



# ANNUAL REPORT 2017-18

The DNA of  
**infinite  
growth**



## General Information

Name : **Oil and Natural Gas Corporation Limited**

CIN : **L74899DL1993GOI054155**

**Registered Office:**

Plot No. 5A- 5B, Nelson Mandela Road, Vasant Kunj,

New Delhi, South West Delhi-110070

Website: [www.ongcindia.com](http://www.ongcindia.com)

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Board of Directors		
Functional Directors	Government Nominee Directors	Independent Directors
1. Shri Shashi Shanker Chairman & Managing Director 2. Shri A. K. Dwivedi Director (Exploration) 3. Shri Subhash Kumar Director (Finance) 4. Shri Rajesh Kakkar Director (Offshore) 5. Shri Sanjay Kumar Moitra Director (Onshore)	6. Shri Rajiv Bansal 7. Shri Amar Nath	8. Shri Ajai Malhotra 9. Prof. Shireesh B. Kedare 10. Shri K.M. Padmanabhan 11. Shri Deepak Sethi 12. Shri Vivek Mallya 13. Shri Sumit Bose 14. Dr. Santrupt B. Misra 15. Smt. Ganga Murthy 16. Dr. Sambit Patra
<b>Company Secretary</b> Shri M E V Selvamm		

Auditors	Cost Auditors	Secretarial Auditors
1. M/s Lodha & Co., Kolkata 2. M/s PKF Sridhar & Santhanam, LLP, Chennai 3. M/s Khandelwal Jain & Co., Mumbai 4. M/s Dass Gupta & Associates, New Delhi 5. M/s K.C. Mehta & Co., Vadodara 6. M/s MKPS & Associates, Mumbai	1. M/s Chandra Wadhwa & Co., New Delhi 2. M/s Dhananjay V. Joshi & Associates, Pune 3. M/s M. Krishnaswamy & Associates, Chennai 4. M/s Musib & Co., Mumbai 5. M/s Rohit & Associates, Mumbai 6. M/s Shome & Banerjee, Kolkata	1. M/s P P Agarwal & Co., New Delhi

Registrar & Share Transfer Agent	Banker
Alankit Assignment Ltd. Alankit Heights, 1E/13, Jhandewalan Extension, New Delhi-110055 Phone : 91-11-4254 1234/1960, Fax : 91-11-42541201/23552001 Website : <a href="http://www.alankit.com">www.alankit.com</a> Email : <a href="mailto:vijayps1@alankit.com">vijayps1@alankit.com</a>	State Bank of India
	<b>Listed on</b>
	1. BSE Ltd. 2. National Stock Exchange of India Ltd.



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## *Vision*

**To be global leader in integrated energy business through sustainable growth, knowledge excellence and exemplary governance practices.**

## *Mission*

### **World Class**

- Dedicated to excellence by leveraging competitive advantages in R&D and technology with involved people.
- Imbibe high standards of business ethics and organizational values.
- Abiding commitment to safety, health and environment to enrich quality of community life.
- Foster a culture of trust, openness and mutual concern to make working a stimulating and challenging experience for our people.
- Strive for customer delight through quality products and services.

### **Integrated In Energy Business**

- Focus on domestic and international oil and gas exploration and production business opportunities.
- Provide value linkages in other sectors of energy business.
- Create growth opportunities and maximize shareholder value.

### **Dominant Indian Leadership**

- Retain dominant position in Indian petroleum sector and enhance India's energy availability.

### **Carbon Neutrality**

- ONGC will continually strive to reduce CO<sub>2</sub> emissions across its activity chain with the objective of achieving carbon neutrality.



# CHAIRMAN'S MESSAGE



## *Dear Members,*

Your participation in our business is one of the fundamental drivers of ONGC's sustained growth and its contribution to the energy landscape of the country. Protecting shareholder interests through sustained value creation is top priority for the Company. I thank you heartily for your continued support.

