistic developmental programs for local communities are based on five thematic areas:

- **Livelihood**
  - In the contemporary world, it is important to learn and accumulate new skills in order to stay ahead of the curve. Our excellence and enterprise centers ensure people are taught important skills that make their life simpler and better.
  - Agriculture, Natural Resource Management and Dairy Development.
  - The program is aimed at increasing incomes of farming community through productivity enhancement of agriculture and livestock.
  - It is our objective to provide affordable medical services to the far flung villages in the Barmer district.
  - In our operational area are sparsely populated and lack optimum methods of transportation and mobility.
  - 10 mobile health vans including six in Barmer and four in Gujarat cover 244 villages on a weekly basis.
  - 15 community awareness programmes.
  - Medical services at the door step of the rural community covering ~2,40,000 community members.
  - 10 health awareness camps conducted ~14,000 people covered.
  - Over 44,000 OPDs through specialist doctors in Barmer district has helped over 24,000 OPDs through two First Referral Units in Barmer district including surgeries and institutional deliveries.

- **Health**
  - We have developed 114 wadis (horticulture farms), 681 Khadins (traditional rainwater harvesting structure) and planted over 1,00,000 saplings including silvi plants.
  - More than 15,000 cubic metre of water harvesting capacity through renovation of 15 community ponds (Nadis)
  - 36 dairy cooperatives registered with 3,689 dairy producers.
  - 20 women self-help groups (SHGs) formed for dairy women; total SHG members increased to 259 women.

- **Education**
  - Quality education is necessary to progress in life and be successful. Schools play a key role in everyone’s life and we at Cairn Oil and Gas, make sure that this basic need is fulfilled.
  - School intervention programme and educational scholarships in Barmer provides support to teachers. Cairn also supports students through enrollment kits, infrastructure and institutional deliveries.
  - With equipment sourced from across the world.
  - Over 1200 youth trained at Cairn Enterprise Centre.
  - Over 13,000 youth have been trained with placement over 70 per cent.

- **Water**
  - Safe drinking water to communities through several RO plants, solar water kiosks and Jal Raths (Water Vans) across three states. Sustainable model with community ownership.
  - 34 RO plants have been installed and commissioned as on data, benefiting over 1,00,000 rural population.
  - In addition to address the scarcity of water in Barmer district, 7 bore-wells have been commissioned, targeting to benefit 7,000 families.

- **Sanitation**
  - State-of-the-art training center in Jodhpur with best-in-class facilities including residential accommodation with equipment sourced from across the world.
  - 360° development-oriented approach with holistic training on soft skills, domain skills, English & digital literacy.
  - Over 44,000 bore-wells have been commissioned, targeting to benefit 7,000 families.

CAIRN ENTERPRISE CENTRE

Nandh Ghar Project - committed to the Prime Minister’s national vision of eradicating child malnutrition, providing education, healthcare and empowering women with skill development, developing 4,000 Nandh Ghars across India, affecting 140,000 children, 80,000 mothers, 20,000 women startups and 8,000 toilets.

Project Nand Ghar

CAIRN ENTERPRISE CENTRE

Cairn Centre of Excellence campus spread over 12 acres in Jodhpur offers courses such as Solar, Wind, Automobile, Welding, Retail and IT.

- Best-in-class Equipment sourced from Germany, Finland etc.
- MoU signed with RSLDC in presence of Chief Minister in 2018
- MoUs signed with IIT, Kota and MNIT, Jaipur

Cairn Oil & Gas undertakes large scale initiatives under this program to support the national sanitation mission:

- Completed construction of 20,500 household toilets, which includes construction of 4000 bathrooms in partnership with 21a Parishad, area under Swachh Bharat Abhiyan.
- Improved sanitation and drinking water facilities in 215 schools with behavioral change sessions.
- Supported government’s effort to make Barmer an open defecation free district in 2018.
Employee Engagement is a key pillar of our people strategy. We strongly believe that mental agility and physical fitness are closely intertwined with individual and organizational performance. Under ‘Cairnfit’, our Workplace Wellness Brand, we encourage our employees to stay fit. Leadership Connect’ and ‘Chairman Workshops’ are significant networking and exposure platforms, where high-potential employees get exposed to thoughts and perspectives coming from the Leadership Team at Cairn. Cairn also has its own Toastmasters Club wherein employees are encouraged to benefit from the internationally recognized and acclaimed Toastmasters Methodology to improve public speaking and leadership skills.