Though the year 2017-18 (FY'18) witnessed a lot of uncertainties, the market movement during the year was in contrast to the previous year. Global crude prices recorded a strong recovery and more than doubled from early-2016 levels. This is a positive indicator for the health and growth outlook of the Oil & Gas sector.

Withdrawal of US from the nuclear deal with Iran and subsequent re-imposition of sanctions on the latter demonstrated the significant influence of geopolitics on oil and gas markets. Climate change concerns, the remarkable growth of renewables and anticipated energy transitions have added to the complexity of the industry landscape.

It is important to note that, while energy mix projections vary by the source agency, Oil and Natural Gas are expected to remain one of the most important sources of energy over the foreseeable future. Keeping in view the long term focus, your Company has continued to maintain good investment level in its core area of Exploration and Production (E&P) despite the high volatility in the Crude prices.

I, on behalf of the Board of Directors as well as 32,265 dedicated energy soldiers of Oil & Natural Gas Corporation Ltd (ONGC), present to you the Company's Annual Report for the financial year 2017-18.

FY'18 was another year of continued success story for your Company's businesses. We made as many as 12 hydrocarbon discoveries out of which two discoveries one each in Cambay and Cauvery Onshore, have already been put on production. Reserve accretion (2P) for the year stood at 67.83 MMtoe. With a Reserve Replacement Ratio (RRR) of 1.48, we expanded our hydrocarbon resource base for the twelfth consecutive year. Our crude production volumes remained steady with a marked improvement in gas output; capital outlays remained robust; profit edged higher and dividend payout was impressive. Beyond E&P, acquisition of HPCL added further strength to our already respectable downstream portfolio.

E&P, the mainstay of our energy business, will continue to be the principal focus area of the management strategy and investments in the years to come.

It is widely recognized that the era of 'easy oil' is over. Hydrocarbon exploration is getting tougher with associated costs expected to face upward pressures. Extended period of low oil prices has necessitated the adoption of a more cost-effective and operationally-efficient approach. We have done well in this regard. At just over USD6 per barrel of oil equivalent, our finding costs are among the most competitive globally. We are continuously working towards optimising the same further. We are focussing on greater integration of the 'right technology' into our campaign and more focused



exploratory inputs through better seismic API. As you are aware, your Company is also associated as an integral part of National Seismic Programme.

Production performance remained on track and our contribution to domestic hydrocarbon supplies increased year-on-year, largely on the back of higher gas output. Standalone crude oil production recorded increase to 22.31 MMT in FY'18 as compared to 22.25 MMT in FY'17. Natural gas production registered an impressive growth of over 6% as production for FY'18 rose to 23.48 BCM as compared to 22.09 BCM in FY'17. Our cumulative domestic hydrocarbon volumes (inclusive of our share in JV-operated properties), also recorded an increase; 50.05 MMtoe vis-a-vis 48.81 MMtoe in FY'17. Production of Value Added Products increased for the fourth consecutive year – VAP output in FY'18 stood at 3.39 MMT, with an increase of 4.6% over FY'17 volumes.

The fact that we have continued to achieve production growth with a largely mature portfolio makes the feat even more rewarding. Despite the maturity of our key fields, our IOR/EOR schemes are aimed at maximizing hydrocarbon recovery from these ageing brownfields. In FY'18, incremental oil gain from these projects totalled 7.5 MMT, almost one-third of our total oil output for the year.

A legacy-dependent portfolio, however, does present its own set of challenges especially in a cash-constrained operating environment. However, with more projects coming online in the next few years, we are confident of reducing our reliance on ageing fields. We expect a steady step-up in our domestic hydrocarbon output, primarily led by ramp-up in gas output from key projects such as KG-DWN-98/2, Daman and Vashishta fields. While crude oil volumes will not experience the same level of growth as gas, Western Offshore redevelopment projects will add incremental oil to our portfolio, helping offset the natural decline of our base portfolio. Seventeen projects completed during the last 4 years contributed over 6 MMtoe of oil and gas supplies. Your Company completed two major projects namely, Development of Western Periphery and Integrated Development of Vashishta and S1 Fields in FY'18 envisaging lifecycle oil and gas gains of over 17 MMtoe.

Drilling is central to any E&P activity. FY'18 proved to be another record-setting year for our drilling operations. For the second consecutive year, as many as 503 wells were drilled - the highest ever. Your Company drilled 119 exploratory wells - the highest number in the last 6

years and also achieved the highest cycle and commercial speed. With 37 rigs operating in the offshore, the Company remains focused on expanding its presence and expertise in a terrain that has historically been its strong suite. Deepwater drilling is an exciting new arena within this domain and the Company plans to drill 24 deep water wells in FY'19. A majority of our future oil and gas supplies are offshore-based which makes offshore drilling critical to the Company's success in the medium term. Considering the capital-intensive offshore operations, cost optimisation is key to mitigating the inherent risks of any offshore upstream project. ONGC's Offshore drilling costs have come down by 7% in FY'18 which in absolute terms is significant. The Company is constantly striving to further bring down the drilling costs.

Your Company's upstream capital program is growing steadily unlike that of most oil and gas operators over the past 4 years - a period that witnessed widespread and extensive budget reductions in reaction to low crude prices. The committed capex of ₹320,770 Million for FY'19 is directed towards E&P activity. While strong domestic oil demand and the country's high degree of reliance on imports are drivers for sustaining robust investments in domestic upstream activity, it is also a derivative of our positive outlook on the domestic hydrocarbon potential. The recently concluded Hydrocarbon resource reassessment project only confirms the view - prognosticated hydrocarbon resource base of the country today stands at 42 Billion tonnes of oil equivalent, up by 50% from past estimates. The Company has also put in place firm plans to deliver on its targets to support the 10% Import Reduction mission, as envisioned by the Hon'ble Prime Minister.

Further, constant efforts are being made to improve the operational efficiencies through various "Research and Development" activities carried out by the in-house institutes.

Coming to financials, the Company recorded Revenue from Operations of ₹850,041 Million in FY'18 compared to ₹779,078 Million in FY'17. Profit After Tax increased by over 11% to ₹199,453 Million in FY'18 against ₹179,000 Million in FY'17. The Company realized USD 57.33/bbl for crude sold in the domestic market in FY'18 as compared to USD 50.27/bbl in FY'17.

Dividends to shareholder for FY'18 remained healthy with a total payout of ₹84,699 Million with impressive payout ratio (including dividend distribution tax) of 51.13%. We have consistently maintained a dividend payout ratio



of over 50% over the last 4 years. Even as your Company expands and diversifies its business, the Company is steadfast in its commitment to maintain its consistent track record in dividend payout to shareholders. It is another testament of business fundamentals and prudent approach to capital management.

FY'18 proved to be good for our overseas arm, ONGC Videsh Ltd also. Following the acquisition of significant stake in Russia's Vankorneft in 2016, ONGC Videsh led Indian consortium also acquired an important 10% stake in the UAE's offshore oil and gas field Zakum in February 2018. Buoyed by incremental volumes from both these assets, overseas hydrocarbon output rose by over 10% to 14.16 MMtoe in FY'18 versus 12.80 MMtoe in FY'17. Consolidated Revenue from Operations and Consolidated PAT during FY'18 stood at ₹104,176 Million and ₹9,815 Million as against ₹100,800 Million and ₹7,573 Million in FY'17, respectively. Going forward, ONGC Videsh's international ventures are going to play a critical role in the realization of ONGC's long-term growth blueprint as well as furthering sovereign energy diplomacy reach globally.

In the downstream business, MRPL registered highest ever throughput at 16.31 MMT in FY'18. The refining unit recorded an impressive GRM of USD 7.54/bbl. Revenue from Operations grew by 6.1% to ₹630,836 Million. PAT stood at ₹22,241 Million. The refining unit also posted an 18% year-on-year growth in its exports. It continues to maintain major share of the direct sales segment of petroleum products market in Karnataka and adjoining states and enhanced its market share for Polypropylene with introduction of new and niche grades. Providing another boost to the sustainability efforts of ONGC group companies, the refinery also successfully commissioned largest solar power project (6 MW) at a refinery site in the country.