We are committed to our cause of promoting diversity and inclusion within the organization and in larger communities who we partner with. A conscious effort is made to attract applicants from diverse backgrounds to achieve and maintain a workforce diversity across levels and functions. We have initiated a series of workshops on ‘Gender Intelligence and Leadership’ aimed at covering all managers across the organization. These workshops aim at improving diversity management capability of existing managers and leaders across the organization. The workshops elucidate how gender, personality, and cultural differences play out in the workplace.

Our policies around work-life integration are one of the best and are framed after extensive deliberations with impacted groups. As a company we have the best practices in respect of maternity, paternity and adoption related leave and compensation policies, besides options for parental leave, career break (sabbatical) to fulfill the needs of our diverse employees. We extended the maternity leave to 6 months ahead of Government Legislation. We take pride in mentioning that the Government has now allowed by way of Gazette notification, working of women in mines, during night shifts. This has been possible due to Cairns efforts in terms of engaging with Government authorities to bring about larger change in rules and regulations pertaining to work hours impacting women.

Cairn has established a unique brand adopting leading practices for engaging and motivating employees that inculcates a sense of newness, freshness and youthfulness in our work environment.

We believe in growing our own timber. We have globally benchmarked organization development interventions across all vertical: ACT-UP (Accelerated Competency Tracking and Up-gradation) Program is a renowned process for identifying “Stars of the Business” every year. CLMB E (Cairn Leadership Initiative for Managerial and Business Excellence), is a transformational learning initiative for our Stars of the Business and Young High Potential Leaders who are on a defined trajectory towards assuming enhanced and multifaceted business roles. Zenith Leadership Coaching Program tailored for Top Management Capability Development, focuses on business and individual competencies unique to senior most leadership.

To ensure that learning is not limited to the workplace or alone, we have provided access to an e-learning library with over 6,000 online video courses, e-books and audiobooks across a number of disciplines. Learning initiatives are further complemented through HR processes like Job Rotations, specially designed to provide on-the-job critical learning experiences to employees, in keeping with Individual Development Action Plans.

To ensure we have a qualified pool of technical leaders, our talent management process begins right from the induction of campus graduates. BOLD (Barrels of Learning per Day), is a year-long structured Mentorship Program, wherein leaders are encouraged to coach young talent towards their learning journey for all our campus hires. The entry level talent is also anchored through a well developed and individualized Career Development Program for Campus Graduates. BOLD (Barrels of Learning per Day), is a year-long learning journey for all our campus hires. The entry level talent is also anchored through a well-developed and individualized Career Development Program for Campus Graduates.

We are committed to keeping ‘Talent and Learning’ at the forefront of our business strategy. The organization offers an integrated approach to talent and leadership development, and focuses on three critical domains - technical know-how, business and commercial knowledge, managerial and leadership skills.

We have been committed in institutionalizing best-in-class people practices and providing our people, the necessary tools, resources and environment to enrich themselves.

While we focus on the development of our existing people, we attract the best minds from premier campuses in the country which has enabled us to build a diverse workforce. Our recruitment mechanisms of leveraging technology and social media has helped to build a ‘Best in-class’ employer brand across the spectrum. We take pride in having 10 years’ average technical expertise and functional capabilities across Geology, Geophysics, Production optimization & Integrated Methodology to improve public speaking and leadership skills.
Cairn Oil & Gas is a firm believer in India’s potential. It is playing a key role in sustaining and growing India’s production.