The acquisition of majority stake in state refining entity, Hindustan Petroleum Corporation Ltd (HPCL), was a defining move, one that significantly transforms ONGC's downstream portfolio. While ONGC in itself remains committed to excellence in upstream business, HPCL fits well into the group's integrated energy strategy. HPCL will provide the Company, a pure-play refining and marketing edge with an extensive retail presence (over 15000 outlets) in the country, entailing significant diversification benefits. Together with MRPL, the refining capacity of ONGC group today stands at over 40 MMT, making us the third largest in the country in terms

of installed capacity.

The Company is also substantially invested in the Petrochemical segment. ONGC Petro additions Ltd (OPaL), a 1.1 MMTPA Ethylene Cracker unit, is one of the largest dual-feed crackers in the world today. Capacity utilization of the plant is expected to be over 80% during the current fiscal i.e. FY'19, further reaching 100% utilization toward the end of December 2019. OPaL, in a short span of time, has established itself in the domestic as well as international markets, both with respect to quality as well as price. ONGC Mangalore Petrochemicals Limited (OMPL), another Petrochemical unit of ONGC having production capacity of 1.2 MMTPA of Aromatics, registered Revenue from Operations of ₹55,613 Million. Close to 80% of its products, namely Paraxylene and Benzene, are exported.

ONGC Tripura Power Company (OTPC), our Power JV in the country's North-eastern State of Tripura which operates a 726 MW Combined Cycle Gas Turbine Power Plant, recorded Revenue from Operations of ₹12,516 Million and Profit After Tax of ₹1,251 Million in FY'18. This is another noteworthy sustainability venture of ONGC group, and a greenest UNFCCC- certified power plant of the country. This plant meets 35% power requirement of North Eastern States.

As I mentioned already, the entire energy framework is on the cusp of substantial restructuring – in fact, the transformation is already underway. With increasing freedom for the consumer to choose from a wide array of energy sources, the energy commodities market will become more consumer-driven. Technology disruptions, Renewables, Digitalization and Sustainability will be at the core of this change.

Your Company is gearing up for this period of transformation. An approach premised on sound application of technology and sustainability is what ONGC is embracing for discovering new pathways of growth. Application of cutting-edge technologies in the way we locate and source our hydrocarbons to implementation of paperless office and reduction of gas flaring are all part of the Company's resilient philosophy of doing the business of energy. Our globally-recognized CDM projects and expanding engagement in renewables also bear proof of our sustainable business ethics.

Your Company has been continuously rated 'outstanding' grade CPSE as per DPE guideline on corporate governance.

Beyond business, our CSR initiatives have also helped the organization in making a positive impact in people's lives. At the same time, it also sensitizes us to our role as an important stakeholder of the society and environment. In FY'18, your Company spent ₹5,034 Million for its various CSR programs with target areas spanning from Healthcare, Sanitation, Education to Environment and Sustainability.

In line with the Government policy, your Company has set up a Start Up fund of ₹1,000 Million dedicated to foster, nurture and incubate new ideas related to energy. As a part of this initiative, we signed MOUs with 5 Start-Ups in FY'18. I am happy to inform that ONGC officers after scaling Mount Everest last year, also successfully summited the third highest and most challenging peak, Mount Kanchenjunga in FY'18.

Though our main objective is energy security, I firmly believe that ONGC has, over the years, proven its

capability to contribute effectively to larger national goals and priorities. Here, I would like to thank the Government of India, especially our administrative Ministry - the Ministry of Petroleum and Natural Gas, for its constant support and encouragement. A lot of what we have achieved as the country's flagship energy explorer would have been difficult without the policy support and facilitating approach of the Government.

Notwithstanding the shifts and turns in the market, your consistent belief in our growth story and enduring association with us is what keeps us motivated to emerge stronger and more competitive with every passing year. At the successful closure of yet another financial year, I express my gratitude for this much valued invaluable investment and support. Look forward to continuing this journey and achieving greater heights together.

Sd/-

**(Shashi Shanker)**  
**Chairman and Managing Director**





# Board's Report

Dear Members,

It gives me immense pleasure to present, on behalf of the Board of Directors of your Company, the 25<sup>th</sup> Annual Report on the business and operations of Oil And Natural Gas Corporation Ltd. (ONGC) and its Audited Financial Statements for the year ended March 31, 2018, together with the Auditors' Report and Comments (on the Accounts) of Comptroller and Auditor General (CAG) of India, thereon.

Your Company has steadfastly focussed on organic growth through its exploratory endeavours and built a healthy hydrocarbon reserve profile to sustain growth in future. During FY'18, the Company registered Reserve Replacement Ratio (RRR) of 1.48 (with 2P reserves) and thereby maintaining RRR of more than one in the twelfth consecutive year. Twelve oil and gas discoveries were made in various basins of the country. With these discoveries, your Company accreted reserves (2P) of 67.83 million metric tonnes of oil and oil equivalent gas (MMtoe). This has been possible because of extensive exploration in known basins as well as frontier plays. Two out of 12 discoveries i.e., Mattur West-1/ (Cauvery onland) and Matar-1 (Cambay onland) have already been monetized and these prospects are producing since May 31, 2017 and January 30, 2018 respectively.

Domestic crude oil and natural gas production of your Company along with the share in domestic joint ventures (PSC-JVs) during FY'18 has been 50.04 MMtoe which is about 2.5% higher than FY'17 production (48.80 MMtoe). On standalone basis crude oil production from the Company operated fields has been 22.31 Million Metric Tonnes (MMT) against production of 22.25 MMT during FY'17. Considering the largely mature producing field portfolio, it highlights the Company's prudent reservoir management and effective technological interventions in improving the production. Natural gas production during FY'18 has been 23.48 Billion Cubic Metre (BCM) against 22.09 BCM during FY'17; an increase of 6.3 %. This is a significant achievement as it marks the second consecutive year that the Company has registered an increase in its domestic natural gas output.

Your Company's share in domestic Joint Ventures' production was 3.13 MMT of crude oil (3.29 MMT in FY'17) and 1.13 BCM of natural gas (1.18 BCM during

FY'17). Combining the two total domestic production has been 25.43 MMT of oil and 24.61 BCM of gas, Production of value added products increased by 4.7%; from 3.24 MMT in FY'17 to 3.39 MMT during the year, with contribution from C2-C3 and Hazira plants in Gujarat and Uran in Maharashtra.

All ventures of your Company established for value-chain integration i.e., ONGC Petro additions Ltd (OPaL), ONGC Mangalore Petrochemicals Ltd (OMPL), ONGC Tripura Power Company Ltd (OTPC), Dahej SEZ Ltd (DSEZ) and Mangalore SEZ Ltd (MSEZ) are now operational and started generating revenue.

## Major Highlights:

Salient highlights with respect to performance of your Company during FY'18 are as below:

- Your Company made 12 Oil and Gas discoveries; 6 in Onshore and 6 in Offshore. One discovery is in New Exploration and Licencing Policy (NELP) block. Two of these discoveries have already been put to production.
- With these 12 discoveries, your Company accreted 67.83 MMtoe of 2P reserves in the domestic fields.
- RRR (2P) for FY'18 was 1.48; more than One for 12 consecutive years.
- Standalone Oil and Oil equivalent gas (O+OEG) output is 45.79 MMtoe; 3.3% higher than FY'17.
- Onshore crude oil and natural gas production increased by 1.7% and 8.3% respectively.
- Offshore gas production registered an increase of 5.7%.
- Production of Value Added Products increased by 4.7%.
- Revenue from Operations was at ₹850,041 million against ₹779,078 million in FY'17.
- Profit After Tax (PAT) was at ₹199,453 million against ₹179,000 million during FY'17.
- Acquisition of 51.11% stake in Hindustan Petroleum Corporation Limited (HPCL). With this acquisition, Company's refining capacity increased to 42.198 MMTPA; accounting 18% of country's total refining capacity.

- The highest ever deployment of 37 rigs for offshore operations.
- The highest in last 27 years drilling of 503 wells (119 exploratory and 384 development).
- The overall Cycle Speed and Commercial Speed of exploratory and development drilling achieved during 2017-18 is the highest ever since inception and stood at 997 meter/ rig month and 1616 meter/ rig month respectively. An increase of more than 9% achieved in commercial speed compared to previous year.
- 4 projects worth ₹68,300 million (approx.) were completed.
- Significant development of KG-DWN-98/2 block in Krishna-Godavari (KG) Basin with investment of about USD 5,076 million (approximately ₹340,000 million) leading to Peak oil production from the field to the extent of 78,000 bpd and natural gas @16 Million Metric Standard Cubic Meter per Day (MMSCMD).
- Gas sales increased from 17.06 BCM in FY'17 to 18.58 BCM an increase of 8.9%.
- Gas flaring during the year reduced from 2.4% to 1.9%.
- Farm-in/ Farm-out (FIFO) agreement signed with GSPC on March 10, 2017 to acquire 80% PI with operatorship in block KG-OSN-2001/3. Acquisition completed on August 04, 2017 with an investment of USD 1,195 million.
- Commencement of Coal Bed Methane (CBM) field development operations in Bokaro and North Karanpura blocks in Jharkhand. Operations resumed in Jharia block. Techno-economic analysis was carried out in Raniganj block.
- Revenue from Operations of the ONGC Group was ₹3,622,462 million and Profit After Tax was ₹221,059 million (attributable to owners) during FY'18.
- ONGC Videsh Limited (OVL), a wholly owned subsidiary of your Company, registered highest-ever production of 14.16 MMtoe of O+OEG during the year. It recorded consolidated Revenue from Operations of ₹104,176 million and consolidated Profit After Tax of ₹9,815 million, attributable to owners (₹7,573 million in FY'17).
- Mangalore Refinery and Petrochemicals Limited (MRPL), a subsidiary of your Company, recorded highest-ever throughput of 16.31 MMT during FY'18.
- MRPL recorded 6.1% increase in Revenue from Operations to ₹630,836 million (₹594,305 million in FY'17) and Profit After Tax of ₹22,241 million (₹36,437 million in FY'17).
- HPCL improved its Gross Refining Margin (GRM) to USD 7.40 per barrel during 2017-18 as compared to GRM of USD 6.20 per barrel in 2016-17.

### Global Recognitions

Your Company has been ranked number one E&P Company in the world by Platts Top 250 Global Energy Company Rankings - 2017 and 11<sup>th</sup> among global energy majors based on assets, revenues, profits and return on invested capital. The leading international business journal Forbes has ranked the Company 3<sup>rd</sup> largest in India and 246<sup>th</sup> worldwide based on sales, profit, assets and market value.

### Details of new discoveries and new resources:

During the year 2017-18, your Company made 12 discoveries (5 new prospects and 7 new pools) of which 1 was in NELP acreage while other 11 were in Nomination acreages. The major success during the year was an Oil discovery from well WO-24-3 (WO-24-C) which has indicated potential of about 29.74 MMtoe of In-Place Hydrocarbon Volume in the discovery area and the discovery is under further assessment through appraisal exploratory efforts.

### Details of these discoveries are as below:

Sl. No.	Basin	Well No.	PEL/PML/NELP	HC Type	Prospect / Pool
1	AAFB- Tripura	Kunjaban-8	Kunjaban PML	Gas	Pool
2	AAFB- Cachar	Bhubandar-6	Bhubandar PML	Gas	Pool
3	Cambay Onland	West Matar-1	Matar PML	Oil	Prospect

